

# Draft Environmental Impact Report

State Clearinghouse #2017101067



## NEWPORT CROSSINGS MIXED USE PROJECT (PA2017-107)

for City of Newport Beach

November 2018

November 2018 | Draft Environmental Impact Report  
State Clearinghouse No. 2017101067

# NEWPORT CROSSINGS MIXED USE PROJECT (PA2017-107) for City of Newport Beach

*Prepared for:*

**City of Newport Beach**

Contact: Jaime Murillo, Senior Planner  
100 Civic Center Drive  
Newport Beach, California 92660  
949.644.3209

*Prepared by:*

**PlaceWorks**

Contact: JoAnn C. Hadfield, Principal  
3 MacArthur Place, Suite 1100  
Santa Ana, California 92707  
714.966.9220  
info@placeworks.com  
www.placeworks.com





## Table of Contents

Contents	Page
<b>1. EXECUTIVE SUMMARY .....</b>	<b>1-1</b>
1.1 INTRODUCTION .....	1-1
1.2 ENVIRONMENTAL PROCEDURES .....	1-1
1.2.1 EIR Format .....	1-2
1.2.2 Type and Purpose of This DEIR.....	1-4
1.3 PROJECT LOCATION .....	1-4
1.4 PROJECT SUMMARY .....	1-4
1.5 SUMMARY OF PROJECT ALTERNATIVES.....	1-5
1.5.1 Alternatives Evaluated.....	1-5
1.5.2 Alternative Conclusions .....	1-6
1.6 ISSUES TO BE RESOLVED .....	1-7
1.7 AREAS OF CONTROVERSY .....	1-8
1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION.....	1-8
<b>2. INTRODUCTION.....</b>	<b>2-1</b>
2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT.....	2-1
2.2 NOTICE OF PREPARATION .....	2-2
2.2.1 Expanded Discussion .....	2-7
2.3 SCOPE OF THIS DEIR .....	2-8
2.3.1 Impacts Considered Less Than Significant .....	2-9
2.3.2 Potentially Significant Adverse Impacts .....	2-9
2.3.3 Unavoidable Significant Adverse Impacts .....	2-9
2.4 INCORPORATION BY REFERENCE .....	2-10
2.5 FINAL EIR CERTIFICATION .....	2-10
2.6 MITIGATION MONITORING.....	2-11
<b>3. PROJECT DESCRIPTION.....</b>	<b>3-1</b>
3.1 PROJECT LOCATION .....	3-1
3.2 STATEMENT OF OBJECTIVES .....	3-1
3.3 PROJECT CHARACTERISTICS.....	3-2
3.3.1 Description of the Project.....	3-2
3.3.2 Green Building and Sustainability .....	3-32
3.3.3 Discretionary Actions and Approvals.....	3-33
3.3.4 Project Phasing and Construction.....	3-33
3.4 INTENDED USES OF THE EIR .....	3-34
<b>4. ENVIRONMENTAL SETTING .....</b>	<b>4-1</b>
4.1 INTRODUCTION.....	4-1
4.2 REGIONAL ENVIRONMENTAL SETTING .....	4-1
4.2.1 Regional Location.....	4-1
4.2.2 Regional Planning Considerations.....	4-1
4.3 LOCAL ENVIRONMENTAL SETTING .....	4-4
4.3.1 Location and Land Use .....	4-4
4.3.2 Environmental Resources and Infrastructure .....	4-9
4.3.3 Local Planning Considerations .....	4-12
4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS.....	4-13
4.5 REFERENCES.....	4-18
<b>5. ENVIRONMENTAL ANALYSIS .....</b>	<b>5-1</b>
5.1 AESTHETICS .....	5.1-1
5.1.1 Environmental Setting.....	5.1-1



## Table of Contents

Contents	Page
5.1.2	Thresholds of Significance.....5.1-4
5.1.3	Regulatory Requirements and Standard Conditions .....5.1-5
5.1.4	Environmental Impacts.....5.1-6
5.1.5	Cumulative Impacts ..... 5.1-14
5.1.6	Level of Significance Before Mitigation ..... 5.1-16
5.1.7	Mitigation Measures..... 5.1-16
5.1.8	Level of Significance After Mitigation ..... 5.1-16
5.1.9	References..... 5.1-16
5.2	AIR QUALITY .....5.2-1
5.2.1	Environmental Setting.....5.2-1
5.2.2	Thresholds of Significance..... 5.2-15
5.2.3	Regulatory Requirements and Standard Conditions ..... 5.2-19
5.2.4	Environmental Impacts..... 5.2-20
5.2.5	Cumulative Impacts ..... 5.2-31
5.2.6	Level of Significance Before Mitigation ..... 5.2-31
5.2.7	Mitigation Measures..... 5.2-32
5.2.8	Level of Significance After Mitigation ..... 5.2-33
5.2.9	References..... 5.2-35
5.3	BIOLOGICAL RESOURCES .....5.3-1
5.3.1	Environmental Setting.....5.3-1
5.3.2	Thresholds of Significance.....5.3-3
5.3.3	Regulatory Requirements and Standard Conditions .....5.3-3
5.3.4	Environmental Impacts.....5.3-4
5.3.5	Cumulative Impacts .....5.3-6
5.3.6	Level of Significance Before Mitigation .....5.3-7
5.3.7	Mitigation Measures.....5.3-7
5.3.8	Level of Significance After Mitigation .....5.3-8
5.3.9	References.....5.3-8
5.4	CULTURAL RESOURCES .....5.4-1
5.4.1	Environmental Setting.....5.4-1
5.4.2	Thresholds of Significance.....5.4-6
5.4.3	Regulatory Requirements and Standard Conditions .....5.4-7
5.4.4	Environmental Impacts.....5.4-7
5.4.5	Cumulative Impacts ..... 5.4-10
5.4.6	Level of Significance Before Mitigation ..... 5.4-10
5.4.7	Mitigation Measures..... 5.4-10
5.4.8	Level of Significance After Mitigation ..... 5.4-11
5.4.9	References..... 5.4-11
5.5	GEOLOGY AND SOILS.....5.5-1
5.5.1	Environmental Setting.....5.5-1
5.5.2	Thresholds of Significance.....5.5-8
5.5.3	Regulatory Requirements and Standard Conditions .....5.5-9
5.5.4	Environmental Impacts..... 5.5-10
5.5.5	Cumulative Impacts ..... 5.5-13
5.5.6	Level of Significance Before Mitigation ..... 5.5-13
5.5.7	Mitigation Measures..... 5.5-13
5.5.8	Level of Significance After Mitigation ..... 5.5-13
5.5.9	References..... 5.5-13
5.6	GREENHOUSE GAS EMISSIONS.....5.6-1
5.6.1	Environmental Setting.....5.6-1
5.6.2	Thresholds of Significance..... 5.6-16

## Table of Contents

<b>Contents</b>	<b>Page</b>
5.6.3	Regulatory Requirements and Standard Conditions ..... 5.6-19
5.6.4	Environmental Impacts..... 5.6-19
5.6.5	Cumulative Impacts ..... 5.6-25
5.6.6	Level of Significance Before Mitigation ..... 5.6-25
5.6.7	Mitigation Measures..... 5.6-25
5.6.8	Level of Significance After Mitigation ..... 5.6-26
5.6.9	References..... 5.6-26
5.7	HAZARDS AND HAZARDOUS MATERIALS .....5.7-1
5.7.1	Environmental Setting.....5.7-1
5.7.2	Thresholds of Significance..... 5.7-14
5.7.3	Regulatory Requirements and Standard Conditions ..... 5.7-15
5.7.4	Environmental Impacts..... 5.7-16
5.7.5	Cumulative Impacts ..... 5.7-21
5.7.6	Level of Significance Before Mitigation ..... 5.7-21
5.7.7	Mitigation Measures..... 5.7-21
5.7.8	Level of Significance After Mitigation ..... 5.7-22
5.7.9	References..... 5.7-22
5.8	HYDROLOGY AND WATER QUALITY .....5.8-1
5.8.1	Environmental Setting.....5.8-1
5.8.2	Thresholds of Significance..... 5.8-10
5.8.3	Regulatory Requirements and Standard Conditions ..... 5.8-15
5.8.4	Environmental Impacts..... 5.8-16
5.8.5	Cumulative Impacts ..... 5.8-27
5.8.6	Level of Significance Before Mitigation ..... 5.8-27
5.8.7	Mitigation Measures..... 5.8-28
5.8.8	Level of Significance After Mitigation ..... 5.8-28
5.8.9	References..... 5.8-28
5.9	LAND USE AND PLANNING .....5.9-1
5.9.1	Environmental Setting.....5.9-1
5.9.2	Thresholds of Significance.....5.9-9
5.9.3	Regulatory Requirements and Standard Conditions .....5.9-9
5.9.4	Environmental Impacts..... 5.9-10
5.9.5	Cumulative Impacts ..... 5.9-27
5.9.6	Level of Significance Before Mitigation ..... 5.9-27
5.9.7	Mitigation Measures..... 5.9-27
5.9.8	Level of Significance After Mitigation ..... 5.9-27
5.9.9	References..... 5.9-28
5.10	NOISE..... 5.10-1
5.10.1	Environmental Setting..... 5.10-1
5.10.2	Thresholds of Significance..... 5.10-13
5.10.3	Regulatory Requirements and Standard Conditions ..... 5.10-13
5.10.4	Environmental Impacts..... 5.10-14
5.10.5	Cumulative Impacts ..... 5.10-24
5.10.6	Level of Significance Before Mitigation ..... 5.10-25
5.10.7	Mitigation Measures..... 5.10-25
5.10.8	Level of Significance After Mitigation ..... 5.10-25
5.10.9	References..... 5.10-25
5.11	POPULATION AND HOUSING ..... 5.11-1
5.11.1	Environmental Setting..... 5.11-1
5.11.2	Thresholds of Significance..... 5.11-7
5.11.3	Regulatory Requirements and Standard Conditions ..... 5.11-8

## Table of Contents

<b>Contents</b>	<b>Page</b>
5.11.4 Environmental Impacts.....	5.11-8
5.11.5 Cumulative Impacts .....	5.11-10
5.11.6 Level of Significance Before Mitigation .....	5.11-10
5.11.7 Mitigation Measures.....	5.11-10
5.11.8 Level of Significance After Mitigation .....	5.11-11
5.11.9 References.....	5.11-11
5.12 PUBLIC SERVICES.....	5.12-1
5.12.1 Fire Protection and Emergency Services .....	5.12-1
5.12.2 Police Protection .....	5.12-9
5.12.3 School Services .....	5.12-11
5.12.4 Library Services .....	5.12-15
5.12.5 References.....	5.12-17
5.13 RECREATION .....	5.13-1
5.13.1 Environmental Setting.....	5.13-1
5.13.2 Thresholds of Significance.....	5.13-3
5.13.3 Regulatory Requirements and Standard Conditions .....	5.13-4
5.13.4 Environmental Impacts.....	5.13-4
5.13.5 Cumulative Impacts .....	5.13-7
5.13.6 Level of Significance Before Mitigation .....	5.13-8
5.13.7 Mitigation Measures.....	5.13-8
5.13.8 Level of Significance After Mitigation .....	5.13-8
5.13.9 References.....	5.13-8
5.14 TRANSPORTATION AND TRAFFIC .....	5.14-1
5.14.1 Environmental Setting.....	5.14-2
5.14.2 Thresholds of Significance.....	5.14-10
5.14.3 Regulatory Requirements and Standard Conditions .....	5.14-13
5.14.4 Environmental Impacts.....	5.14-14
5.14.5 Cumulative Impacts .....	5.14-31
5.14.6 Level of Significance Before Mitigation .....	5.14-31
5.14.7 Mitigation Measures.....	5.14-31
5.14.8 Level of Significance After Mitigation .....	5.14-32
5.14.9 References.....	5.14-32
5.15 TRIBAL CULTURAL RESOURCES .....	5.15-1
5.15.1 Environmental Setting.....	5.15-1
5.15.2 Thresholds of Significance.....	5.15-4
5.15.3 Regulatory Requirements and Standard Conditions .....	5.15-4
5.15.4 Environmental Impacts.....	5.15-5
5.15.5 Cumulative Impacts .....	5.15-6
5.15.6 Level of Significance Before Mitigation .....	5.15-6
5.15.7 Mitigation Measures.....	5.15-6
5.15.8 Level of Significance After Mitigation .....	5.15-6
5.15.9 References.....	5.15-7
5.16 UTILITIES AND SERVICE SYSTEMS .....	5.16-1
5.16.1 Wastewater Treatment and Collection.....	5.16-1
5.16.2 Water Supply and Distribution Systems.....	5.16-8
5.16.3 Storm Drainage Systems .....	5.16-19
5.16.4 Solid Waste .....	5.16-22
5.16.5 References.....	5.16-28
<b>6. SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS .....</b>	<b>6-1</b>
<b>7. ALTERNATIVES TO THE PROPOSED PROJECT .....</b>	<b>7-1</b>

## Table of Contents

Contents	Page
7.1 INTRODUCTION.....	7-1
7.1.1 Purpose and Scope.....	7-1
7.1.2 Project Objectives.....	7-2
7.1.3 Significant and Unavoidable Impacts.....	7-3
7.2 METHODOLOGY.....	7-3
7.3 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS.....	7-3
7.3.1 Alternative Development Areas.....	7-3
7.4 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS.....	7-4
7.4.1 Alternatives Comparison.....	7-5
7.5 NO PROJECT ALTERNATIVE.....	7-5
7.5.1 Aesthetics.....	7-6
7.5.2 Air Quality.....	7-6
7.5.3 Biological Impacts.....	7-7
7.5.4 Cultural Resources.....	7-7
7.5.5 Geology and Soils.....	7-8
7.5.6 Greenhouse Gas Emissions.....	7-8
7.5.7 Hazards and Hazardous Materials.....	7-9
7.5.8 Hydrology and Water Quality.....	7-10
7.5.9 Land Use and Planning.....	7-10
7.5.10 Noise.....	7-10
7.5.11 Population and Housing.....	7-11
7.5.12 Public Services.....	7-11
7.5.13 Recreation.....	7-11
7.5.14 Transportation and Traffic.....	7-11
7.5.15 Tribal Cultural Resources.....	7-12
7.5.16 Utilities and Service Systems.....	7-12
7.5.17 Conclusion.....	7-13
7.6 REDUCED HEIGHT AND DENSITY ALTERNATIVE.....	7-14
7.6.1 Aesthetics.....	7-14
7.6.2 Air Quality.....	7-15
7.6.3 Biological Impacts.....	7-15
7.6.4 Cultural Resources.....	7-15
7.6.5 Geology and Soils.....	7-15
7.6.6 Greenhouse Gas Emissions.....	7-15
7.6.7 Hazards and Hazardous Materials.....	7-16
7.6.8 Hydrology and Water Quality.....	7-16
7.6.9 Land Use and Relevant Planning.....	7-16
7.6.10 Noise.....	7-17
7.6.11 Population and Housing.....	7-17
7.6.12 Public Services.....	7-17
7.6.13 Recreation.....	7-17
7.6.14 Transportation and Traffic.....	7-18
7.6.15 Tribal Cultural Resources.....	7-18
7.6.16 Utilities and Service Systems.....	7-18
7.6.17 Conclusion.....	7-19
7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE.....	7-19
7.8 REFERENCES.....	7-21
<b>8. IMPACTS FOUND NOT TO BE SIGNIFICANT.....</b>	<b>8-1</b>
8.1 AGRICULTURE AND FORESTRY RESOURCES.....	8-1
8.2 BIOLOGICAL RESOURCES.....	8-2

## Table of Contents

<b>Contents</b>	<b>Page</b>
8.3 MINERAL RESOURCES .....	8-4
8.4 GEOLOGY AND SOILS .....	8-4
8.5 HAZARDS AND HAZARDOUS MATERIALS .....	8-4
8.6 HYDROLOGY AND WATER QUALITY .....	8-5
8.7 LAND USE AND PLANNING .....	8-6
8.8 POPULATION AND HOUSING .....	8-6
8.9 REFERENCES.....	8-6
<b>9. OTHER CEQA CONSIDERATIONS.....</b>	<b>9-1</b>
9.1 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT .....	9-1
9.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT.....	9-2
9.3 ENERGY IMPACTS OF THE PROPOSED PROJECT .....	9-3
9.4 REFERENCES.....	9-9
<b>10. ORGANIZATIONS AND PERSONS CONSULTED.....</b>	<b>10-1</b>
<b>11. QUALIFICATIONS OF PERSONS PREPARING EIR.....</b>	<b>11-1</b>
PLACEWORKS .....	11-1
<b>12. BIBLIOGRAPHY.....</b>	<b>12-1</b>

### APPENDICES

Appendix A	Notice of Preparation (NOP) and NOP Comment Letters
Appendix B	Air Quality and Greenhouse Gas Modeling
Appendix C	Biological Resources Technical Memo
Appendix D	Cultural and Paleontological Resources Technical Memo
Appendix E	Updated Geotechnical Investigation
Appendix F1	Phase I Environmental Site Assessment
Appendix F2	Phase II Investigation Report
Appendix F3	Soil and Soil Gas Investigation Report
Appendix G1	Hydrology Report
Appendix G2	Water Quality Management Plan
Appendix H	Noise Modeling
Appendix I	Public Services and Utilities Questionnaires Responses
Appendix J	Traffic Impact Analysis
Appendix K1	Sewer Analysis Report
Appendix K2	Sewer Demand
Appendix K3	Water Demand Report

## Table of Contents

Figure		Page
Figure 3-1	Regional Location.....	3-3
Figure 3-2	Local Vicinity.....	3-5
Figure 3-3a	Aerial Photograph: Airport Area .....	3-7
Figure 3-3b	Aerial Photograph: Project Site .....	3-9
Figure 3-4	Conceptual Site and Landscape Plan.....	3-13
Figure 3-5a	Conceptual Building Elevations .....	3-17
Figure 3-5b	Conceptual Building Elevations .....	3-19
Figure 3-6a	Conceptual Building Renderings: Daytime .....	3-21
Figure 3-6b	Conceptual Building Renderings: Daytime .....	3-23
Figure 3-7	Conceptual Building Rendering: Nighttime .....	3-25
Figure 3-8	Conceptual Building Sections .....	3-27
Figure 4-1	Site Photographs.....	4-5
Figure 4-2	Site Photographs.....	4-7
Figure 4-3	Cumulative Developments Location Map .....	4-15
Figure 5.5-1	Fault Map .....	5.5-5
Figure 5.7-1	Soil and Soil Vapor Sampling Locations .....	5.7-11
Figure 5.8-1	Newport Bay Watershed .....	5.8-5
Figure 5.8-2	Existing Site Drainage.....	5.8-11
Figure 5.8-3	Main Orange County Groundwater Basin .....	5.8-13
Figure 5.8-4	Water Quality Management Plan .....	5.8-19
Figure 5.8-5	Proposed Site Drainage .....	5.8-25
Figure 5.9-1	Airport Area Planning Designations .....	5.9-5
Figure 5.12-1	Public Services Facilities Map.....	5.12-3
Figure 5.14-1	Study Intersections and Roadway Segments.....	5.14-11
Figure 5.14-2	Project Trip Distribution and Assignment.....	5.14-21
Figure 5.16-1	Existing Sewers .....	5.16-5
Figure 5.16-2	Existing Water Mains.....	5.16-13
Figure 5.16-3	Proposed Utility Plan.....	5.16-17

## Table of Contents

Table	Page
Table 1-1	Project Alternative Statistical Summary.....1-6
Table 1-2	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation .....1-9
Table 2-1	NOP Written Comments Summary.....2-2
Table 2-2	Scoping Meeting Verbal Comments Summary.....2-6
Table 3-1	Apartment Unit Type Summary..... 3-11
Table 3-2	Apartment Unit Mix..... 3-15
Table 4-1	Cumulative Projects List..... 4-13
Table 5.2-1	Ambient Air Quality Standards for Criteria Pollutants ..... 5.2-2
Table 5.2-2	Attainment Status of Criteria Pollutants in the South Coast Air Basin..... 5.2-12
Table 5.2-3	Ambient Air Quality Monitoring Summary ..... 5.2-14
Table 5.2-4	Existing Daily Emissions Inventory..... 5.2-15
Table 5.2-5	SCAQMD Significance Thresholds..... 5.2-16
Table 5.2-6	SCAQMD Localized Significance Thresholds ..... 5.2-18
Table 5.2-7	SCAQMD Screening-Level Localized Significance Thresholds..... 5.2-19
Table 5.2-8	Construction Activities, Phasing, and Equipment..... 5.2-22
Table 5.2-9	Maximum Daily Regional Construction Emissions..... 5.2-24
Table 5.2-10	Newport Crossings Mixed-Use Project Maximum Daily Regional Operational Emissions ..... 5.2-26
Table 5.2-11	Maximum Daily Onsite Construction Emissions ..... 5.2-27
Table 5.2-12	Maximum Daily Regional Construction Emissions with Mitigation ..... 5.2-34
Table 5.5-1	Construction Best Management Practices..... 5.5-11
Table 5.6-1	GHG Emissions and Their Relative Global Warming Potential Compared to CO <sub>2</sub> ..... 5.6-2
Table 5.6-2	Summary of GHG Emissions Risks to California..... 5.6-5
Table 5.6-3	2017 Climate Change Scoping Plan Emissions Reductions Gap ..... 5.6-9
Table 5.6-4	2017 Climate Change Scoping Plan Emissions Change by Sector..... 5.6-10
Table 5.6-5	Existing GHG Emissions Inventory – Project Site..... 5.6-16
Table 5.6-6	Post-2020 Project-Level GHG Reduction Targets..... 5.6-18
Table 5.6-7	Newport Crossings Mixed Use Operational Phase GHG Emissions ..... 5.6-22
Table 5.6-8	SCAG 2016 RTP/SCS Transportation Land Use Strategies Consistency..... 5.6-24
Table 5.7-1	Perchloroethylene Soil Vapor Concentrations Exceeding CHHSL for Residential Land Use, 2017, µg/L..... 5.7-9
Table 5.7-2	Offsite Hazardous Materials Sites Listings..... 5.7-10
Table 5.8-1	Existing Peak Drainage Flow Rates from a 25-Year Storm ..... 5.8-8
Table 5.8-2	Pollutants on CWA Section 303(d) List of Water Quality Limited Segments for Receiving Waters for Project Site..... 5.8-8

## Table of Contents

Table	Page
Table 5.8-3	Construction Best Management Practices..... 5.8-17
Table 5.8-4	Proposed Peak Drainage Flow Rates from a 25-Year Storm..... 5.8-24
Table 5.9-1	Newport Beach General Plan Consistency Analysis ..... 5.9-12
Table 5.9-2	NPPC Consistency Analysis ..... 5.9-26
Table 5.10-1	Typical Noise Levels ..... 5.10-3
Table 5.10-2	Human Reaction to Typical Vibration Levels ..... 5.10-5
Table 5.10-3	Land Use Noise Compatibility Matrix ..... 5.10-7
Table 5.10-4	City of Newport Beach Exterior Noise Standards ..... 5.10-8
Table 5.10-5	City of Newport Beach Incremental Noise Impact Criteria for Noise-Sensitive Uses (dBA CNEL) ..... 5.10-9
Table 5.10-6	Groundborne Vibration Criteria: Architectural Damage..... 5.10-11
Table 5.10-7	Project-Related Construction Noise Levels, Energy-Average ( $L_{eq}$ ) Sound Levels..... 5.10-17
Table 5.10-8	Vibration Levels for Typical Construction Equipment ..... 5.10-19
Table 5.10-9	Project-Related Increase in Traffic Noise ..... 5.10-20
Table 5.11-1	City of Newport Beach and Orange County Population, 2000–2017 ..... 5.11-4
Table 5.11-2	Population Forecast, City of Newport Beach and Orange County ..... 5.11-4
Table 5.11-3	Housing Units, City of Newport Beach and Orange County, 2017 ..... 5.11-5
Table 5.11-4	City of Newport Beach RHNA Allocation, 2014–2021 ..... 5.11-5
Table 5.11-5	Household Forecast, City of Newport Beach and Orange County ..... 5.11-6
Table 5.11-6	Employment Projections, City of Newport Beach and Orange County ..... 5.11-6
Table 5.11-7	Jobs-Housing Balance..... 5.11-7
Table 5.11-8	Jobs-Housing Balance..... 5.11-9
Table 5.12-1	Fire Stations..... 5.12-2
Table 5.12-2	Schools Serving the Project Site..... 5.12-12
Table 5.12-3	Estimated Project Student Generation (350 Proposed Multifamily Units) ..... 5.12-13
Table 5.12-4	Project Impacts on School Capacities..... 5.12-13
Table 5.13-1	Recreational Facilities in Project Area..... 5.13-3
Table 5.14-1	Local Intersection Evaluation Levels of Service Descriptions ..... 5.14-5
Table 5.14-2	Roadway Segment Levels of Service Correspondence..... 5.14-6
Table 5.14-3	Summary of Intersection Operations Existing Conditions ..... 5.14-9
Table 5.14-4	Project Trip Generation (TPO) ..... 5.14-16
Table 5.14-5	Project Trip Generation (CEQA)..... 5.14-17
Table 5.14-6	Existing Plus Project Intersection Level of Service Summary..... 5.14-19
Table 5.14-7	Existing and Existing Plus Project Roadway Segment Level of Service Summary..... 5.14-20
Table 5.14-8	2022 Plus Project Intersection Level of Service Summary..... 5.14-25



## Table of Contents

<b>Table</b>		<b>Page</b>
Table 5.14-9	Future Year 2022 Roadway Segment Level of Service Summary.....	5.14-26
Table 5.14-10	Level of Service Summary, HCM Methodology, for Caltrans Intersections.....	5.14-27
Table 5.16-1	City of Newport Beach Current and Projected Water Supplies and Demands, Normal Years .....	5.16-11
Table 5.16-2	City of Newport Beach Projected Single Dry Year Supply and Demand (acre-feet) .....	5.16-11
Table 5.16-3	City of Newport Beach Projected Multiple Dry Year Supply and Demand (acre- feet).....	5.16-12
Table 5.16-4	Estimated Project Water Demand.....	5.16-16
Table 5.16-5	Proposed Peak Drainage Flow Rates from a 25-Year Storm.....	5.16-21
Table 5.16-6	Estimated Project Solid Waste Generation.....	5.16-26
Table 5.16-7	Landfill Capacity .....	5.16-27
Table 7-1	Project Alternative Statistical Summary.....	7-5
Table 7-2	Maximum Daily Regional Operational Emissions: Proposed Project vs. No Project Alternative.....	7-7
Table 7-3	GHG Emissions: Proposed Project vs. No Project Alternative .....	7-9
Table 7-4	Service and Utility Demand: Proposed Project vs. No Project Alternative .....	7-13
Table 7-5	Service and Utility Demand: Proposed Project vs. Reduced Height and Density Alternative.....	7-18
Table 7-6	Summary of Proposed Project and Alternatives Impacts.....	7-20
Table 7-7	Ability of Each Alternative to Meet the Project Objectives.....	7-20
Table 9-1	Estimated Project Electricity Demands.....	9-7
Table 9-2	Estimated Project Natural Gas Demands .....	9-8

## Abbreviations and Acronyms

### ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ADT	average daily traffic
AELUP	airport environs land use plan
AHIP	Affordable Housing Implementation Plan
ALUC	airport land use commission
amsl	above mean sea level
AR4	<i>Fourth Assessment Report: Climate Change 2007</i> (Intergovernmental Panel on Climate Change)
AQMP	air quality management plan
bctfd	billion cubic feet per day
bgs	below ground surface
BMP	best management practices
CalARP	California Accidental Release Prevention Program
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CHHSL	California Human Health Screening Levels
CMP	congestion management program
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide

## Abbreviations and Acronyms

CO <sub>2</sub> e	carbon dioxide equivalent
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
cy	cubic yard
dB	decibel
dba	A-weighted decibel
DEIR	draft environmental impact report
DPM	diesel particulate matter
du/ac	dwelling unit per acre
DWR	Department of Water Resources (CA)
EOP	emergency operations plan
EPA	United States Environmental Protection Agency
ESA	environmental study area
FAA	Federal Aviation Administration
FESA	Federal Endangered Species Act
GHG	greenhouse gases
gpd	gallons per day
gpm	gallons per minute
GWh	gigawatt hour
GWP	global warming potential
HCD	Housing and Community Development Department (CA)
HCM	Highway Capacity Manual
IBC	Irvine Business Complex
ICU	intersection capacity utilization
iShuttle	Irvine Shuttle
ITE	Institute of Transportation Engineers
JWA	John Wayne Airport
kWh	kilowatt hour
L <sub>dn</sub>	day-night noise level
L <sub>eq</sub>	equivalent continuous noise level
LBP	lead-based paint
LCFS	low-carbon fuel standard
LID	low impact development

## Abbreviations and Acronyms

LOS	level of service
LST	localized significance thresholds
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MMT	million metric tons
MOU	memorandum of understanding
MPO	metropolitan planning organization
MRZ	mineral recovery zone
MS4	municipal separate storm sewer system
MT	metric ton
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
MWS	modular wetland systems
NAHC	Native American Heritage Commission
NBFD	Newport Beach Fire Department
NBPD	Newport Beach Police Department
NBPL	Newport Beach Public Library
NBWS	Newport Beach
NCCP/HCP	natural communities conservation plan/habitat conservation plan
NEHRP	National Earthquake Hazard Reduction Program
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NPPC	Newport Place Planned Community
O <sub>3</sub>	ozone
OC EHD	Orange County
OCSD	Orange County
OCTA	Orange County Transportation Authority
OCWD	Orange County
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
PC-11	Newport Place Planned Community District
PCDP	planned community development plan

## Abbreviations and Acronyms

PCE	perchloroethylene
PM	particulate matter
POTW	publicly owned treatment works
ppd	pounds per day
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RHNA	regional housing needs assessment
RTP/SCS	regional transportation plan / sustainable communities strategy
RWQCB	Regional Water Quality Control Board
SAUSD	Santa Ana Unified School District
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SIP	state implementation plan
SoCAB	South Coast Air Basin
SO <sub>x</sub>	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCR	tribal cultural resource
TIA	traffic impact analysis
tpd	tons per day
TPO	traffic phasing ordinance
TTCP	traditional tribal cultural places
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
UWMP	urban water management plan

## Abbreviations and Acronyms

V/C	volume-to-capacity ratio
VdB	velocity decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
WQMP	water quality management plan
YBP	years before present
ZE	zero emissions

## Abbreviations and Acronyms

*This page intentionally left blank.*

# 1. Executive Summary

---

## 1.1 INTRODUCTION

This Draft Environmental Impact Report (DEIR) addresses the environmental effects associated with the implementation of the proposed Newport Crossings Mixed Use project. The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An environmental impact report (EIR) analyzes potential environmental consequences in order to inform the public and support informed decisions by local and state governmental agency decision makers. This document focuses on impacts determined to be potentially significant in the Notice of Preparation completed for this project (see Appendix A).

This DEIR has been prepared pursuant to the requirements of CEQA and the City of Newport Beach's CEQA procedures. The City of Newport Beach, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgment, including reliance on City technical personnel from other departments and review of all technical subconsultant reports.

Data for this DEIR derive from onsite field observations, discussions with affected agencies, analysis of adopted plans and policies, review of available studies, reports, data and similar literature, and specialized environmental assessments (aesthetics, air quality, biological resources, cultural resources, geological resources, hazards and hazardous materials, hydrology and water quality, land use, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems).

## 1.2 ENVIRONMENTAL PROCEDURES

This DEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the proposed project, as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
2. Identify ways to avoid or reduce environmental damage.
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
5. Foster interagency coordination in the review of projects.
6. Enhance public participation in the planning process.



## 1. Executive Summary

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

### 1.2.1 EIR Format

**Chapter 1. Executive Summary:** Summarizes the background and description of the proposed project, the format of this EIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

**Chapter 2. Introduction:** Describes the purpose of this EIR, background on the project, the notice of preparation, the use of incorporation by reference, and Final EIR certification.

**Chapter 3. Project Description:** A detailed description of the project, including its objectives, its area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this EIR.

**Chapter 4. Environmental Setting:** A description of the physical environmental conditions in the vicinity of the project as they existed at the time the notice of preparation was published, from local and regional perspectives. These provide the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

**Chapter 5. Environmental Analysis:** Each environmental topic is analyzed in a separate section that discusses: the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the project; the existing environmental setting; the potential adverse and beneficial effects of the project; the level of impact significance before mitigation; the mitigation measures for the proposed project; the level of significance after mitigation is incorporated; and the potential cumulative impacts of the proposed project and other existing, approved, and proposed development in the area.

**Chapter 6. Significant Unavoidable Adverse Impacts:** Describes the significant unavoidable adverse impacts of the proposed project.

**Chapter 7. Alternatives to the Proposed Project:** Describes the alternatives and compares their impacts to the impacts of the proposed project. Alternatives include the No Project Alternative and a Reduced Height and Density Alternative.

## 1. Executive Summary

**Chapter 8. Impacts Found Not to Be Significant:** Briefly describes the potential impacts of the project that were determined not to be significant and were therefore not discussed in detail in this DEIR.

**Chapter 9. Other CEQA Considerations.** This section includes the following three subsections:

- Significant Irreversible Changes Due to the Proposed Project: Describes the significant irreversible environmental changes associated with the project.
- Growth-Inducing Impacts of the Project: Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical or environmental impacts.
- Energy Conservation: Discusses the potential energy impacts of proposed project, with particular emphasis on avoiding or reducing any inefficient, wasteful, and unnecessary consumption of energy per CEQA Section 21100(b)(3).

**Chapter 10. Organizations and Persons Consulted:** Lists the people and organizations that were contacted during the preparation of this DEIR.

**Chapter 11. Qualifications of Persons Preparing EIR:** Lists the people who prepared this DEIR for the proposed project.

**Chapter 12. Bibliography:** The technical reports and other sources used to prepare this DEIR.

**Appendices:** The appendices for this document comprise these supporting documents:

- Appendix A Notice of Preparation (NOP) and NOP Comment Letters
- Appendix B Air Quality and Greenhouse Gas Modeling
- Appendix C Biological Resources Technical Memo
- Appendix D Cultural and Paleontological Resources Technical Memo
- Appendix E Updated Geotechnical Investigation
- Appendix F1 Phase I Environmental Site Assessment
- Appendix F2 Phase II Investigation Report
- Appendix F3 Soil and Soil Gas Investigation Report
- Appendix G1 Hydrology Report
- Appendix G2 Water Quality Management Plan
- Appendix H Noise Modeling
- Appendix I Public Services and Utilities Questionnaires Responses
- Appendix J Traffic Impact Analysis
- Appendix K1 Sewer Analysis Report
- Appendix K2 Sewer Demand
- Appendix K3 Water Demand Report

## 1. Executive Summary

### 1.2.2 Type and Purpose of This DEIR

This DEIR has been prepared as a “Project EIR,” defined by Section 15161 of the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). This type of EIR examines the environmental impacts of a specific development project and should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.

## 1.3 PROJECT LOCATION

The approximately 5.69-acre project site is in the northern end of the City of Newport Beach (City). The City is in the western part of Orange County in southern California. It is bordered by Huntington Beach to the northwest, Costa Mesa to the north, Irvine to the northeast, unincorporated areas (Crystal Cove State Park) of Orange County to the southeast, and the Pacific Ocean to the south.

The project site is in the City’s “Airport Area” planning subarea, which is bounded by Campus Drive to the north and west, SR-73 to the south, and Jamboree Road to the east. Within the Airport Area are established planned community development plans. The project site is in the Newport Place Planned Community. The site is generally bounded by Corinthian Way to the northeast, Martingale Way to the east, Scott Drive to the northwest, and Dove Street to the southwest. The site is approximately 0.2 mile east of John Wayne Airport.

## 1.4 PROJECT SUMMARY

The site is currently improved with the 58,277-square-foot MacArthur Square shopping center built in 1974, which consists of eight retail/commercial buildings, surface parking, and ornamental trees. Project development includes demolition of the existing buildings, surface parking, and hardscape improvements of MacArthur Square, as well as removal of a number of ornamental trees and other landscape improvements.

Upon clearing, the project site would be redeveloped with the proposed Newport Crossings Mixed Use project (proposed project). The proposed project would consist of the development of a multistory building that would house 350 apartment units, 2,000 square feet of “casual-dining” restaurant space, 5,500 square feet of retail space, and a 0.5-acre public park. Centrally located within the multistory building is a six-level, five-story parking structure (one semi-subterranean level), which would be surrounded and screened from public view by the proposed building. Of the proposed project’s 350 apartment units, 259 are considered “base” units and 91 are “density bonus” units. Of the 259 based units, 78 units (30 percent) are proposed to be reserved for lower-income households.

In addition to the 91 density bonus units, development incentives are available to developers pursuant to Chapter 20.32 of the City’s zoning code and Government Code Section 65915(d)(1). Specifically, the proposed project is seeking a development concession (unit mix) and a waiver/concession of development standards (building height increase). For the development concession, the project applicant is requesting a unit mix that includes a greater percentage of studio and one-bedroom units. For the waiver/concession, the project applicant is requesting a waiver of the 55-foot building height limit to 77 feet 9 inches in order to

## 1. Executive Summary

accommodate the parapet, roof-top mechanical equipment, elevator shafts, emergency staircase, rooftop terrace, and a portion of the parking garage. However, all portions of the building's residential living areas would be under 55 feet in height.

Future project residents and their guests would have access to a number of amenities, recreation and entertainment areas and services, including a pool courtyard featuring a community pool and spa, a clubroom, an outdoor terrace, barbecue grills, and an outdoor fireplace; entertainment courtyard featuring a fire pit, barbecue grills, soft seating, and overhead festival lights; lounge courtyard featuring a lounge cabana with fire pit, barbecue grills, communal dining tables, and soft seating; rooftop terrace featuring a spa with a cabana and sunning furniture, fireside lounge with a three-sided fireplace, group shade structure, lounge seating, and a dining terrace with barbecue grills, communal tables and outdoor kitchen, and a game lawn with synthetic turf, game tables, and overhead festival lighting; and view deck featuring an outdoor kitchen, lounge chairs, and a fireplace. Other amenities and services available to future residents include a club room for entertainment and gatherings; fitness facility; leasing office; centralized mail room; and washer and dryer in each apartment unit. Also, each apartment unit would feature a private patio or balcony. Ground-level units would feature patios, and units on the second floor and above would feature balconies.

### 1.5 SUMMARY OF PROJECT ALTERNATIVES

#### 1.5.1 Alternatives Evaluated

CEQA requires that an EIR include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines § 15126.6[a]). As required by CEQA, Chapter 7.0, *Alternatives to the Proposed Project*, of this DEIR identifies and evaluates potential alternatives to the proposed project.

Based on the analysis in Chapter 5, *Environmental Analysis*, the proposed project would result in potentially significant environmental effects prior to mitigation in the areas of air quality, biological resources, cultural resources, hazards and hazardous materials, and public services (fire protection and emergency services). However, with mitigation, impacts to these three topical areas would be avoided or reduced to less than significant levels. No significant and unavoidable impact would occur under implementation of the proposed project.

Based on the CEQA criteria, the following two alternatives were determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any the environmental effects of the project. These alternatives are analyzed in Chapter 7. Table 1-1 provides statistical summary of the project alternatives in comparison to the proposed project.

- **No Project Alternative** (required by CEQA). This alternative assumes that the existing commercial development on the site would remain, and leases would be extended/renewed to continue commercial operations at the site. Under this alternative, no demolition of existing buildings would occur.

## 1. Executive Summary

- Reduced Height and Density Alternative.** Under this alternative, the project’s building height would be kept under the 55 feet. As a result, the fifth floor of residential units (63 units), 7,955 square-foot amenity deck, a top of parking structure would all be eliminated. The retail, park, and residential amenities would remain the same as the proposed project. As shown in Table 1-1, this alternative would include a total of 287 residential units, and the maximum structure height would be 55 feet.

**Table 1-1 Project Alternative Statistical Summary**

		Proposed Project	No Project Alternative	Reduced Height & Density Alternative
Dwelling Units (Total)		350	—	287
Affordable Units		78	—	67
Commercial/Office Space (Square Feet)		7,500	58,277	7,500
Park Acreage		0.5 ac	—	0.5 ac
Population <sup>1</sup>		550	—	451
Employment <sup>2</sup>		16	94	16
Building Height	Height to roof of habitable areas	55 ft.	—	45 ft.
	Height of tallest architectural feature	77 ft. 9 in.	Single story (approx. average height 14 ft)	55 ft.

<sup>1</sup> Calculated using Newport Beach’s 2017 average household size of 2.24 people (DOF 2018).

<sup>2</sup> An employment density factor of one job per 617 square feet was used for retail and service jobs (Natelson 2001). Projected jobs under the proposed project and the No Development Incentives or Waivers Alternative add 4 full-time jobs related to residential uses (e.g., 12 commercial + 4 residential = 16 total jobs).

### 1.5.2 Alternative Conclusions

An EIR must identify an “environmentally superior” alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior.

#### 1.5.2.1 NO PROJECT ALTERNATIVE

The No Project alternative would lessen environmental impacts in the areas of air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, public services, tribal cultural resources, and utilities and service systems. Compared to the proposed project, this alternative would have greater impacts related to aesthetics, hydrology and water quality, land use and planning, population and housing, and recreation. Overall, the No Project alternative would reduce impacts for nine environmental categories and increase impacts for six categories. Assuming full occupancy for the existing commercial buildings under the No Project alternative, this alternative could introduce a new significant impact for traffic. The inconsistency with the goals of the Newport Beach General Plan vision for this area is an important land use consideration (impact greater than proposed project). Overall, the No

## 1. Executive Summary

Project alternative would result in a similar level of environmental impacts, but very different impacts. It would not be considered environmentally superior.

Moreover, the No Project alternative would prevent redevelopment of the project site. Therefore, none of the project objectives would be achieved under this alternative. The No Project alternative would not provide any of the project benefits that would occur with implementation of the proposed project, including enhancement of the site's character and design, dedication of publicly-accessible park space, sustainable development improvements (such as low-impact development, source control, site design, and treatment control best management practices that would improve drainage and water quality); economic revitalization, and affordable housing

### 1.5.2.2 REDUCED HEIGHT AND DENSITY ALTERNATIVE

The Reduced Height and Density alternative would lessen environmental impacts in the areas of air quality, greenhouse gas emissions, noise (operational), public services, recreation, transportation and traffic, and utilities and service systems. Impacts would be very similar for aesthetics, biological and cultural resources, geology and soils, hazards, hydrology and water quality, and land use and planning. This alternative would increase impacts to population and housing (jobs-housing balance). As with the proposed project, all impacts would be mitigated to less than significant. Overall, impacts under this alternative would be reduced in comparison to the proposed project.

The Reduced Height and Density alternative would represent a similar project as the proposed project, only with fewer housing units and less overall development intensity. Accordingly, as shown in Table 7-7, several of the project objectives would be achieved, but to a lesser extent. These includes objectives related to provision of housing, local jobs-housing balance, and onsite private recreation amenities. In addition, the Reduced Height and Density alternative would not allow for the provision of the 91 density bonus units allowed under both the City's zoning code and Government Code Section 65915 for the project. Instead, only 28 units associated with this alternative would be density bonus units.

## 1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed project, the major issues to be resolved include decisions by the lead agency as to:

1. Whether this DEIR adequately describes the environmental impacts of the project.
2. Whether the benefits of the project override those environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
3. Whether the proposed land use changes are compatible with the character of the existing area.
4. Whether the identified goals, policies, or mitigation measures should be adopted or modified.

## 1. Executive Summary

5. Whether there are other mitigation measures that should be applied to the project besides the mitigation measures identified in the DEIR.
6. Whether there are any alternatives to the project that would substantially lessen any of the significant impacts of the proposed project and achieve most of the basic project objectives.

### 1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Prior to preparation of the DEIR, the Notice of Preparation was distributed for comment from November 1, 2017, through November 30, 2017. A public scoping meeting was held on November 16, 2017. A summary of the NOP comment letters received and verbal comments received at the public scoping meeting are summarized in Chapter 2, *Introduction* (see Tables 2-1 and 2-2). The scoping meeting was held at the OASIS Senior Center, 801 Narcissus Ave, Corona Del Mar, CA 92625 and was attended by a number of community members and interested parties. Comments received were primarily related to the project's potential impacts on land use and planning. There were concerns that the project is inconsistent with the policies of the City's General Plan and the City's park dedication ordinance.

### 1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-2 summarizes the conclusions of the environmental analysis contained in this EIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after imposition of the mitigation measures is also presented.



## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>5.1 AESTHETICS</b>			
<b>Impact 5.1-1:</b> The proposed project would not result in a substantial adverse effect on a scenic vista or alter scenic resources within a state scenic highway.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.1-2:</b> The proposed project would alter the visual appearance of the project site and its surroundings but would not substantially degrade the existing visual character or quality.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.1-3:</b> The proposed project would create new sources of light or glare in the project area, but none of these would adversely affect day or nighttime views in the area.	Less than significant	No mitigation is required	Less than significant
<b>5.2 AIR QUALITY</b>			
<b>Impact 5.2-1:</b> The proposed project is consistent with the applicable Air Quality Management Plan.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.2-2:</b> Construction activities associated with the proposed project would generate short-term emissions in exceedance of SCAQMD'S threshold criteria for NOx.	Potentially significant	AQ-1 The construction contractor shall implement the following measure to reduce construction exhaust emissions during rough grading and rough grading soil hauling activities: <ul style="list-style-type: none"> <li>Hauling of soil generated from rough grading activities shall be limited to a maximum of 269 trucks per day (538 one-way haul trips per day if 14-cubic-yard trucks are used) assuming a one-way haul distance of 20 miles. If the one-way truck haul distance for export of soil from rough grading activities is greater than 20 miles, as identified by the contractor(s), hauling shall be restricted to no more than 10,760 miles per day.</li> <li>Rough grading and rough grading soil hauling activities shall not overlap with other construction activities (demolition, site preparation, utilities, etc.).</li> </ul> These requirements shall be noted on all construction management plans and verified by the City of Newport Beach prior to issuance of any	Less than significant with mitigation



## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>construction permits and during rough grading and rough grading soil hauling activities.</p> <p>The construction contractor shall implement the following measure to reduce construction exhaust emissions during demolition and demolition debris material export activities:</p> <ul style="list-style-type: none"> <li>Hauling of building demolition debris shall be limited to a maximum of 47 trucks per day (94 one-way haul trips per day; if 18-cubic-yard trucks are used) assuming a one-way haul distance of 30 miles. If the one-way truck haul distance for export of building demolition debris is greater than 30 miles, as identified by the contractor(s), hauling shall be restricted to no more than 2,850 miles per day.</li> <li>All demolition and demolition debris (building asphalt) hauling activities shall not overlap with other non-demolition construction activities (rough grading, site preparation, utilities, etc.).</li> </ul> <p>These requirements shall be noted on all construction management plans and verified by the City of Newport Beach prior to issuance of any construction permits and during demolition and demolition debris hauling activities.</p>	
AQ-2		<p>Construction contractors shall, at minimum, use equipment that meets the EPA's Tier 3 emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower for all building and asphalt demolition, building and asphalt demolition debris hauling, rough grading, and rough grading soil hauling activities, unless it can be demonstrated to the City of Newport Beach Building Division that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by Tier 3 emissions standards for a similarly sized engine, as defined by the California Air Resources Board's regulations.</p> <p>Prior to construction, the project engineer shall ensure that all construction (e.g., demolition and grading) plans clearly show the requirement for EPA Tier 3 emissions standards for construction equipment over 50 horsepower for the specific activities stated above. During construction, the construction</p>	AQ-3

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>contractor shall maintain a list of all operating equipment in use on the construction site for verification by the City of Newport Beach. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to 5 minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.</p>	
<p><b>Impact 5.2-3:</b> Long-term operation of the project would not generate additional vehicle trips and associated emissions in exceedance of SCAQMD's threshold criteria.</p>	<p>Less than significant</p>	<p>No mitigation is required</p>	<p>Less than significant</p>
<p><b>Impact 5.2-4:</b> The proposed project would not expose sensitive receptors to substantial pollutant concentrations.</p>	<p>Less than significant</p>	<p>No mitigation is required</p>	<p>Less than significant</p>
<p><b>Impact 5.2-5:</b> Operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.</p>	<p>Less than significant</p>	<p>No mitigation is required</p>	<p>Less than significant</p>
<p><b>Impact 5.2-6:</b> The proposed project would not create objectionable odors.</p>	<p>Less than significant</p>	<p>No mitigation is required</p>	<p>Less than significant</p>
<p><b>5.3 BIOLOGICAL RESOURCES</b></p>			
<p><b>Impact 5.3-1:</b> Development of the proposed project would not result in an impact on federally designated wetlands through direct removal, filling, hydrological interruption, or other means.</p>	<p>Less than significant</p>	<p>No mitigation is required</p>	<p>Less than significant</p>

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><b>Impact 5.3-2:</b> Removal of trees and shrubs onsite during site clearance could impact nesting migratory birds.</p>	<p>Potentially significant</p>	<p>BIO-1</p> <p>Prior to the commencement of any proposed actions (e.g., site clearing, demolition, grading) during the breeding/nesting season (September 1 through February 15), a qualified biologist contracted by the project applicant shall conduct a preconstruction survey(s) to identify any active nests in and adjacent to the proposed project site no more than three days prior to initiation of the action. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. However, if the biologist finds an active nest within or directly adjacent to the action area (within 100 feet) and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest using temporary plastic fencing or other suitable materials, such as barricade tape and traffic cones. The buffer zone shall be determined by the biologist in consultation with applicable resource agencies and in consideration of species sensitivity and existing nest site conditions, and in coordination with the construction contractor. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. Only specified construction activities (if any) approved by the qualified biologist shall take place within the buffer zone until the nest is vacated. At the discretion of the qualified biologist, activities that may be prohibited within the buffer zone include but not be limited to grading and tree clearing. Once the nest is no longer active and upon final determination by the biologist, the proposed action may proceed within the buffer zone.</p> <p>The qualified biologist shall prepare a survey report/memorandum summarizing his/her findings and recommendations of the preconstruction survey. Any active nests observed during the survey shall be mapped on a current aerial photograph, including documentation of GPS coordinates, and included in the survey report/memorandum. The completed survey report/memorandum shall be submitted to the City of Newport Beach Community Development Department prior to construction-related activities that have the potential to disturb any active nests during the nesting season.</p>	<p>Less than significant with mitigation</p>

# 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.3-3:</b> Development of the proposed project could potentially result in a conflict with the City's local policies or ordinances protecting biological resources	Less than significant	No mitigation is required	Less than significant
<b>5.4 CULTURAL RESOURCES</b>			
<b>Impact 5.4-1:</b> Development of the proposed project would not impact an identified historic resource.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.4-2:</b> Project development could result in an impact on archaeological resources.	Potentially significant	<p>CUL-1 Prior to the issuance of a grading permit by the City of Newport Beach, the project applicant shall retain a qualified archaeologist to periodically monitor ground-disturbing activities onsite and provide documentation of such retention to the City of Newport Beach Community Development Director. The archaeologist shall train project construction workers on the types of archaeological resources that could be found in site soils. The archaeologist shall periodically monitor project ground-disturbing activities. If archaeological resources are encountered, all construction work within 50 feet of the find shall cease, and the archaeologist shall assess the find for importance and whether preservation in place without impacts is feasible. Construction activities may continue in other areas. If, in consultation with the City, the discovery is determined to not be important, work will be permitted to continue in the area. Any resource that is not Native American in origin and that cannot be preserved in place shall be curated at a public, nonprofit institution with a research interest in the materials, such as the South Central Coastal Information Center at California State University, Fullerton.</p>	Less than significant with mitigation
<b>Impact 5.4-3:</b> The proposed project could result in an impact on paleontological resources.	Potentially significant	<p>CUL-2 Prior to the issuance of a grading permit by the City of Newport Beach, the project applicant shall retain a qualified paleontologist to be available on-call during ground-disturbing activities onsite and provide documentation of such retention to the City of Newport Beach Community Development Director. If fossils are encountered, all construction work within 50 feet of the find shall cease, and the paleontologist shall assess the find for importance. Construction activities may continue in other areas. If, in consultation with the City, the discovery is determined to not be important, work will be permitted to</p>	Less than significant with mitigation

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.4-4:</b> Grading activities could potentially disturb human remains.	Less than significant	No mitigation is required	Less than significant
<b>5.5 GEOLOGY AND SOILS</b>			
<b>Impact 5.5-1:</b> Project residents, workers, and visitors would be subject to strong ground shaking. Project development would not subject people or structures to substantial hazards from surface rupture of a known active fault, liquefaction, or earthquake-induced landslides.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.5-2:</b> Project development could cause substantial soil erosion.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.5-3:</b> Project development could expose people and structures to substantial hazards from collapsible soils and/or expansive soils. Development would not subject people or structures to substantial hazards from ground subsidence.	Less than significant	No mitigation is required	Less than significant
<b>5.6 GREENHOUSE GAS EMISSIONS</b>			
<b>Impact 5.6-1:</b> Implementation of the proposed project would not generate a net increase in GHG emissions, either directly or indirectly, that would have a significant impact on the environment.	Less than significant	No mitigation is required	Less than significant

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.6-2:</b> Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Less than significant	No mitigation is required	Less than significant
<b>5.7 HAZARDS AND HAZARDOUS MATERIALS</b>			
<b>Impact 5.7.1:</b> Project construction [and/or] operations would involve the transport, use, and/or disposal of hazardous materials. Such transport, use, and/or disposal would not cause substantial hazards to the public or the environment.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.7-2:</b> The project site is on a list of hazardous materials sites.	Potentially significant	HAZ-1  Before the City of Newport Beach issues a grading permit for the proposed project, the City of Newport Beach Chief Building Official or his/her designee shall verify that a passive ventilation system conforming to the following specifications has been included on project building plans. The City of Newport Beach Community Development Department shall verify that the ventilation system is built to such specifications during project construction.  <ul style="list-style-type: none"> <li>• <b>Subslab Ventilation System:</b> A subslab collection and ventilation system shall be installed under the residential building. The system shall consist of a series of PVC (polyvinyl chloride) gas collection pipes embedded in a permeable gravel layer. The collection pipes shall be networked together and vented to the atmosphere. The purpose of the vent system will be to prevent the buildup or accumulation of VOCs in the underlying soil; the gases instead are passively diverted into the venting system and safely discharged to the atmosphere away from occupied areas and air intake vents.</li> <li>• <b>Membrane Barrier:</b> A horizontal synthetic membrane or a sprayed-on liner shall be placed over the granular collection layer. The membrane provides a barrier to the intrusion of subsurface gases.</li> </ul>	Less than significant with mitigation

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li><b>Utility Trench Dams and Conduit Seals:</b> Gas barriers shall be installed in the permeable backfill of utility trenches or the hollow spaces of electrical or cable conduit piping to prevent gases from migrating laterally into the soils beneath the building. The conduit seals can consist of polyurethane foam that is injected into the conduit piping at the point where the conduit enters the structure to prevent the infiltration of subsurface gases into interior space.</li> </ul>	
<b>Impact 5.7-3:</b> Project development would not subject people on the ground to substantial airport-related hazards.	Less than significant	No mitigation is required	Less than significant
<b>5.8 HYDROLOGY AND WATER QUALITY</b>			
<b>Impact 5.8-1:</b> The proposed project would not violate water quality standards or waste discharge requirements or otherwise degrade water quality.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.8-2:</b> The proposed project would not substantially deplete groundwater supplies, interfere substantially with groundwater recharge, or result in a significant impact to groundwater quality.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.8-3:</b> Development of the proposed project would not substantially alter the existing drainage pattern to result in adverse flooding impacts, or create or contribute to runoff water that would exceed the capacity of existing or planned stormwater systems.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.8-4:</b> Development of the proposed project would not substantially alter the existing drainage pattern to result in potentially significant erosion or siltation impacts.	Less than significant	No mitigation is required	Less than significant

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>5.9 LAND USE AND PLANNING</b>			
<b>Impact 5.9-1:</b> Project implementation would not divide an established community.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.9-2:</b> Implementation of the proposed project would not conflict with Newport Beach General Plan policies, Newport Place Planned Community zoning, or the Airport Environs Land Use Plan for John Wayne Airport.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.9-3:</b> The proposed project would not conflict with an adopted habitat conservation plan.	Less than significant	No mitigation is required	Less than significant
<b>5.10 NOISE</b>			
<b>Impact 5.10-1:</b> Construction activities would create temporary noise increases in the vicinity of the proposed project site but would be in compliance with the City's noise ordinance.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.10-2:</b> Buildout of the proposed project would not expose sensitive uses to excessive levels of groundborne vibration.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.10-3:</b> Project implementation would not result in long-term operation-related noise that would exceed local standards.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.10-4:</b> The proximity of the project site to John Wayne Airport would result in exposure of future residents and workers to airport-related noise.	Less than significant	No mitigation is required	Less than significant
<b>5.11 POPULATION AND HOUSING</b>			
<b>Impact 5.11-1:</b> The proposed project would introduce approximately 550 residents into the project area, but would not directly (for	Less than significant	No mitigation is required	Less than significant



## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
example, by proposing new homes or businesses) or indirectly (for example, by extension or roads or expansion of infrastructure) induce substantial additional growth.			
<b>5.12 PUBLIC SERVICES</b>			
<b>FIRE PROTECTION AND EMERGENCY SERVICES</b>			
<b>Impact 5.12-1:</b> The proposed project would introduce new residents, workers, and structures into Newport Beach Fire Department's service boundaries, thereby increasing the requirement for fire protection apparatus and personnel, but not resulting in the need for new or physically altered fire facilities.	Potentially significant	PS-1  The project applicant/developer shall comply with the following measures related to fire protection and emergency services: <ul style="list-style-type: none"> <li>• Prior to the issuance of a building permit, the project applicant/developer shall provide payment to the City of Newport Beach equivalent to the cost for purchasing and equipping a new rescue ambulance with patient transport and advanced life support (ALS) capabilities to be located at Santa Ana Heights Fire Station No. 7. Because the cost of the ambulance exceeds the Project's pro rata contribution to its cumulative impact, the Project applicant shall be entitled to reimbursement from the City on a pro rata share basis, as determined by the City.</li> <li>• The project applicant/developer shall participate, on a pro-rata basis, in any City-approved funding program for up to an additional six firefighter/paramedic personnel, as may be needed to fund staff for the new paramedic unit. The funding program may be a community facilities district or other funding program. Prior to the issuance of a building permit, the project applicant/developer shall execute a written agreement with the City of Newport Beach to participate in such a funding program if the City determines one is necessary and forms it prior to the City's issuance of the Project's first Certificate of Occupancy</li> </ul>	Less than significant with mitigation

1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>POLICE PROTECTION</b>			
<b>Impact 5.12-2:</b> The proposed project would introduce new structures, residents, and workers into the Newport Beach Police Department's service boundaries, thereby increasing the requirement for police protection facilities and personnel, but not resulting in the need for new or physically altered police facilities.	Less than significant	No mitigation is required	Less than significant
<b>SCHOOL SERVICES</b>			
<b>Impact 5.12-3:</b> The proposed project would generate new students. Schools serving the project site have sufficient capacity for project-generated students.	Less than significant	No mitigation is required	Less than significant
<b>LIBRARY SERVICES</b>			
<b>Impact 5.12-4:</b> The proposed project would not generate additional population resulting in the need for the construction of new or expanded libraries.	Less than significant	No mitigation is required	Less than significant
<b>5.13 RECREATION</b>			
<b>Impact 5.13-1:</b> The proposed project would generate additional residents in the City of Newport Beach, which would result in an increase in the use of existing park and recreational facilities.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.13-2:</b> Development of a 0.5-acre public community park and private recreational amenities under the proposed project would not result in environmental impact.	Less than significant	No mitigation is required	Less than significant

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>5.14 TRANSPORTATION AND TRAFFIC</b>			
<b>Impact 5.14-1:</b> Project-related trip generation would not impact levels of service for the existing area roadway system.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.14-2:</b> Project-related traffic would not result in traffic impacts per traffic phasing ordinance (TPO) requirements.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.14-3:</b> The project-related traffic would not result in significant impacts to state highway intersections in the study area.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.14-4:</b> Project-related trip generation in combination with existing and proposed cumulative development would not result in designated road and/or highways exceeding county congestion management agency service standards.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.14-5:</b> The proposed project would not result in a change in air traffic patterns or an increase in traffic levels that would result in substantial safety risks.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.14-6:</b> The proposed project would not modify any public road or introduce features that would result in hazardous conditions, and it would provide adequate emergency access.	Less than significant	No mitigation is required	Less than significant
<b>Impact 5.14-7:</b> The proposed project complies with adopted policies, plans, and programs for alternative transportation and would not decrease the performance or safety of such facilities.	Less than significant	No mitigation is required	Less than significant

## 1. Executive Summary

**Table 1-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.13-8: Project-related construction worker, delivery, and construction vehicle trips would not adversely affect the operations of intersections and roadways in the study area.	Less than significant	No mitigation is required	Less than significant
<b>5.15 TRIBAL CULTURAL RESOURCES</b>			
Impact 5.15-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource.	Less than significant	No mitigation is required	Less than significant
<b>5.16 UTILITIES AND SERVICE SYSTEMS</b>			
Impact 5.16-1: Project-generated wastewater could be adequately treated by the wastewater service provider for the project.	Less than significant	No mitigation is required	Less than significant
Impact 5.16-2: Water supply and delivery systems are adequate to meet project requirements.	Less than significant	No mitigation is required	Less than significant
Impact 5.16-3: Existing and/or proposed storm drainage systems are adequate to serve the drainage requirements of the proposed project.	Less than significant	No mitigation is required	Less than significant
Impact 5.16-4: Existing and/or proposed facilities could accommodate project-generated solid waste and comply with related solid waste regulations.	Less than significant	No mitigation is required	Less than significant

## 1. Executive Summary

*This page intentionally left blank.*

## 2. Introduction

---

### 2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This draft environmental impact report (DEIR) has been prepared to satisfy CEQA and the CEQA Guidelines. The environmental impact report (EIR) is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the proposed project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The lead agency means “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment” (CEQA Guidelines § 21067). The City of Newport Beach has the principal responsibility for approval of the Newport Crossings Mixed Use project. For this reason, the City of Newport Beach is the CEQA lead agency for this project.

The intent of the DEIR is to provide sufficient information on the potential environmental impacts of the proposed Newport Crossings Mixed Use project to allow the City of Newport Beach to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the City are described in Section 3.4, *Intended Uses of the EIR*.

This DEIR has been prepared in accordance with requirements of the:

- California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, §§ 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (CEQA Guidelines), as amended (California Code of Regulations, §§ 15000 et seq.)

The overall purpose of this DEIR is to inform the lead agency, responsible agencies, decision makers, and the general public about the environmental effects of the development and operation of the proposed Newport Crossings Mixed Use project. This DEIR addresses effects that may be significant and adverse; evaluates alternatives to the project; and identifies mitigation measures to reduce or avoid adverse effects.

## 2. Introduction

### 2.2 NOTICE OF PREPARATION

The City of Newport Beach determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on November 1, 2017 (see Appendix A). The public was provided with a 30-day public review period to comment on the NOP from November 1 to November 30, 2017. Table 2-1 compiles the comments received from commenting agencies/persons and identifies the section(s) of this DEIR where the issues are addressed. All NOP comments received during the public review period are in Appendix A.

**Table 2-1 NOP Written Comments Summary**

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
<b>AGENCIES</b>			
Office of Planning and Research (OPR)	10/31/17	<ul style="list-style-type: none"> <li>Confirmed receipt of the NOP and notified responsible agencies of public review commenting period.</li> </ul>	Not Applicable
Native America Heritage Commission (NAHC)  Gayle Totton, M.A., PhD, Associate Governmental Program Analyst	11/8/17	<ul style="list-style-type: none"> <li>Provides details on Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) requirements.</li> <li>Recommends lead agencies consult with all California Native American tribes traditionally and culturally affiliated with the project area per AB 52 and SB 18 requirements.</li> <li>States that lead agencies should contact appropriate regional California Historical Research Information System Centers for an archaeological records search of the project area; prepare a professional cultural resources assessment report; contact the NAHC for a Sacred Lands File search and Native American Tribal Consultation List.</li> <li>Lead agencies should include mitigation to reduce impacts to potentially inadvertently discovered archaeological resources during project construction, including plans for the disposition of recovered cultural items and human remains.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.4, <i>Cultural Resources</i></li> <li>Section 5.15, <i>Tribal Cultural Resources</i></li> </ul>
Airport Land Use Commission for Orange County (ALUC)  Kari A. Rigoni, Executive Officer	11/16/17	<ul style="list-style-type: none"> <li>States that the project site is in the Federal Aviation Regulation (FAR) Part 77 Notification Area for John Wayne Airport (JWA) and recommends using the Notice Criteria Tool on the Federal Aviation Administration (FAA) website to determine if the project penetrates the notification surface and requires filing Form 7460-1 Notice of Proposed Construction or Alteration with the FAA.</li> <li>States that the project site is also within the 60 dBA CNEL noise contour and within Safety Zone 6 for JWA. The DEIR should discuss how the project would address noise and safety concerns.</li> <li>If a referral by the City to the ALUC is required for the project, the ALUC requests such referrals to be submitted and agendized by the ALUC staff between the City's expected Planning Commission and City Council hearings.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.9, <i>Land Use and Planning</i></li> <li>Section 5.10, <i>Noise</i></li> </ul>

2. Introduction

**Table 2-1 NOP Written Comments Summary**

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
Irvine Ranch Water District (IRWD)  Fiona M. Sanchez, Director of Water Resources	11/17/17	<ul style="list-style-type: none"> <li>Confirmed that the project site is outside IRWD's service area and that the project would have no impact to IRWD services.</li> </ul>	Not Applicable
South Coast Air Quality Management District (SCAQMD)  Lijin Sun, J.D., Program Supervisor, CEQA & IGR, Planning, Rule Development & Area Sources	11/17/17	<ul style="list-style-type: none"> <li>States that the lead agency should use SCAQMD's CEQA Air Quality Handbook and CalEEMod land use emissions software when preparing its air quality analysis.</li> <li>The EIR should identify any potential adverse air quality impacts (construction and operation) that could occur from all phases of the project and all air pollutant sources related to the project.</li> <li>The EIR should quantify criteria pollutant emissions and localized significance thresholds and compare the results to the regional and localized significant thresholds, respectively.</li> <li>Air quality impacts from all phases (construction and operations) should be calculated.</li> <li>A mobile health risk assessment is recommended if the proposed project generates or attracts substantial vehicular trips, especially heavy-duty diesel-fueled vehicles.</li> <li>All feasible mitigation measures should be utilized for significant adverse air quality impacts. If impacts remain significant, project alternatives shall be considered and discussed to avoid or substantially lessen the air quality and health risk impacts.</li> <li>If the proposed project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the proposed project.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.2, <i>Air Quality</i></li> <li>Section 5.6, <i>Greenhouse Gas Emissions</i></li> </ul>
City of Irvine Community Development Department  Justin Equina, Associate Planner	11/21/17	<ul style="list-style-type: none"> <li>Requests traffic analysis of AM and PM peak periods as well as the average daily conditions for all study area locations.</li> <li>States that the traffic analysis should include the intersections and arterials located within the City of Irvine bounded by Interstate 405 to the north, MacArthur to the west, and Jamboree to the east; the City of Irvine's IBC Vision Plan methodology and performance criteria along these arterial/intersections should be used for the 2020, 2035, and post 2035 year scenarios (pending and approved projects).</li> <li>Requests an analysis of already approved projects (i.e., General Plan build out) and a cumulative analysis that includes projects currently on file or concurrently being reviewed in Irvine and Newport Beach.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.14, <i>Transportation and Traffic</i></li> <li>Appendix J, <i>Traffic Study</i></li> <li>Section 2.2.1, <i>Expanded Analysis</i>, below</li> </ul>



## 2. Introduction

**Table 2-1 NOP Written Comments Summary**

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
<b>ORGANIZATIONS</b>			
Still Protecting Our Newport (SPON)  Marko Popovich, President	11/21/17	<ul style="list-style-type: none"> <li>Reproduces the General Plan Land Use Element, Airport Area Policy Overview and states that the project is not a part of an integrated plan for the Airport Area. Instead, it is a stand-alone project with inadequate facilities to fulfill neighborhood needs to create an area with limited need for car use.</li> <li>States that the proposed 5,500-square-foot retail area is not consistent with an integrated mixed-use plan for the Airport Area as promised in the General Plan.</li> <li>States that the proposed project makes no accommodations to incorporate retail uses of a sufficient scale to achieve a "complete" neighborhood that minimizes the needs for residents to travel outside the community for retail and services.</li> <li>Requests analysis of how the proposed retail use would fulfill the need for an integrated neighborhood where people can carry on their daily routine with very limited use of a car.</li> <li>Requests analysis of how the project fulfills the goal of a "complete" and "integrated" neighborhood.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.9, <i>Land Use and Planning</i></li> </ul>
		<ul style="list-style-type: none"> <li>States that the rooftop facilities result in a significant increase in height close to the airport and directly under the flight path of small airplanes, including pilot training flights.</li> <li>Requests analysis of noise and safety issues for residents using the proposed rooftop facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.7, <i>Hazards and Hazardous Materials</i></li> <li>Section 5.9, <i>Land Use and Planning</i></li> <li>Section 5.10, <i>Noise</i></li> <li>Section 5.14, <i>Transportation and Traffic</i></li> </ul> <p>CEQA review analyzes the project's impact on the environment. Per a California Supreme Court decision, it is no longer a requirement of the CEQA process to evaluate the impact of existing (or future) environmental conditions on any given project, with limited exceptions.<sup>1</sup></p> <p>One exception applies to airports. Section 5.9</p>

<sup>1</sup> *California Building Industry Association v. Bay Area Air Quality Management District* (2015) [Case No. S213478].

2. Introduction

**Table 2-1 NOP Written Comments Summary**

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
			<p>addresses the consistency with the Airport Environs Land Use Plan for John Wayne Airport, and Sections 5.7 and 5.10, respectively, address airport-related safety and noise issues.</p>
		<ul style="list-style-type: none"> <li>• Requests analysis of the needs of future residents of the project—access to schools, grocery stores, hardware stores, medical facilities, and public transit.</li> </ul>	<p>The potential impacts of the proposed project on public services and transportation are addressed in the following DEIR sections:</p> <ul style="list-style-type: none"> <li>• Section 5.12, <i>Public Services</i></li> <li>• Section 5.14, <i>Transportation and Traffic</i></li> </ul> <p>Note that potential impacts to medical facilities (i.e., hospitals) are not an environmental concern under CEQA and are not addressed. Additionally, CEQA review analyzes the project’s impact on the environment. The potential impact of the project on itself (i.e., future residents) is not a CEQA concern.<sup>2</sup></p>
		<ul style="list-style-type: none"> <li>• Requests analysis of the cost of proposed housing and how it meets the needs of job opportunities in the area.</li> </ul>	<p>The cost of the proposed units is not an environmental topic of concern under CEQA. However, an analysis of project-generated jobs and the City’s jobs-housing balance is included in Section 5.11, <i>Population and Housing</i>.</p>
		<ul style="list-style-type: none"> <li>• States that the City’s park dedication ordinance requires 5 acres of parkland per 1,000 residents; the proposed 0.5-acre community park does not meet that standard.</li> <li>• States that the Airport Area is planned for 2,200 additional units with potentially more due to density bonuses. Using a conservation assumption of two residents per unit (4,400 residents), the Airport</li> </ul>	<ul style="list-style-type: none"> <li>• Section 5.13, <i>Recreation</i></li> </ul> <p>Note, the commenter incorrectly calculated the required parkland. An increase in 4,400 residents would result in a need of 22 acres of parkland in the</p>

<sup>2</sup> Ibid.

## 2. Introduction

**Table 2-1 NOP Written Comments Summary**

Commenting Agency/Person	Letter Dated	Summary of Comments	Issue Addressed In:
		Area would need 22,000 acres of park space. Questions where and how the parkland would be developed.	Airport Area (not 22,000 acres).
		<ul style="list-style-type: none"> <li>The project description states the proposed buildings would have contemporary architecture.</li> <li>Request an explanation to what the term "contemporary architecture" entails and how it is planned for this project.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.1, <i>Aesthetics</i></li> </ul>
		<ul style="list-style-type: none"> <li>Requests analysis of the following alternatives:                             <ul style="list-style-type: none"> <li>A project with more limited square footage per unit resulting in lower expected costs per residents and with less bulk, mass, and height.</li> <li>A project without rooftop facilities for residents.</li> <li>A project with increased park space for residents of the neighborhood which should be at least 2.65 acres if using the assumption of 1.5 residents per unit.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Chapter 7, <i>Alternatives</i>, as applicable</li> <li>Section 2.2.1, <i>Expanded Discussion</i>, below</li> </ul>
<b>INDIVIDUALS</b>			
Kerri Hirsch	11/21/17	<ul style="list-style-type: none"> <li>Generally opposed to the project.</li> <li>States that the project will most definitely increase car trips over 150 trips and questioned why the project does not require a greenlight vote.</li> </ul>	Comment on opposition is not related to the scope of the EIR but project trip generation is analyzed in Section 5.14, <i>Transportation and Traffic</i> . See also Section 2.2.1, <i>Expanded Discussion</i> , below.
All comments are organized based on date received.			

In addition, a scoping meeting was held on November 16, 2017, at the OASIS Senior Center, 801 Narcissus Avenue, Corona del Mar, CA 92625, to elicit comments on the scope of the DEIR. A summary of verbal comments received during the scoping meeting is provided in Table 2-2, and the list of attendees is included in Appendix A.

**Table 2-2 Scoping Meeting Verbal Comments Summary**

Commenter	Summary of Comments	Issue Addressed In:
Jim Mosher	<ul style="list-style-type: none"> <li>Stated that the fact that the proposed project does not need a General Plan Amendment does not mean it is consistent with all the policies in the City's General Plan; the EIR should analyze the project's consistency with these policies.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.9, <i>Land Use and Planning</i></li> </ul>
	<ul style="list-style-type: none"> <li>Concerned that the 0.5-acre community park is not sufficient to meet the City's parkland standard (5 acres per 1,000 residents).</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.13, <i>Recreation</i></li> </ul>

## 2. Introduction

The NOP process helps determine the scope of the environmental issues to be addressed in the DEIR. Based on this process, certain environmental categories were identified as having the potential to result in significant impacts. Issues considered Potentially Significant are addressed in this DEIR, but issues identified as Less Than Significant or No Impact are not. Refer to Chapter 8, *Impacts Found Not to Be Significant*, in this DEIR for a discussion of how these initial determinations were made.

### 2.2.1 Expanded Discussion

This section provides additional explanation regarding some of the comments received in response to the NOP. Reference to this section is included in Table 2-1, *NOP Written Comments Summary*, as applicable.

#### 2.2.1.1 ALTERNATIVES

One of the commenters requested that the following alternatives be analyzed in the EIR:

- A project with more limited square footage per unit resulting in lower expected costs per residents and with less bulk, mass, and height.
- A project without rooftop facilities for residents.
- A project with increased park space for residents of the neighborhood, which should be at least 2.65 acres if using the assumption of 1.5 residents per unit.

Per Section 15126.6 of the CEQA Guidelines, EIRs are required to describe a range of reasonable alternatives to the project or to the location of the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Therefore, the formulation of alternatives is directly related to a project's significant environmental impacts identified in the EIR and how the alternatives could reduce or eliminate the impacts while feasibly attaining most of the project's objectives.

The alternatives requested are not associated with any of the project's significant adverse impacts identified in this EIR; therefore, it is not necessary to analyze such alternatives. The Reduced Height & Density alternative, however, as analyzed in Chapter 7, *Alternatives*, calls for a development of less bulk, mass, and height. Specifically, under this alternative, the project's height would be kept under 55 feet. As a result, the fifth floor of residential units would be eliminated, resulting in a reduction of 63 units, 7,995 square foot amenity deck, and top of parking structure, as well as a height reduction of 10 feet. The retail, park, and residential amenities would remain the same as the proposed project. This alternative would include a total of 287 residential units, and the maximum structure height would be 55 feet.

The other alternatives analyzed in Chapter 7 is the No Project alternative. Under this alternative, the project site would remain a commercial/office complex and no activities under the proposed project would be realized. Refer to the Chapter 7 for additional analysis and discussion. Refer also to Section 7.1.2 of Chapter 7 for a description of the project objectives.

## 2. Introduction

### 2.2.1.2 TRAFFIC

#### **Additional Traffic Analysis**

One of the commenters requested traffic analysis of AM and PM peak periods as well as the “average daily conditions” for all study area locations. The Traffic Impact Analysis (TIA) prepared for the proposed project (see Appendix J) included an analysis of AM and PM peak hour conditions for the study area intersections; this analysis formed the bases for the analysis in Section 5.14, *Transportation and Traffic*, of this DEIR. The request to evaluate “average daily conditions for all study area locations” is not clear but implies that the commenter is requesting an analysis of daily traffic on all roadway segments between the intersections evaluated. The TIA includes Average Daily Trip analysis of four roadway segments, which are the segments closest to the project where project traffic would have the potential to have an impact. Therefore, traffic impacts were adequately addressed in the TIA and Section 5.14.

The commenter also requested that the City of Irvine’s IBC Vision Plan methodology and performance criteria along the listed arterials/intersections should be used for the 2020-, 2035-, and post 2035-year scenarios (pending and approved projects). The IBC impact criteria was used for Irvine intersections; please refer to the TIA and Section 5.14. However, the TIA did not include all the major intersections and arterials in the area within the City of Irvine requested by the commenter. The TIA included all relevant intersections in Irvine, as the project trip distribution presented in in the TIA shows very little project-related traffic on the segments and intersections in Irvine that were not analyzed on Jamboree, Michaelson, and Von Karman.

The suggested analysis of long-range 2035 and post-2035 scenarios, were not included in the TIA. The TIA includes the appropriate analysis to support the cumulative analysis requirements for the DEIR. The project does not require a zone change or general plan amendment, and is therefore, consistent with previous general plan buildout assessments. The TIA for the proposed project evaluates traffic impacts for future conditions, including pending and approved projects in Irvine and Newport Beach and includes 25 related projects in Newport Beach and 30 in Irvine. Refer to the TIA and Section 5.14 for additional analysis and discussion.

#### **Greenlight Vote**

The “greenlight vote” referenced by the commenter is related to Newport Beach Charter Section 423 and City Council Policy A-18, which state that major general plan amendments shall require a vote of the public. A “major amendment” is one that significantly increases the maximum amount of traffic that allowed uses could generate, or significantly increases allowed density or intensity. The proposed project does not require a general plan amendment, and therefore, Charter Section 423 and Council Policy A-18 are not applicable.

## 2.3 SCOPE OF THIS DEIR

The scope of the DEIR was determined based on the City’s NOP, comments received in response to the NOP, and comments received at the scoping meeting conducted by the City. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the DEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

## 2. Introduction

### 2.3.1 Impacts Considered Less Than Significant

As detailed in Chapter 8, *Impacts Found Not to Be Significant*, the City of Newport Beach determined that the following environmental impact categories were not significantly affected by or did not affect the proposed project.

- Agriculture and Forestry Resources
- Mineral Resources

### 2.3.2 Potentially Significant Adverse Impacts

The City determined that 16 environmental factors have potentially significant impacts if the proposed project is implemented.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems

### 2.3.3 Unavoidable Significant Adverse Impacts

This DEIR did not identify any significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the proposed project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant.

## 2. Introduction

### 2.4 INCORPORATION BY REFERENCE

Some documents are incorporated by reference into this DEIR, consistent with Section 15150 of the CEQA Guidelines, and they are available for review at the City of Newport Beach, Community Development Department, 100 Civic Center Drive, Newport Beach, CA 92660.

- **City of Newport Beach General Plan (2006):** The 2006 General Plan serves as the major blueprint for directing growth within the City of Newport Beach and presents a comprehensive plan to accommodate the City's growing needs. Currently this document regulates the existing land uses on the proposed project site. The General Plan analyzes existing conditions in the City, including physical, social, cultural, and environmental resources and opportunities. It also looks at trends, issues, and concerns that affect the region, describes City goals and objectives, and provides policies to guide development and change.
- **City of Newport Beach Municipal Code:** The municipal code is a set of laws governing Newport Beach and covers all aspects of City regulations, including zoning, permitted uses and standards, and various development requirements. Zoning district standards are also included in the code. Where applicable, code sections are referenced throughout the DEIR.
- **Newport Place Planned Community Development Plan:** The Newport Place Planned Community District (PC-11) and planned community development plan (PCDP) and its associated Development Standards were adopted by the City of Newport Beach in December 1970 and amended through July of 2012. Development Standards address building height, setbacks, parking, landscaping, residential densities (maximum number of dwelling units per acre), nonresidential intensities (maximum building area in square feet), amenities, and neighborhood integration. The Residential Overlay provides opportunities to develop affordable residential projects which, among other provisions, must provide a density of 30 to 50 dwelling units per acre and a minimum of 30 percent affordable housing units.

In each instance where a document is incorporated by reference for purposes of this report, the DEIR shall briefly summarize the incorporated document or briefly summarize the incorporated data if the document cannot be summarized. Chapter 12, *Bibliography*, provides a complete list of references used in preparing this DEIR.

### 2.5 FINAL EIR CERTIFICATION

This DEIR is being circulated for public review for 45 days. Interested agencies and members of the public are invited to provide written comments on the DEIR to the City address shown on the title page of this document. Upon completion of the 45-day review period, the City will review all written comments received and prepare written responses for each. A Final EIR (FEIR) will incorporate the received comments, responses to the comments, and any changes to the DEIR that result from comments. The FEIR will be presented to the Newport Beach City Council for potential certification as the environmental document for the project. All persons who comment on the DEIR will be notified of the availability of the FEIR and the date of the public hearing before the City.

## 2. Introduction

The DEIR is available to the general public for review at various locations:

- City of Newport Beach, Community Development Department, 100 Civic Center Drive, Newport Beach, CA 92660
- Newport Beach Libraries:
  - Central Library, 1000 Avocado Avenue, Newport Beach, CA 92660
  - Balboa Branch, 100 East Balboa Boulevard, Newport Beach, CA 92660
  - Mariners Branch, 1300 Irvine Avenue, Newport Beach, CA 92660
  - Corona del Mar Branch, 420 Marigold Avenue, Corona Del Mar, CA 92625
- City of Newport Beach website: <http://www.newportbeachca.gov/ceqa>

### **2.6 MITIGATION MONITORING**

Public Resources Code, Section 21081.6, requires that agencies adopt a monitoring or reporting program for any project for which it has made findings pursuant to Public Resources Code 21081 or adopted a Negative Declaration pursuant to 21080(c). Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR or Negative Declaration.

The Mitigation Monitoring Program for the Newport Crossings Mixed Use project will be completed in conjunction with the Final EIR, prior to consideration of the project by the Newport Beach City Council.



## 2. Introduction

*This page intentionally left blank.*

## 3. Project Description

---

### 3.1 PROJECT LOCATION

The approximately 5.69-acre project site is in the northern end of the City of Newport Beach (City). The City is in the western part of Orange County in southern California. It is bordered by Huntington Beach to the northwest, Costa Mesa to the north, Irvine to the northeast, unincorporated areas (Crystal Cove State Park) of Orange County to the southeast, and the Pacific Ocean to the south (see Figures 3-1, *Regional Location*, and 3-2, *Local Vicinity*). As shown in Figures 3-1 and 3-2, regional access to the project site is provided via Interstate 405 (I-405), State Route 55 (SR-55), State Route 73 (SR-73) (San Joaquin Hills Transportation Corridor), and Highway 1 (Pacific Coast Highway).

As shown in Figure 3-3a, *Aerial Photograph: Airport Area*, the project site is in the City's "Airport Area" planning subarea, which is bounded by Campus Drive to the north and west, SR-73 to the south, and Jamboree Road to the east. Within the Airport Area are established planned community development plans. The project site is in the Newport Place Planned Community. The site is generally bounded by Corinthian Way to the northeast, Martingale Way to the east, Scott Drive to the northwest, and Dove Street to the southwest (see Figure 3-3b, *Aerial Photograph: Project Site*). The site is approximately 0.2 mile east of John Wayne Airport.

The project site is pentagonal-shaped area comprising four Assessor Parcel Numbers (APNs): 427-172-02, -03, -05, and -06. Given the odd shape of the property, it does not have a definable width or depth.

### 3.2 STATEMENT OF OBJECTIVES

The following objectives have been established for the proposed Newport Crossings Mixed Use project and will aid decision makers in their review of the project and associated environmental impacts.

- **Objective 1.** To develop a multiunit mixed-use project that includes affordable housing units that will serve the various populations of the City of Newport Beach.
- **Objective 2.** To develop a mixed-use project that is consistent with and furthers the policies of the General Plan for the Airport Area without the need for a General Plan amendment.
- **Objective 3.** To locate additional housing within an area identified by the General Plan as an opportunity area for future housing.
- **Objective 4.** To develop a mixed-use project that contributes to a walkable and pedestrian-friendly community.

### 3. Project Description

- **Objective 5.** To generate temporary employment in the construction industry.
- **Objective 6.** To improve the jobs-housing balance in Newport Beach and to provide new housing within close proximity to jobs and services.
- **Objective 7.** To provide beneficial site and area improvements, including extensive onsite private recreation amenities and the dedication of a public park to the City of Newport Beach.
- **Objective 8.** To develop a project that implements and is consistent with the intent of the Newport Place Planned Community Residential Overlay and that takes advantage of the Density Bonus allowed under both the City’s zoning code and Government Code Section 65915.

### 3.3 PROJECT CHARACTERISTICS

“Project,” as defined by the CEQA Guidelines, means “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)...enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700” (14 Cal. Code of Reg. 15378[a]).

#### 3.3.1 Description of the Project

Following is a discussion of the project background for context, and a detailed description of the proposed project’s overall site plan and character and the various development components, elements, and improvements that would be implemented. Project phasing is discussed in Section 3.3.4, *Project Phasing and Construction*.

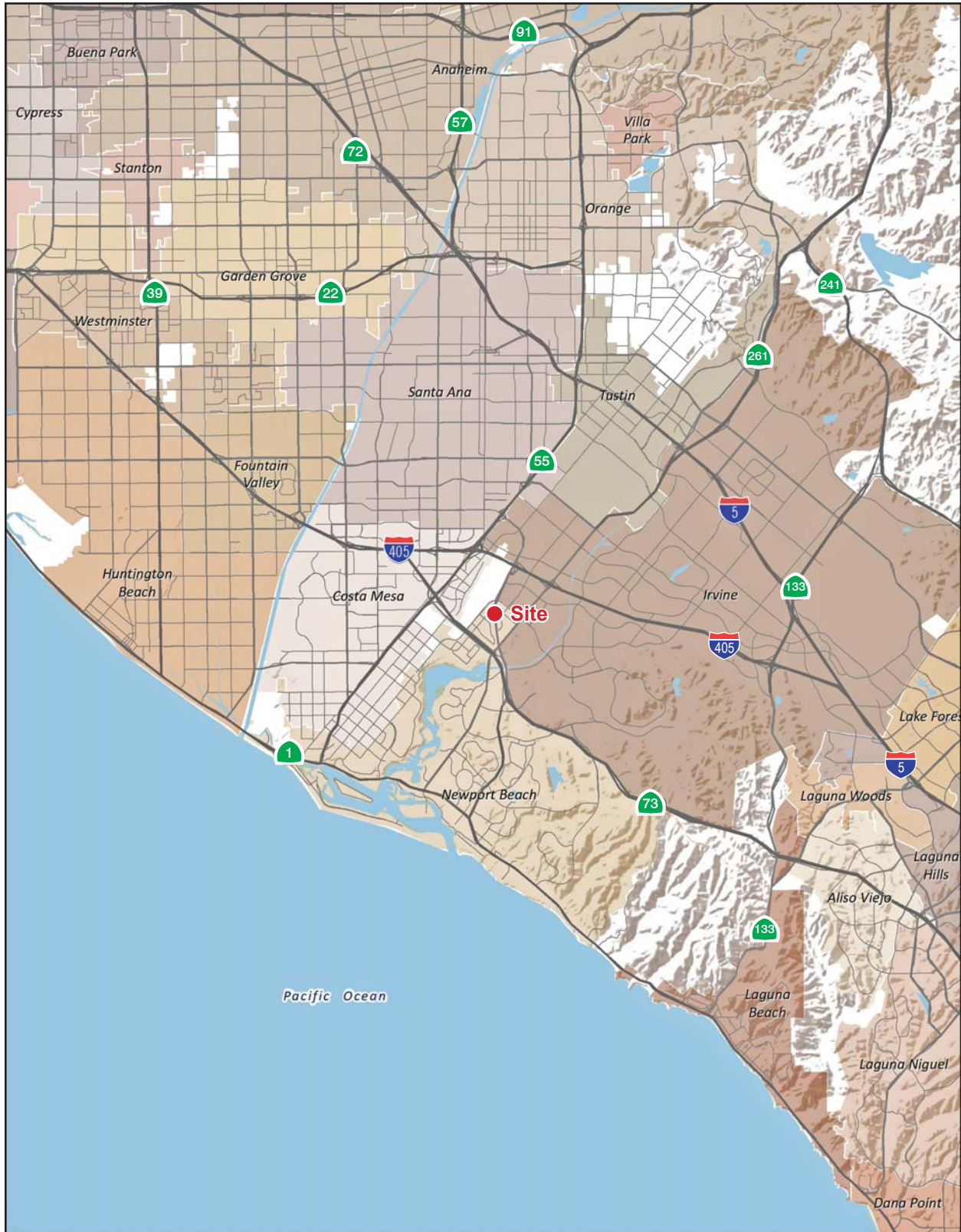
##### 3.3.1.1 PROJECT BACKGROUND

As shown in Figure 3-3b, *Aerial Photograph: Project Site*, the site is currently improved with the 58,277-square-foot MacArthur Square shopping center, which was built in 1974. The shopping center consists of eight single-story commercial/retail buildings, surface parking, and various landscape (e.g., ornamental trees, shrubs) and hardscape improvements. MacArthur Square is characterized as an aging, underutilized, and underperforming shopping center that supports a variety of retail and commercial business, including restaurants and retail shops. Current tenants include several restaurants, a dance studio, retail stores, and professional and medical offices.

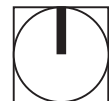
##### 3.3.1.2 SITE PLAN, CHARACTER, AND LAND USE

Project development includes demolition of approximately 58,277 square feet of existing buildings, surface parking for 462 vehicles, and hardscape improvements of MacArthur Square. Project development also requires removal of a number of ornamental trees and other landscape improvements. Site improvements and features to be demolished and removed are shown in Figure 3-3b, *Aerial Photograph: Project Site*.

Figure 3-1 - Regional Location  
3. Project Description



Note: Unincorporated county areas are shown in white.



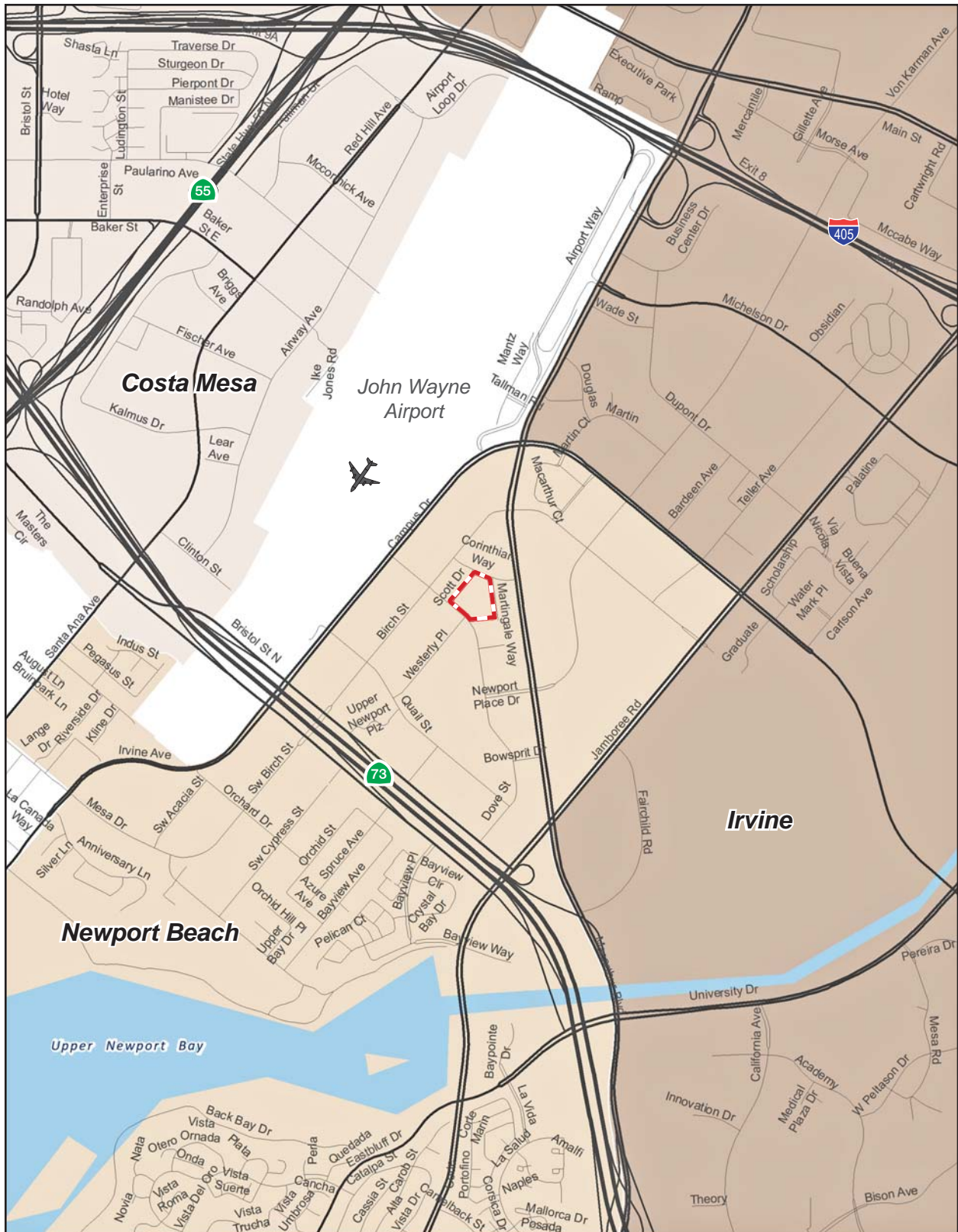
Source: ESRI, 2017

### 3. Project Description

*This page intentionally left blank.*



Figure 3-2 - Local Vicinity  
3. Project Description



Note: Unincorporated county areas are shown in white.

--- Project Boundary

Source: ESRI, 2015

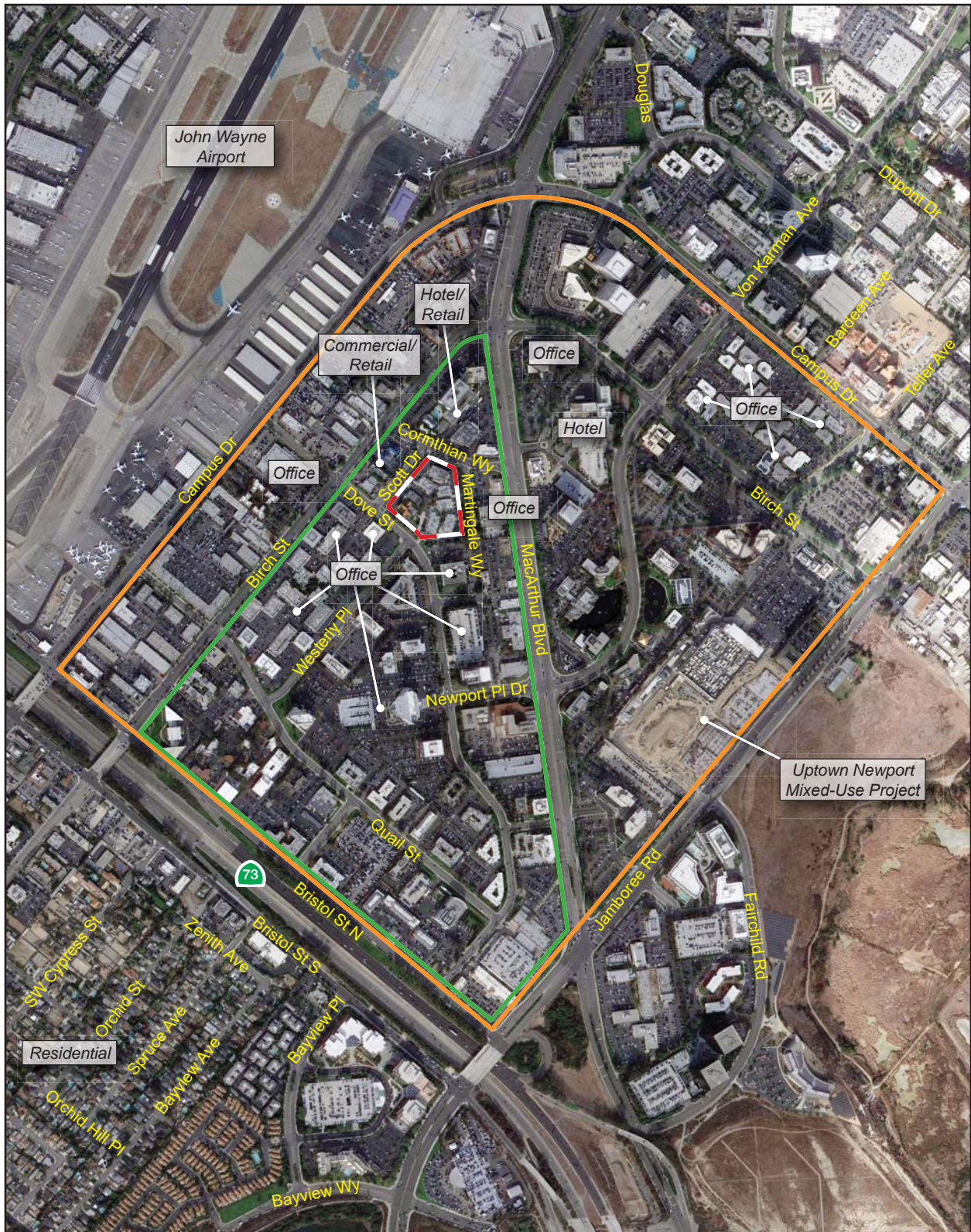


### 3. Project Description

*This page intentionally left blank.*

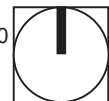


Figure 3-3a - Aerial Photograph: Airport Area  
3. Project Description



--- Project Boundary      — Newport Place Planned Community  
— Airport Area

0      1,000  
Scale (Feet)



Source: Google Earth Pro, 2017



### 3. Project Description

*This page intentionally left blank.*

Figure 3-3b - Aerial Photograph: Project Site  
3. Project Description



--- Project Boundary

0 2,000  
Scale (Feet)



Source: Google Earth Pro, 2017

### 3. Project Description

*This page intentionally left blank.*

### 3. Project Description

Upon clearing, the approximately 5.69-acre project site would be redeveloped with the proposed Newport Crossings Mixed Use project (proposed project). The proposed project would consist of the development of a multistory building that would house 350 apartment units, 2,000 square feet of “casual-dining” restaurant space, and 5,500 square feet of retail space. The project also includes the development of a 0.5-acre public park, which is described in detail below. Table 3-1 provides a breakdown of the proposed apartment unit types.

**Table 3-1 Apartment Unit Type Summary**

Unit Type	Unit Square Footage Range	Quantity	Percentage Total
Studio/1 bathroom	587 to 626	29	8%
1 bedroom/1 bathroom	690 to 828	197	56%
2 bedrooms/2 bathrooms	916 to 1,209	124	36%
<b>Total</b>	—	<b>350</b>	<b>100%</b>

Figure 3-4, *Conceptual Site and Landscape Plan*, illustrates how the proposed building and public park fit into the overall layout of the project site. As shown in this figure, the proposed building would follow the pentagonal shape of the project site, with building façades fronting all site frontages. The pentagonal building is designed as a single structure; however, it includes multiple buildings with various heights and massing that are connected to each other through common/shared walls, covered pedestrian corridors and breezeways, and various building elements and architectural features. Centrally located within the multistory building is a six-level, five-story parking structure (one semi-subterranean level), which would be surrounded and screened from public view by the proposed building. Various courtyards and recreational and entertainment amenities would be introduced to break up the overall building plane; these features and amenities would also help break up the massing of the building as seen from the ground level. Various elements of the proposed building would exceed the base height limit of 55 feet; specifically, building heights would reach up to 77 feet 9 inches for stair towers, architectural features (including parapets), parking structure, roof decks, elevator shafts, and mechanical equipment. However, all portions of the building’s residential living areas would be under 55 feet in height.

As shown in Figure 3-4, the proposed retail space and plaza would front onto Corinthian Way, serving as a walkable and pedestrian-friendly connection between the proposed project’s retail uses and existing commercial and retail uses to the north, across Corinthian Way. Also, the elongated, roughly rectangular public park in the southern portion of the project site would help provide a physical and visual buffer between the proposed apartment units and the office uses to the south.

#### **3.3.1.3 AFFORDABLE HOUSING AND DEVELOPMENT INCENTIVES/CONCESSIONS AND WAIVERS**

The project site is within the Residential Overlay of the Newport Place Planned Community, which is an established planned community development plan in the Airport Area (see Figure 3-3a, *Aerial Photograph: Airport Area*). The established Newport Place Planned Community Development Standards (Residential



### 3. Project Description

Overlay) allow for a maximum residential density of 50 dwelling units per net acre; a minimum of 30 percent of the units in residential developments are required to be affordable to lower-income households.

After dedication of the 0.5-acre public park, the net acreage of the project site would be 5.19 acres, which results in a maximum allowed density of 259 units. Of the 259 units allowed, 78 units (30 percent) are proposed to be reserved for lower-income households. As encouraged by the Residential Overlay and pursuant to Chapter 20.32 (Density Bonus) of the City's zoning code and Government Code Section 65915 (Density Bonus Law), with a 30 percent allocation for lower-income households, the proposed project is entitled to the maximum 35 percent density bonus (91 additional units), increasing the total project density to 350 units. Therefore, of the proposed project's 350 apartment units, 259 are considered "base" units and 91 are "density bonus" units.

In addition to the 91 density bonus units, development incentives are available to developers pursuant to Chapter 20.32 of the City's zoning code and Government Code Section 65915(d)(1). Specifically, the proposed project is entitled to up to three incentives or concessions that would result in identifiable, financially sufficient, and actual cost reductions. Government Code Section 65915(e)(1) also entitles a development to waivers or modifications of development standards that, if applied, would physically preclude development of the housing development with the proposed density bonus.

To illustrate compliance with the Residential Overlay affordable housing requirements and density bonus allowances of the City zoning code and state law, the proposed project includes preparation of an Affordable Housing Implementation Plan (AHIP) (see Section 3.3.3, *Discretionary Actions and Approvals*). The AHIP includes a request for one development concession for the unit mix and one waiver for the height.

- **Development Concession (Unit Mix).** Pursuant to Section V.F.1 of the Residential Overlay, "Affordable units shall reflect the range of numbers of bedrooms provided in the residential development project as a whole." In the case of the proposed project, the project applicant is requesting a unit mix that includes a greater percentage of studio and one-bedroom units, as illustrated in Table 3-2.
- **Waiver/Concession of Development Standard (Height Increase).** Pursuant to Section V.A of the Residential Overlay, the maximum building heights are limited to 55 feet, but may be increased with the approval of a site development review after making certain findings for approval. Government Code Section 65915(e)(1) provides that a city may not apply a development standard that will have the effect of physically precluding the construction of a density bonus project at the density permitted under the density bonus law. In the case of the proposed project, the project applicant is requesting a waiver of the 55-foot building height limit to 77 feet 9 inches in order to accommodate the parapet, roof-top mechanical equipment, elevator shafts, emergency staircase, rooftop terrace, and a portion of the parking garage.

Figure 3-4 - Conceptual Site and Landscape Plan  
3. Project Description



ENLARGED GROUND LEVEL PATIOS  
- TOP ALL SIDES

ENTRY DRIVE  
• enhanced paving

TRASH STATIONS

ENTERTAINMENT COURTYARD  
• fire pit on turf "rug"  
• overhead festoon lighting  
• bar/food counter  
• dining terrace  
• changed private patios

THE LOUNGE  
• lounge cabana with firepit  
• communal tables  
• bar/food counter  
• changed private patios

1/2 ACRE COMMUNITY PARK

RETAIL PLAZA

ROOFTOP TERRACE at LEVEL 7

EXISTING ITALIAN STONE PINE  
• protect in-place

LEASING PLAZA and ENTRY DRIVE  
• enhanced paving  
• matching height patios  
• project signage  
• pottery

NEW DECK at LEVEL 5  
• outdoor kitchen  
• lounge chairs  
• fireplace  
• pottery

POOL COURTYARD



### 3. Project Description

*This page intentionally left blank.*

### 3. Project Description

**Table 3-2 Apartment Unit Mix**

Unit Type	Total Units	Required Density Bonus Lower-Income Units	Development Standards Additional Lower-Income Units	Total Affordable Units
Studio	29	13	7	20
1 Bedroom	197	38	18	56
2 Bedrooms	124	1	1	2
<b>Total</b>	<b>350</b>	<b>52</b>	<b>26</b>	<b>78</b>

#### 3.3.1.4 ARCHITECTURAL DESIGN AND CHARACTER

Figures 3-5a and 3-5b, *Conceptual Building Elevations*, Figures 3-6a and 3-6b, *Conceptual Building Renderings: Daytime*, and Figure 3-7, *Conceptual Building Rendering: Nighttime*, illustrate the proposed architectural style and building elements/features of the proposed project. Figure 3-8 illustrates the conceptual building sections and massing. As shown in these figures, the proposed architectural style would be Contemporary, and design elements (e.g., roof style, window fenestration and details, building materials) would be consistent with this architectural style. For example, design elements would include light sand-finish stucco walls; architectural metal and acrylic panels; wood plank tiles; glass railings; vinyl windows; aluminum storefronts; and metal awnings, sun shades, horizontal slats, and trellises. Building pop-outs and offsets; variations in building heights, rooflines, materials, colors, and landscaping; and balconies would be added and modulated to offset the building’s massing, provide human scale, promote visual interest and articulation, and provide relief to and variation in the building form and style. The final building design and architectural style are subject to review and approval by the City’s Planning Commission.

#### 3.3.1.5 LANDSCAPING AND LIGHTING

As shown in Figure 3-4, *Conceptual Site and Landscape Plan*, ornamental trees, shrubs, and groundcover would be planted along the site perimeter and in the public gathering areas, such as the entertainment courtyard, pool courtyard, lounge, view deck, and rooftop terrace in the residential development portion as well as the retail plaza. The half-acre public park in the southern portion of the site would also be landscaped with ornamental trees surrounding the proposed park amenities. Additionally, existing Italian Stone pines along Martingale Way would be preserved in place (see Figure 3-4). The proposed plant palette would include noninvasive, medium-/low-water consumptive varieties. The proposed plants would be water conserving and have deep root systems that enable soil stabilization and minimize erosion.

Project development requires removal of the majority of existing trees onsite (minus the aforementioned Italian Stone pines), as well as other landscape improvements associated with the existing MacArthur Square shopping center. Although the majority of existing trees would be removed (approximately 76 trees), the proposed project would provide a greater number of trees (approximately 174 new trees, including the public park and retail plaza) than currently exist. All landscaped areas, including the public park and retail plaza, would be maintained by the property management company.

Project lighting would consist of building-mounted light fixtures; lighting for pedestrian walkways and corridors; decorative lighting for landscape and architectural features; signage lighting; interior lighting for the



### 3. Project Description

apartment units, leasing office, retail uses, and parking structure; lighting for the courtyards, rooftop terrace, common areas, and public park; and security lighting. See Figure 3-7, *Conceptual Building Rendering: Nighttime*, for an illustration of the potential nighttime lighting scheme of the proposed project.

#### 3.3.1.6 AMENITIES, RECREATION AND ENTERTAINMENT AREAS, AND SERVICES

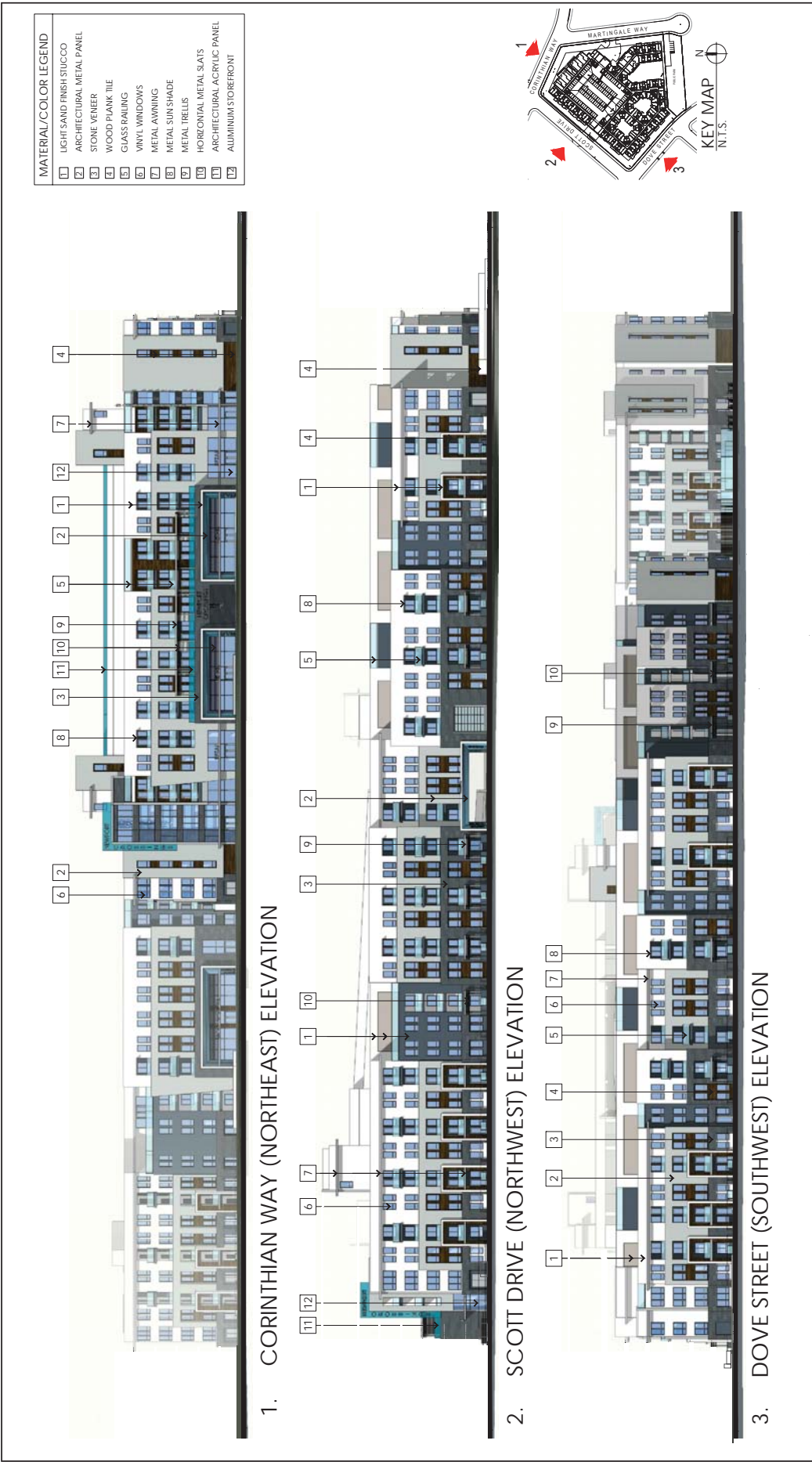
##### Residential

As shown in Figure 3-4, *Conceptual Site and Landscape Plan*, future project residents and their guests would have access to a number of amenities, recreation and entertainment areas and services, including:

- **Pool Courtyard:** The pool courtyard includes a community pool and spa, a clubroom, an outdoor terrace, barbecue grills, and an outdoor fireplace. Chaise lounges and cabanas provide for poolside seating, and the spa terrace would be developed with lounging on deck or synthetic turf with a fireplace. A round metal trellis at the south end of the pool courtyard is intended for hanging “pod” chairs with views back to the clubroom. As shown in Figure 3-4, this courtyard would provide a direct connection to the proposed public park (described below) via a gated entry.
- **Entertainment Courtyard:** The entertainment courtyard is intended for the passive user and bisected by a pedestrian corridor (see Figure 3-4). Uses in this courtyard would include a fire pit, barbecue grills, soft seating, and overhead festival lights. Ground-level units surrounding the entertainment courtyard would have private patios fronting the courtyard.
- **Lounge Courtyard:** The lounge courtyard is intended for the passive user and bisected by a pedestrian corridor (see Figure 3-4). Uses in this courtyard would include a lounge cabana with fire pit, barbecue grills, communal dining tables, and soft seating. Ground-level units surrounding the lounge courtyard would have private patios fronting the courtyard.
- **Rooftop Terrace at Level 7:** The rooftop terrace would be on the seventh floor of the apartment building, on the north side of the proposed parking structure. The terrace would provide direct views of the retail plaza below (see Figure 3-4), John Wayne Airport, and surrounding commercial areas. The terrace would include a spa with a cabana and sunning furniture. A fireside lounge with a three-sided fireplace, group shade structure, lounge seating, and overhead festival lights would be provided at the center of the terrace. The rooftop would also include a dining terrace with barbecue grills, communal tables and outdoor kitchen, and a game lawn with synthetic turf, game tables, and overhead festival lighting.
- **View Deck at Level 5:** The view deck would be on the fifth floor of the apartment building (see Figure 3-4). The view deck would include an outdoor kitchen, lounge chairs, and a fireplace.

Other amenities and services available to future residents include a club room for entertainment and gatherings; fitness facility; leasing office; centralized mail room; and washer and dryer in each apartment unit. Also, each apartment unit would feature a private patio or balcony. Ground-level units would feature patios, and units on the second floor and above would feature balconies.

Figure 3-5a - Conceptual Building Elevations  
3. Project Description



### 3. Project Description

*This page intentionally left blank.*

Figure 3-5b - Conceptual Building Elevations  
3. Project Description



### 3. Project Description

*This page intentionally left blank.*



### Figure 3-6a - Conceptual Building Renderings: Daytime 3. Project Description



### 3. Project Description

*This page intentionally left blank.*

### Figure 3-6b - Conceptual Building Renderings: Daytime 3. Project Description



1. VIEW FROM DOVE STREET LOOKING WEST



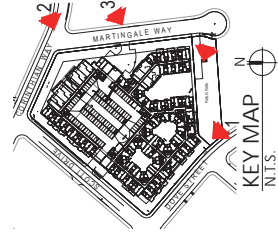
2. VIEW OF RETAIL PLAZA AT CORINTHIAN WAY



3. VIEW FROM MARTINGALE WAY LOOKING WEST TOWARDS LEASING CENTER



4. VIEW FROM PARK LOOKING NORTHWEST TOWARDS POOL COURTYARD

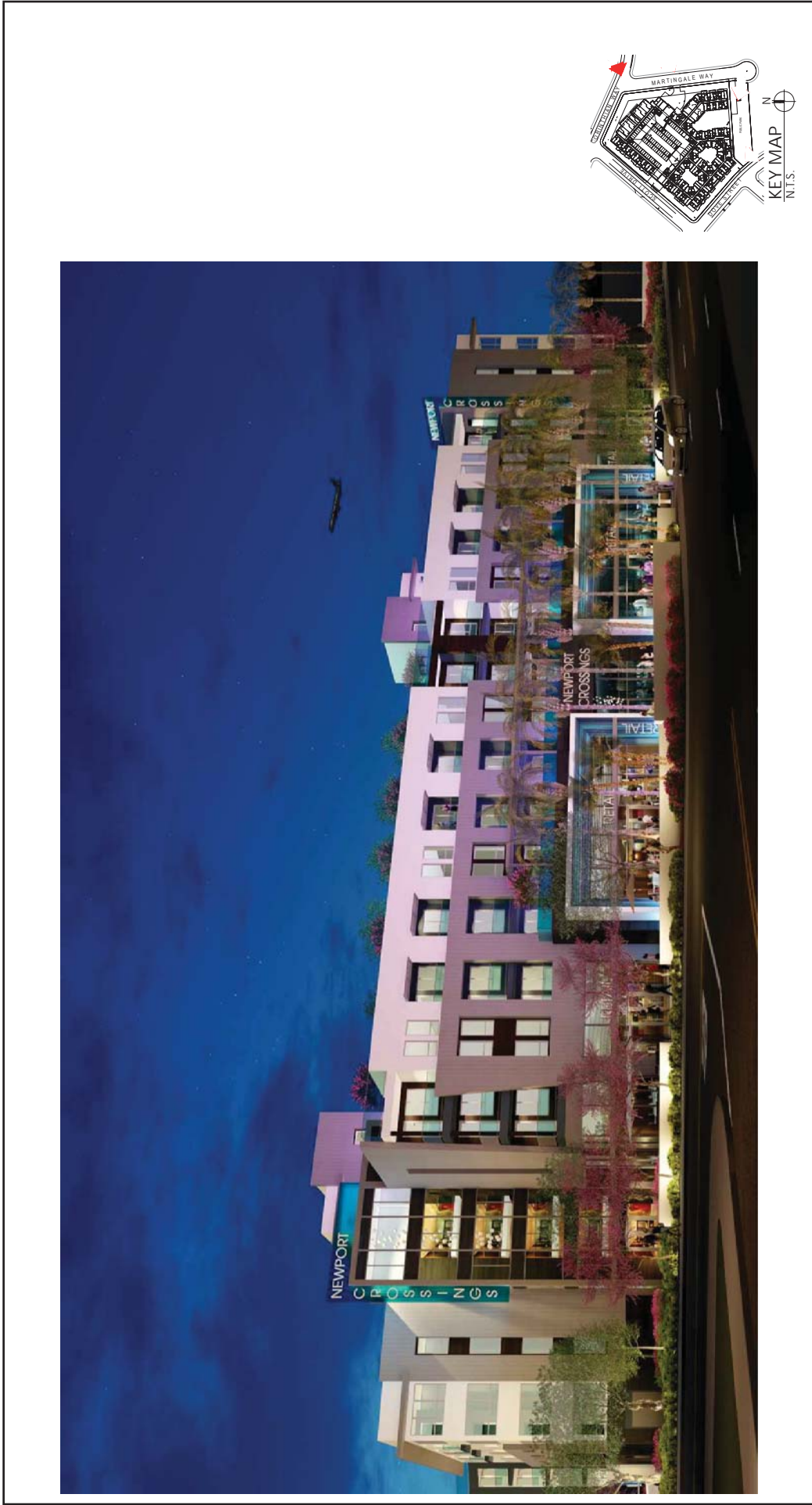




### 3. Project Description

*This page intentionally left blank.*

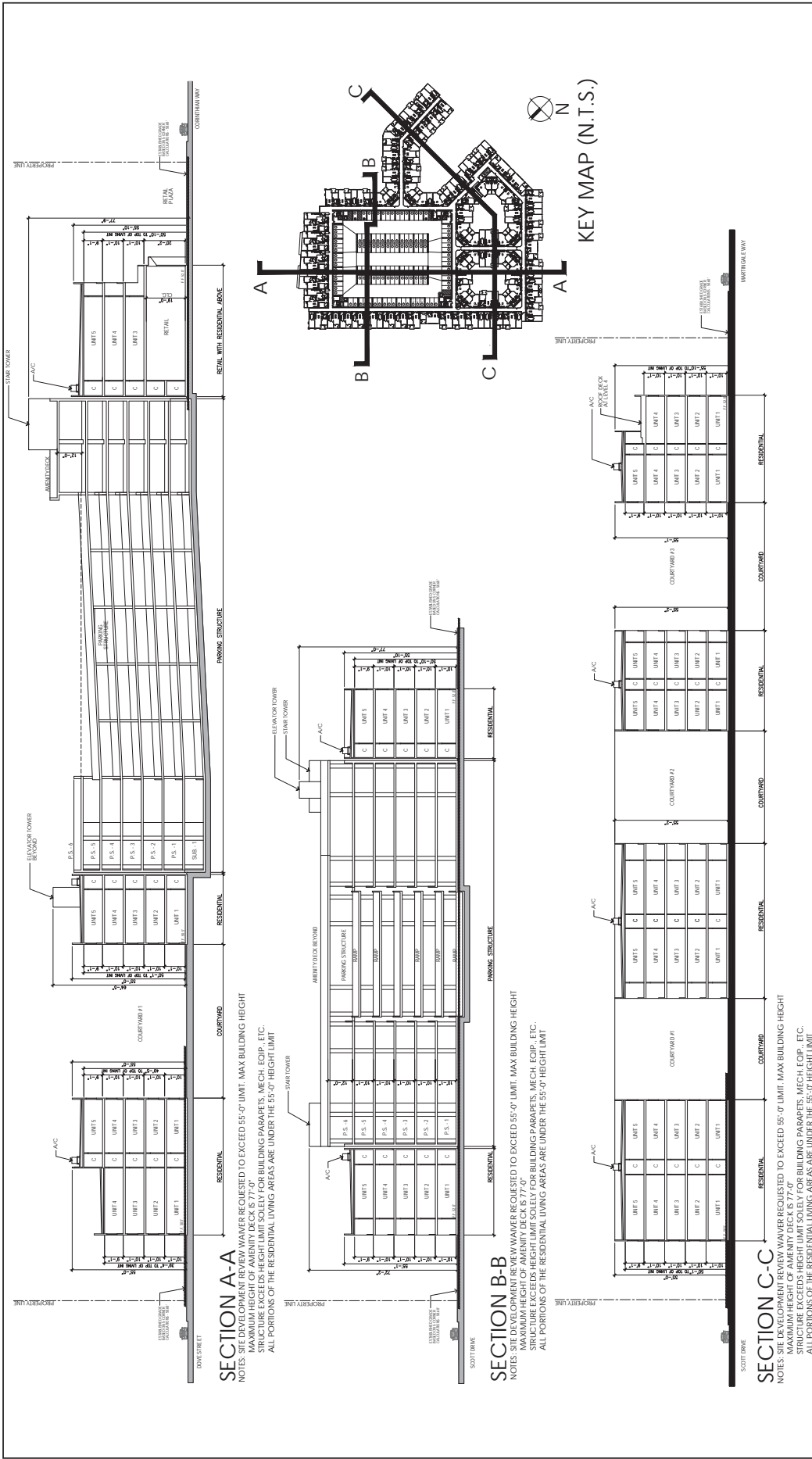
### Figure 3-7 - Conceptual Building Rendering: Nighttime 3. Project Description



### 3. Project Description

*This page intentionally left blank.*

Figure 3-8 - Conceptual Building Sections  
3. Project Description



### 3. Project Description

*This page intentionally left blank.*

## 3. Project Description

### Retail

As shown in Figure 3-4, a retail plaza would be directly adjacent to the proposed ground-level retail uses fronting Corinthian Way. The retail plaza would be available to future retail employees and patrons of the retail uses and to future project residents and their guests. The retail plaza would include designated outdoor dining areas for restaurants with tables, chairs, and low fencing; an open dining plaza with tables, chairs, and festival lights; a fireside lounge with a firepit, soft seating, and festival lights; a water feature that would include a wall and reflection pool with water steps; and palm trees and other landscape features and elements throughout.

#### 3.3.1.7 PUBLIC PARK

In addition, the proposed project includes development of a half-acre public park. As shown in Figure 3-4 and consistent with the General Plan Land Use Element Figure LU23 (Airport Area Residential Villages Illustrative Concept Diagram) and General Plan Policy LU 6.15.13, an elongated, rectangular-shaped public park would be at the southern end of the project site with frontages on Dove Street and Martingale Way. Upon completion, the park would be dedicated to the City for public use; however, it would be managed and operated by the property management company. The park would serve future project residents, employees, and patrons. It is also intended to serve the existing offices and business in the surrounding vicinity as a recreation and activity area and respite from the daily work environment. Anticipated park amenities include a play lawn featuring playground equipment, shade structure, benches, and synthetic turf; fenced and separated dog parks for large and small dogs featuring synthetic turf; fitness terrace with fitness equipment and shade trellis; central dining terrace with overhead trellis, tables, and chairs; bocce ball court with shade cabanas; fenced pickleball court; and seat walls throughout. An off-street parking lot for park users is also proposed on the eastern end of the park. The public park would be landscaped with low-water-use plants. A tree and shrub hedge would be provided along the southern boundary to provide a visual and physical buffer between the park and the adjacent office parking lot to the south.

#### 3.3.1.8 ACCESS, CIRCULATION, AND PARKING

##### Vehicular Access and Circulation

Vehicular access to the project site would be via full-access driveways (all turning movements permitted) off Scott Drive and Martingale Way. The driveways would lead to internal private drive aisles with decorative pavers, which would direct vehicles to the parking structure's gated entries (see Figure 3-4). The parking structure would be restricted to apartment residents, guests, and employees, and to employees and patrons of the retail uses. Once inside the parking structure, vehicles would circulate via internal drive aisles and vehicle ramps; wayfinding signs would be provided. The parking structure's gated entries would be accessed by emergency service vehicles via remote opening devices.

As shown in Figure 3-4, the public park would have a separate full-access driveway at the southern end of Martingale Way, which would lead into a separate parking lot area for the park.

### 3. Project Description

#### **Pedestrian and Bicycle Access and Circulation**

Pedestrians and bicyclists would access the project site along the perimeter roadways. Pedestrian corridors and walkways that lead into the retail, residential, and public park areas line the perimeter of the project site (see Figure 3-4). Pedestrian corridors and walkways would also be provided internal to the site, between the apartment buildings and courtyards; these would connect to the public sidewalks along the perimeter roadways. Resident access to the individual apartment units, site amenities, retail plaza, and parking structure would be provided via internal pedestrian corridors/walkways on each level of the apartment building, as well as via elevators and stairwells.

As a part of the proposed project, the existing public sidewalks along Dove Street, Scott Drive, Corinthian Way, and Martingale Way would be demolished and reconstructed to City standards. Additionally, new ADA-compliant curb access ramps would be constructed at Dove Street/Scott Drive, Scott Drive/Corinthian Way, and Corinthian Way/Martingale Way intersections in accordance with City standards.

#### **Parking**

A six-level, five-story parking structure (one semi-subterranean level) is proposed in the center of the project site (see Figure 3-4). It would be surrounded and screened from public view by the proposed multistory building (see Figures 3-5a, 3-5b, 3-6a, and 3-6b). The parking structure would be restricted to apartment residents, guests, and employees, and to retail employees and patrons. The parking structure would provide a total of 740 parking spaces, including assigned and open spaces for residences and their visitors, required spaces for ADA-accessible parking and electric vehicle charging stations, and open spaces for retail patrons and employees. Of the total 740 parking spaces provided, 5 uncovered surface parking spaces would be provided in front of the leasing office, 661 would be designated/assigned for apartment use and the remaining 74 for the retail uses. The 74 spaces for retail use would all be provided on the ground level of the parking structure. Levels two through five of the parking structure would contain the parking spaces for apartment residents and visitors; a few resident parking spaces would also be provided on the ground level. The project provides 655 assigned residential parking stalls (1.87/unit), which is less than the City requires for non-density bonus projects (2/unit plus 0.5 space per unit for guest parking), but in excess of the City's parking stall requirement for density bonus projects that request a parking reduction. The City's density bonus regulations establish parking requirements consistent with the requirements under state density bonus law. Under that law, if a developer so requests, a city cannot require a parking ratio that would exceed one space for each studio and one-bedroom unit and two spaces for each two-bedroom unit. (Gov't Code § 65915(p)(1).) With the project's mix of units, this would result in a parking ratio of 1.35 parking spaces per unit (or 474 spaces).

As shown in Figure 3-4, the public park would have a separate parking lot (five parking spaces) for park users, which would be accessed from Martingale Way.

Bicycle racks would be provided in key locations of the retail plaza area and public park. At a minimum, four open rack bicycle spaces for short term parking and four secured lockers for long-term parking would be provided. Project residents would also be able to store their bicycles in their apartment units.

## 3. Project Description

### 3.3.1.9 INFRASTRUCTURE IMPROVEMENTS

#### **Water**

The City's Water Services Department currently provides potable water to the existing commercial and retail uses on the project site and would continue to do so for the proposed project. Potable water is provided via internal water lines that connect to the existing off-site water lines in the perimeter roadways.

As a part of the proposed project, the on-site potable water lines would be removed and replaced with a series of new potable water lines that would connect to the existing off-site water lines in the perimeter roadways. A six-inch water line connection and eight-inch fire service connection are proposed along Martingale Way and Scott Drive. Proposed potable water infrastructure improvements would entail trenching and exposing existing lines on-site for connections, trenching and installing new lines, and break-in connections to off-site water lines. No offsite water line construction or upsizing would be required to accommodate the proposed project; however, some construction would occur within the public rights-of-way of Martingale Way and Scott Drive adjacent to the project site in order to make the necessary connections. Proposed work activities within the City's right-of-way would require City issuance of an encroachment permit.

Additionally, fire hydrants would be installed onsite at key locations, as required by the City of Newport Beach Fire Department to meet hose-pull requirements and provide adequate fire access. Fire flows for emergency fire suppression would be provided to the site via the proposed eight-inch fire service line.

#### **Wastewater**

The City's Water Services Department currently provides wastewater collection service to the existing commercial and retail uses on the project site and would continue to do so for the proposed project. Wastewater collection is provided via internal sewer lines that connect to the off-site sewer lines in the perimeter roadways. Wastewater flows through a system of regional trunk lines to Reclamation Plants No. 1 (in the City of Fountain Valley) and No. 2 (in the City of Huntington Beach) for treatment; the reclamation plants are owned and operated by the Orange County Sanitation District.

As a part of the proposed project, the existing on-site sewer lines would be replaced with new lines and would connect to sewer lines in the perimeter roadways. Proposed improvements would entail trenching and exposing existing lines on-site for connections, trenching and installing new lines, and break-in connections to the off-site sewer lines. No off-site sewer line construction or upsizing would be required to accommodate the proposed project; however, some construction may occur within the public right-of-way of the perimeter roadways in order to make the necessary infrastructure connections. Proposed work activities within the City's right-of-way would require City issuance of an encroachment permit.

#### **Drainage**

Under existing conditions, approximately 90 percent of the project site consists of impervious areas (e.g., buildings, paving), and the remainder is pervious (e.g., landscaping). The project site is relatively flat (approximately 0.5 percent grade) and runoff from the site surface flows generally south. Existing on-site



### 3. Project Description

drainage is conveyed as surface flow via two concrete valley gutters along the center of the parking drive aisles. One route travels along the western site perimeter and the second route travels southerly along the eastern perimeter. Drainage converges at the southeast driveway near the intersection of Dove Street and Westerly Place, where it discharges into the City's 48-inch storm drain line in Dove Street via a curb inlet. From this point, stormwater flows southeast via regional trunk lines into the San Diego Creek Channel and ultimately discharges into the Upper Newport Bay.

Under proposed conditions, approximately 77 percent of the project site would consist of impervious areas and the remainder would be pervious. Runoff from the project site would be conveyed similar to existing conditions, continuing to flow southerly via a new onsite drainage collection and treatment system. Site drainage improvements needed to accommodate the proposed project would include new storm drain pipes, catch basins, and best management (BMP) practices (e.g., modular wetland system). Stormwater would be routed through the BMPs prior to discharging off-site into the 48-inch storm drain line in Dove Street. Other drainage improvements would include reconstruction of the curb and gutter along the perimeter roadway frontages.

#### Utilities and Service Systems

Public infrastructure and utility facilities—including electrical, telephone, cable television, and natural gas—would be upgraded and/or extended to the project site. Dry utility providers for the project would be the same as for the current commercial and retail uses of the site—Southern California Edison for electricity, Southern California Gas Company for natural gas, AT&T for telephone service, and Cox Communications for cable television and data transmission. All new utility infrastructure would be installed underground or in enclosed spaces (e.g., utility closets) in the proposed building and parking structure.

Solid waste services would be provided by CR&R Environmental Services. The residential portion of the building would include two trash rooms per level in the parking structure adjacent to the residential corridors. Trash collection would be via two trash chutes in each trash room—one for solid waste and one for recyclables. Each trash room would also include covered carts for organic waste. The chutes would lead to a ground-level trash collection room within the parking structure that includes bins for solid waste, recyclables, and organic waste. The retail portion of the building would have a dedicated trash room adjacent to the retail area, with bins for solid waste, recyclables, and organic waste. Once full, the bins would be transported by a retrieval vehicle to the designated staging/pick-up area on the western side of the project site near the Scott Drive access drive (see Figure 3-4). CR&R Environmental Services' trash trucks would pick up the bins from the staging/pick-up area on scheduled pick-up days.

#### 3.3.2 Green Building and Sustainability

Development under the proposed project would be designed using green building practices, including those of the most current California Green Building Standards Code (CALGreen) (Title 24, California Code of Regulations, Part 11); incorporated by reference in Chapter 15.11 of the Newport Beach Municipal Code. The proposed project would use low-flow fixtures in bathrooms (toilets, showers), Energy Star appliances, and water-efficient landscape material throughout. It would also have minimized hard surface paving to allow

## 3. Project Description

more permeable open space and reduce the heat island effect; recirculating water system equipment for pool, spa, and water features; onsite stormwater detention and treatment via modular wetland systems; separate bins for solid waste, recyclables, and organic waste; electric vehicle charging stations in parking structure; and bicycle racks in the retail plaza area and public park. Other green building practices/features would be considered by the City as the proposed project is refined during the design and construction phase.

### 3.3.3 Discretionary Actions and Approvals

Project development requires the following discretionary actions and approvals from the City.

- **Lot Line Adjustment No. LA2018-004.** Under the lot line adjustment, the three existing parcels (Lot 1 of Tract No. 7770, M.M. 299/15-16, and Parcels 1 and 2 of P.M.B. 53-13) that make up the approximately 5.69-acre project site would be reconfigured to create a 0.5-acre parcel for the public park to be dedicated to the City; 5.08-acre parcel for the proposed mixed-use development; and 0.11-acre parcel (to be owned by project applicant) for emergency access improvements needed to serve the proposed project. The 0.11-acre parcel would also include an easement dedicated to the City for access and parking for the public park. With dedication of the 0.5-acre public park, the net project site area would be 5.19 acres.
- **Affordable Housing Implementation Plan No. AH2018-001.** The AHIP specifies how the proposed project would meet the City's affordable housing requirements, pursuant to the 30 percent inclusionary requirement of the established Residential Overlay of the Newport Place Planned Community. Under the proposed project's AHIP, 30 percent of the project's apartment units would be set aside as affordable units to lower-income households. Providing the affordable housing required by the Newport Place Planned Community Residential Overlay qualifies the project for a density bonus and incentives/concessions pursuant to Chapter 20.32 (Density Bonus) of the City's Municipal Code and Government Code Section 65915 (Density Bonus Law). The proposed project's AHIP includes a request for one development concession and one waiver of development standards, as described in Subsection 3.3.1.3, *Affordable Housing and Development Incentives/Concessions and Waivers*, above.
- **Site Development Review No. SD2017-004.** Project development includes City review and approval of a Site Development Review. Through the Site Development Review, the City ensures that development projects are designed and developed in accordance with the applicable planned community and zoning code development standards and regulations pursuant to Section 20.52.080 (Site Development Reviews) of the City's zoning code.

### 3.3.4 Project Phasing and Construction

It is anticipated that the proposed project would be built in a single phase spanning approximately 38 months, from December 2019 to February 2023. Following is a description of the various phases of construction.

### 3. Project Description

#### 3.3.4.1 DEMOLITION

The existing MacArthur Square shopping plaza would be completely demolished prior to site grading and building construction. Demolition activities are projected to occur for approximately a one-month period in December 2019 and generate approximately 8,400 tons of building debris and 4,000 tons of asphalt. Demolition debris would be crushed onsite and hauled offsite to nearby OC Waste & Recycling landfill(s) serving the City, such as the Frank R. Bowerman landfill in Irvine, the Prima Deshecha landfill in San Juan Capistrano, or the Olinda Alpha Sanitary landfill in Brea.

#### 3.3.4.2 SITE PREPARATION/GRADING, EXCAVATION/SHORING, AND UTILITY INSTALLATION

Following demolition activities, the site would be graded, and excavation would commence in January 2020 for the proposed semi-subterranean level of the parking structure. Site preparation, grading, and excavation would take approximately one month. Overall, activities for this construction phase would require exporting approximately 7,542 cubic yards of soil during grading and an additional 7,000 cubic yards of soil during excavation. Wet and dry utility trenching would also commence prior to construction of the building foundations.

#### 3.3.4.3 BUILDING FOUNDATIONS AND VERTICAL BUILDING CONSTRUCTION

Following demolition and grading activities, the building foundation and vertical building construction activities would commence in February 2020 and take approximate 36 months. Construction of the proposed buildings would also include installation of exterior and interior finishes; installation of mechanical, electrical, and plumbing equipment; installation of landscape and irrigation; and installation of furniture and equipment.

### 3.4 INTENDED USES OF THE EIR

This Draft EIR (DEIR) examines the environmental impacts of the proposed project and also addresses various actions by the City and others to adopt and implement the proposed project. It is the intent of this DEIR to evaluate the environmental impacts of the proposed project, thereby enabling the City of Newport Beach, other responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project are:

Lead Agency	Action
City of Newport Beach	<ul style="list-style-type: none"> <li>▪ Certification of the Newport Crossings Mixed Use Project Environmental Impact Report</li> <li>▪ Adoption of Findings of Fact (and Statement of Overrides, if required)</li> <li>▪ Adoption of a Mitigation Monitoring and Reporting Program</li> <li>▪ Approval of Lot Line Adjustment No. LA2018-004</li> <li>▪ Approval of an Affordable Housing Implementation Plan No. AH2018-001</li> <li>▪ Approval of Site Development Review No. SD2017-004</li> </ul>

# 4. Environmental Setting

---

## 4.1 INTRODUCTION

This section provides 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, ... from both a local and a regional perspective” (Guidelines § 15125[a]), pursuant to provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project.

## 4.2 REGIONAL ENVIRONMENTAL SETTING

### 4.2.1 Regional Location

The City of Newport Beach is on the southwestern boundary of Orange County in Southern California. As shown in Figure 3-1, *Regional Location*, the City is bordered by Huntington Beach to the northwest, Costa Mesa to the north, Irvine to the northeast, unincorporated areas (Crystal Cove State Park) of Orange County to the southeast, and the Pacific Ocean to the south.

Figure 3-1 provides a visual of the regional access to the City provided by various freeways and highways. Interstate 405 runs north to south across the Southern California region and intersects State Route 73 (San Joaquin Hills Transportation Corridor) and State Route 55. State Route 55 also runs north to south and terminates in the City of Costa Mesa. State Route 73 runs along the northwestern boundary of the City limits and connects with Interstate 5 further south in Laguna Beach. Highway 1 (East/West Coast Highway) runs along Newport Beach and the entire California coast.

### 4.2.2 Regional Planning Considerations

#### **SCAG Regional Transportation Plan/Sustainable Communities Strategy**

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and

## 4. Environmental Setting

transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increase capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth and opportunity; promoting the links between public health, environmental protection and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets identified by the California Air Resources Board. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency. The proposed project's consistency with the applicable 2016-2040 RTP/SCS policies is analyzed in detail in Section 5.9, *Land Use and Planning*.

### South Coast Air Basin Air Quality Management Plan

The City is in the South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (SCAQMD). Pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law and standards are detailed in the SoCAB Air Quality Management Plan (AQMP). Air pollutants for which ambient air quality standards (AAQS) have been developed are known as criteria air pollutants—ozone (O<sub>3</sub>), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide, coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and lead. VOC and NO<sub>x</sub> are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O<sub>3</sub>, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet AAQS for that pollutant. Based on the SoCAB AQMP, the SoCAB is designated nonattainment for O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO<sub>2</sub> under the California AAQS. The proposed project's consistency with the applicable AAQS is discussed in Section 5.2, *Air Quality*.

### Greenhouse Gas Emissions Reduction Legislation

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order S-03-05; Executive Order B-30-15; Executive Order B-55-18; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); Senate Bill 32 (SB 32), updating the emission limits set in AB 32; Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act; and Senate Bill 100 (SB 100), the 100 Percent Clean Energy Act of 2018.

Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the State of California:

- 2000 levels by 2010
- 1990 levels by 2020

## 4. Environmental Setting

- 80 percent below 1990 levels by 2050

AB 32 was passed by the state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the emissions reduction targets established in Executive Order S-3-05. SB 32 was passed September 8, 2016, and set an interim target consistent with AB 32. Executive Order B-30-15 also established an interim goal of a 40 percent reduction below 1990 levels by 2030.

In 2008, SB 375 was adopted to connect GHG emissions reductions targets for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035.

In September 2016, Governor Brown signed SB 32 and Assembly Bill 197, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources. CARB issued an update to its Scoping Plan, which sets forth programs for meeting the SB 32 reduction target in 2017. In 2018, Governor Brown signed Executive Order B-55-18, which sets a more ambitious goal for emission reductions than Executive Order S-3-05. Executive Order B-55-18 sets a goal for the state to achieve carbon neutrality no later than 2045 and to achieve and maintain net negative emissions thereafter. SB 100 would help the state reach the goal set by Executive Order B-55-18 by requiring that the state's electricity suppliers have a source mix that consists of at least 60 percent renewable/zero carbon sources in 2030 and 100 percent renewable/zero carbon sources in 2045.

The project's ability to meet these regional GHG emissions reduction target goals is analyzed in Section 5.6, *Greenhouse Gas Emissions*.

### *Senate Bill 743*

The legislature found that with the adoption of the SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of GHG emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB 32]). Additionally, AB 1358 requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

On September 27, 2013, SB 743 was signed into law. SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts under CEQA. . As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of



## 4. Environmental Setting

multimodal transportation networks, and a diversity of land uses” (Public Resources Code Section 21099(b)(1)).

Pursuant to SB 743, the State Office of Planning and Research (OPR) has developed revisions to the CEQA Guidelines to implement SB 743. The proposed revised CEQA Guidelines, when adopted, will establish new criteria for determining the significance of transportation impacts and define alternative metrics to replace level of service (LOS). The new guidelines will require that LOS be replaced with VMT-related metric(s) to evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects beginning on January 1, 2020. However, until the Natural Resources Agency adopts OPR’s proposed revisions to the CEQA Guidelines, LOS metrics can still be utilized, as is the case for the proposed project. Further, the legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements. Project information on VMT is analyzed in Section 5.14, *Transportation and Traffic*.

### 4.3 LOCAL ENVIRONMENTAL SETTING

#### 4.3.1 Location and Land Use

##### Project Location

As shown in Figure 3-3a, *Aerial Photograph: Airport Area*, the approximately 5.69-acre project site is in the City’s “Airport Area” planning subarea, which is bounded by Campus Drive to the north and west, SR-73 to the south, and Jamboree Road to the east. Within the Airport Area are established planned community development plans. The project site is in the Newport Place Planned Community. The site is generally bounded by Corinthian Way to the northeast, Martingale Way to the east, Scott Drive to the northwest, and Dove Street to the southwest (see Figure 3-3b, *Aerial Photograph: Project Site*). The site is approximately 0.2 mile east of John Wayne Airport.

##### Existing Land Uses

###### *Onsite Uses*

The site is currently improved with the 58,277-square-foot MacArthur Square shopping center, which was built in phases from 1974 to 1980 and consists of eight retail/commercial buildings, surface parking (462 parking spaces), walkways, and ornamental trees (see Figures 4-1 and 4-2, *Site Photographs*). An approximately 14-foot-wide landscape perimeter strip is adjacent to the public sidewalks and surrounds the shopping center.

###### *Surrounding Uses*

The project site is surrounded by low- and mid-rise office buildings, shopping centers, restaurants, a car wash, and a hotel. A seven- to ten-story Radisson Hotel and a single-story Staples office supply store are to the north across Corinthian Way; a single-story Benihana restaurant and a car wash are to the west across Scott Drive; and two- to four-story office buildings are to the east and west of the site across Martingale Way and Dove Street, respectively.



Figure 4-1 - Site Photographs  
4. Environmental Setting



① View of the project site looking southeast from the northwest part of the site.



③ View of the project site looking northeast from the southwest corner of the site.



② View of the project site looking northwest from the southeast corner of the site.



④ View looking north from the south side of the site showing a driveway extending into the site interior



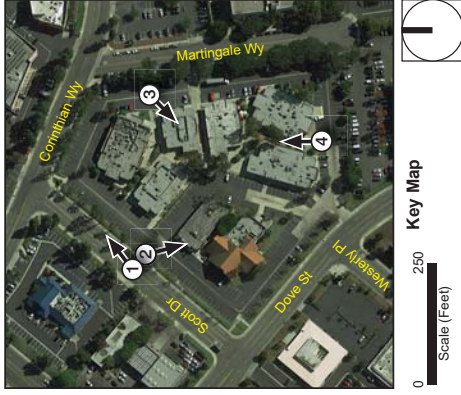
## 4. Environmental Setting

*This page intentionally left blank.*

Figure 4-2 - Site Photographs  
4. Environmental Setting



1 View looking northeast from Scott Drive next to the west site boundary showing Canary Island pine trees in the landscaping strip on the west edge of the site.



2 View of the project site looking southeast from the west side of the site.



3 View of the project site looking southwest from the east side of the site.



4 View of the project site looking south from the central part of the site.

## 4. Environmental Setting

*This page intentionally left blank.*



## 4. Environmental Setting

### 4.3.2 Environmental Resources and Infrastructure

#### Air Quality and Climate

The project site is approximately five miles inland from the Orange County coast in the western portion of the SoCAB. The climate in the SoCAB is mild and tempered by cool ocean breezes, particularly in Newport Beach. Temperatures are normally mild (62° to 72°F), with rare extremes above 100°F or below freezing (32°F). Precipitation is typically 9 to 15 inches annually in the SoCAB. The climate of Orange County is typified by warm temperatures and light winds. The average monthly high temperatures range from about 52°F in the coastal areas in January to 72°F in the inland areas of the coastal plain in August. In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Annual average humidity is 70 percent along the coast and 57 percent in the eastern portions of the SoCAB.

However, the year 2013 marked the driest year in recorded state history and led Governor Edmund G. Brown Jr. to proclaim a state of emergency regarding the dry conditions throughout California. The drought conditions have led to extended months of high temperatures with little to no precipitation throughout the SoCAB, including the City of Newport Beach. Since then, Governor Brown has issued several additional Executive Orders addressing drought, including Executive Orders B-29-2015, calling for a 25 percent statewide reduction in urban potable water use, and B-37-16, which sets actions to use water more wisely, eliminate water waste, strengthen local drought resilience, and improve agricultural water use efficiency and drought planning.

The SoCAB is designated nonattainment for O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO<sub>2</sub> under the California AAQS. An air quality analysis was performed for the project, and the results are discussed in Section 5.2, *Air Quality*. Additionally, project-related impacts from GHG emissions are discussed in Section 5.6, *Greenhouse Gas Emissions*.

#### Biological Resources

The project site and surrounding areas are completely built out and urbanized. Biological resources onsite are limited to ornamental trees surrounding the site. About 30 ornamental trees surround the site, including 12 Italian Stone pines (*Pinus pinea*), 12 Canary Island pines (*Pinus canariensis*), and 12 London planes (*Platanus acerifolia*).

#### Geology and Landform

The project site is at the southern portion of the Los Angeles Basin, which is part of the Peninsular Range Geomorphic Province of California. The project site is relatively flat, with elevations ranging from about 175 feet to 180 feet above mean sea level, and slopes ranging from about 1 to 4 percent. The site is underlain by artificial fill over Pleistocene age marine terrace deposits approximately 100 feet thick.

The site is not within a currently established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards and no active or potentially active faults are known to pass directly beneath the site. The closest

## 4. Environmental Setting

surface trace of an active fault to the site is the Newport-Inglewood Fault Zone approximately 6.5 miles to the southwest. Other nearby faults include the Palos Verdes Fault Zone (offshore), the Whittier Fault, and the Elsinore Fault about 16 miles southwest, 16.5 miles northeast, and 17 miles northeast of the site, respectively.

The closest potentially active fault to the site is the Pelican Hill Fault approximately 2.3 miles to the southwest. Other nearby potentially active faults are the El Modeno Fault, Peralta Hills Fault, and the Los Alamitos Fault (Geocon West 2014).

Refer to Section 5.5, *Geology and Soils*, for additional information concerning geological and soil conditions and an analysis of project impacts on geology and soils.

### Hydrology

The project site is in the Newport Bay Watershed, which spans 154 square miles in central and southern Orange County. The Newport Bay Watershed is defined by the foothills of the Santa Ana Mountains to the east (Loma Ridge) and the San Joaquin Hills to the west and southwest. The watershed is divided into four subwatersheds—Peters Canyon Wash, Upper San Diego Creek, Lower San Diego Creek, and Newport Bay. Nine cities are partly or fully within the watershed: Costa Mesa, Irvine, Lake Forest, Laguna Hills, Laguna Woods, Newport Beach, Orange, Santa Ana, and Tustin. The watershed also includes several unincorporated areas of Orange County. Water quality in the Newport Bay Watershed is currently listed by the US Environmental Protection Agency as impaired by various pollutants, including pesticides, copper and other metals, pathogens, sediment toxicity, and selenium (USEPA 2015).

Existing onsite drainage is conveyed as surface flow via two concrete valley gutters along the center of the parking drive aisles. One route travels along the western site perimeter and the second route travels southerly along eastern perimeter. Drainage then converges and leaves the site at the southeast driveway near the intersection of Dove Street and Westerly Place.

Refer to Section 5.8, *Hydrology and Water Quality*, for additional information regarding hydrological conditions and an analysis of project impacts on hydrology and water quality.

### Noise

Community noise levels are measured in terms of the “A-weighted decibel” (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels to the frequency response of the human ear. The noise rating scale used in California for land use compatibility assessment is the Community Noise Equivalent Level (CNEL). The CNEL scale represents a time-weighted, 24-hour average noise level based on the A-weighted decibel. Noise levels in the project area are influenced primarily by airplane noise from John Wayne Airport and motor vehicle traffic in and around the Airport Area, including along MacArthur Boulevard, Campus Drive, Birch Street, and Von Karman Avenue. Minimal noise from existing operational equipment (e.g., HVAC system) of nearby commercial and office buildings also adds to the noise levels in the project area.

Refer to Section 5.10, *Noise*, for additional information concerning the noise environment and an analysis of project-related noise impacts.

## 4. Environmental Setting

### Public Services and Utilities

The project site is located in an urbanized area of the City with existing public services and utilities available to the site. Local utilities and service systems that serve the existing MacArthur Square shopping center are available to serve the proposed project.

Fire protection services are provided by the City of Newport Beach Fire Department. The closest fire station to the project site is the Santa Ana Heights Station No. 7 at 20401 Acacia Street, about one mile southwest of the project site. Law enforcement services are provided by the City of Newport Beach Police Department at 870 Santa Barbara Drive, approximately three miles south of the site. The project site is served by the Santa Ana Unified School District. Schools within this district that may serve the proposed project are James Monroe Elementary School, McFadden Intermediate, and Century High School in Santa Ana. Library services are provided by the Newport Beach Public Library.

Domestic and reclaimed water service and wastewater service for the project site are provided by the City of Newport Beach Municipal Operations Department. Wastewater is treated by the Orange County Sanitation District. The City of Newport Beach is under contract with CR&R Environmental Services and franchised haulers for solid waste hauling and OC Waste & Recycling for disposal. Electricity and natural gas services are provided by Southern California Edison and Southern California Gas Company, respectively.

Refer to Sections 5.12, *Public Services*, and 5.16, *Utilities and Service Systems*, for additional information regarding public services and utilities and service systems, respectively, and an analysis of project impacts on services and utilities.

### Transportation and Traffic

The existing local roadway network in the project area includes MacArthur Boulevard, Campus Drive, Jamboree Road, Bristol Street, Birch Street, Corinthian Way, Scott Drive, Dove Street, Martingale Way, Westerly Place, and Von Karman Avenue.

Per the City of Newport Beach General Plan Circulation Element, Jamboree Road, MacArthur Boulevard, and a portion of Campus Drive to the west of the site are designated Major Roads (six-lane divided); Birch Street and a portion of Campus Drive to the north of the site are designated Secondary Road (four lane undivided); Von Karman Avenue and Bristol Street are designated Primary Road (four-lane divided); and SR-73 is designated Adopted Freeway Route. Existing access to the project site is provided via driveways off of Dove Street and Scott Drive.

The regional transportation system in the vicinity of the project site includes SR-55 to the west, SR-73 to the south, and I-405 to the north. Orange County Transit Authority bus routes are provided along Birch Street, Campus Drive, Bristol Street, Von Karman Avenue, and Jamboree Road. Additionally, John Wayne Airport is less than a mile northwest of the project site.

Refer to Section 5.14, *Transportation and Traffic*, for additional information concerning existing transportation facilities and traffic conditions and an analysis of project-related impacts.



## 4. Environmental Setting

### 4.3.3 Local Planning Considerations

#### 4.3.3.1 GENERAL PLAN AND ZONING

The City of Newport Beach General Plan designation for the proposed project site is MU-H2 (Mixed-Use Horizontal 2), and the zoning is Planned Community 11 – Newport Place (PC-11). The site is also located within the limits of the Airport Area Planning Subarea of the General Plan.

#### 4.3.3.2 AIRPORT ENVIRONS LAND USE PLAN FOR JOHN WAYNE AIRPORT

In 1975, the Airport Land Use Commission (ALUC) of Orange County adopted an Airport Environs Land Use Plan (AELUP, amended April 17, 2008) that included John Wayne Airport (JWA), Fullerton Municipal Airport, and the Joint Forces Training Base Los Alamitos. The AELUP is a land use compatibility plan that is intended to protect the public from adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable space. Each airport's AELUP identifies standards for development in the airport's planning area based on noise contours, accident potential zones, and building heights. The ALUC is authorized under state law to assist local agencies in ensuring compatible land uses in the vicinity of airports. Primary areas of concern for the ALUC are noise, safety hazards, and airport operational integrity. The ALUC is not an implementing agency in the manner of local governments, nor does it issue permits for a project such as those required by local governments. However, the project site falls within the airport influence area and 60 dBA CNEL noise contour of JWA. Therefore, the proposed project's consistency with JWA's AELUP is discussed in Sections 5.8, *Hazards and Hazardous Materials*; 5.9, *Land Use and Planning*; 5.10, *Noise*, and 5.14, *Transportation and Traffic*.

#### 4.3.3.3 PREVIOUS DEVELOPMENT APPLICATION FOR THE PROJECT SITE

In 2016, The Residences at Newport Place was proposed for the project site. The proposed project consisted of the redevelopment of the approximately 5.69-acre property with a mixed-use project consisting of 384 residential units and 5,677 square feet of retail. On June 9, 2016, the Planning Commission conducted a noticed public hearing and, following receipt of public comments and deliberation, voted 4 to 1 (2 absent) to deny the project. Resolution No. 2019 denying the project was adopted unanimously on June 23, 2016. The Planning Commission expressed many concerns, and principal among them were:

- Encroachments within minimum building setbacks
- Exceedance of the maximum building height standard
- Waiver of the park dedication
- Public open space design and limits on public access
- Project integration with surroundings
- Limited amount of commercial space proposed
- Inadequate parking

## 4. Environmental Setting

On July 7, 2016, the applicant filed an appeal to the City Council (Newport Beach 2016a). On July 26, City Council denied the project and upheld the decision of the Planning Commission. City Council approved Resolution No. 2016-98 denying the appeal without prejudice (Newport Beach 2016b). The project applicant did not challenge this denial.

### 4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts to be “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

- A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency.
- B. A summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analyses in Chapter 5, *Environmental Analysis*, of this DEIR primarily use Method A. The City compiled a list of cumulative projects for analysis under CEQA. The cumulative projects are listed and numbered in Table 4-1 and mapped on Figure 4-3, *Cumulative Projects Location Map*. The list has two parts: Reasonably Foreseeable Projects and Approved Projects.

**Table 4-1 Cumulative Projects List**

ID	Project	Land Uses	Dwelling Units	Non-Residential Area (square feet)
<b>Reasonably Foreseeable Projects</b>				
F1	Newport Village	Multi-Family Residential/Commercial	175	240,650
F2	Mariner Square	Condominiums	92	
F3	Ullman Sail Lofts	Single-Family Residential/Retail	4	1,171
F4	Harbor Pointe Senior living	Convalescent and Congregate Care Facility	108 care units	—
F5	Koll Newport Residential	Multi-Family Residential/Retail	260	3,000
F6	ExplorOcean	Ocean Literacy Facility	—	70,295
F7	Back Bay Landing	Mixed-use	49	61,534
F8	Balboa Marina Expansion	Boat Slips/Retail	—	14,252
F9	Newport Harbor Yacht Club	Yacht Club	—	23,162
F10	Newport Dunes Hotel	Hotel	—	201,498

## 4. Environmental Setting

**Table 4-1 Cumulative Projects List**

ID	Project	Land Uses	Dwelling Units	Non-Residential Area (square feet)
<b>Approved Projects</b>				
A1	ENC Preschool	School	—	—
A2	Birch Newport Executive Center	Condominiums/Commercial	—	64,000
A3	Ebb Tide	Single-Family Residential	83	—
A4	Lido House Hotel	Hotel	—	130 hotel rooms
A5	Westcliff Medical	Medical Facility	—	73,722
A6	Lido Villas	Condominiums	69	—
A7	Villas Fashion Island	Multi-Family Residential	94	—
A8	Uptown Newport Mixed-Use Development	Multi-Family Residential/Commercial	1,244	11,500
A9	McArthur at Dolphin-Striker Way	Commercial Retail	—	12,351
A10	Plaza Corona Del Mar	Offices/Townhomes	6	1,750
A11	Old Newport GPA Project	Offices	—	25,000
A12	Hoag Memorial Hospital Presbyterian	Medical Facility	—	225,000
A13	AERIE Project	Condominiums	8	—
A14	Newport Marina - ETCO	Mixed-Use	27	36,000
A15	Mariner's Pointe	Commercial	—	19,905
A16	Newport Business Plaza	Commercial	—	46,044
A17	PRES Office Building B	Offices	—	9,917
A18	Saint Mark Presbyterian Church	Church	—	33,867
<b>Total</b>			<b>2,111</b>	<b>1,174,618</b> <b>130 hotel rooms</b>

Source: City of Newport Beach Planning Department.

Cumulative impact analyses for several topical sections are also based on the most appropriate geographic boundary for the respective impact. For example, cumulative hydrological impacts are based on the area's watershed (Newport Bay Watershed), and wastewater treatment service impacts are based on the Orange County Sanitation District's service boundary, which includes other jurisdictions in addition to Newport Beach. Several potential cumulative impacts that encompass regional boundaries (e.g., air quality and traffic) have been addressed in the context of various regional plans and defined significance thresholds. Climate change is a global issue, and the cumulative impacts analysis has been addressed in the context of state regulations and regional plans designed to address the global cumulative impact.

Following is a summary of the approach and extent of cumulative impacts, which are further detailed in each environmental topical section:

- **Aesthetics.** Cumulative impacts consider the potential of nearby existing and reasonably foreseeable projects together with the project to cause significant cumulative impacts.
- **Air Quality.** Air quality impacts are both regional impacts and localized impacts. For cumulative impacts, the analysis is based on the regional boundaries of the South Coast Air Basin.

Figure 4-3 - Cumulative Developments Location Map  
4. Environmental Setting



Note: Unincorporated county areas are shown in white.

--- Project Boundary

A# Approved Projects

F# Reasonably Foreseeable Projects

0 4,000  
Scale (Feet)



Source: City of Newport Beach, 2018

## 4. Environmental Setting

*This page intentionally left blank.*



## 4. Environmental Setting

- **Biological Resources.** Cumulative biological resources impacts consider regional habitat loss, protected species, and wildlife corridors.
- **Cultural Resources.** Cumulative impacts consider the potential for the proposed project in conjunction with nearby existing and reasonably foreseeable development projects to result in impacts on cultural resources in the project site and an area within a one-half-mile radius of the project site for historical, archaeological and paleontological resources, and for tribal cultural resources significant to local Native American tribes.
- **Geology and Soils.** Geologic and soils impacts are site specific and generally do not combine to result in cumulative impacts, but the cumulative impacts analysis in this EIR considers the combined effects of nearby (adjacent) past and reasonably foreseeable projects in conjunction with the project.
- **Greenhouse Gas (GHG) Emissions.** GHG emissions impacts are not site-specific impacts but cumulative impacts. Therefore, the project-level analysis in Section 5.6 also provides the analysis to determine whether the project would make a cumulatively considerable contribution to significant cumulative GHG emissions impact.
- **Hazards and Hazardous Materials.** Impacts are typically site specific and generally would not combine with impacts of other projects to result in cumulatively considerable impacts, but the cumulative impacts analysis in this EIR considers the combined effects of nearby past and reasonably foreseeable projects in conjunction with the project.
- **Hydrology and Water Quality.** Cumulative hydrological impacts are based on the boundaries of the Newport Bay Watershed, and cumulative water quality impacts are based on the boundaries of the Santa Ana Regional Water Quality Control Board's jurisdiction.
- **Land Use and Planning.** Cumulative impacts are based on applicable jurisdictional boundaries and related plans, including the City of Newport Beach General Plan, and regional land use plans (e.g., SCAG's RTP/SCS).
- **Noise.** Cumulative traffic noise impacts are based on the traffic study, which considers the regional growth based on citywide and regional projections. Cumulative construction impacts are based on nearby projects that may have concurrent construction schedules. Cumulative operational impacts are based on existing development combined with the project and reasonably foreseeable nearby future development.
- **Population and Housing.** Cumulative impacts are based on regional demographic projections in regional plans (e.g., SCAG's RTP/SCS).
- **Public Services.** Cumulative impacts are based on potential related development within each service provider's boundaries—Newport Beach Fire Department, Newport Beach Police Department, Santa Ana Unified School District, and Newport Beach Public Library.

## 4. Environmental Setting

- **Recreation.** Cumulative impacts are assessed relative to City of Newport Beach standards and are based on impacts within the City's boundaries.
- **Transportation and Traffic.** The traffic study considers the project's cumulative contribution to traffic and transportation issues in project vicinity. The cumulative traffic analysis is based on a regional transportation demand model and incorporates regional growth projections identified by SCAG. The cumulative analysis of transit, bicycle, and pedestrian transportation impacts is based on City plans and policies.
- **Tribal Cultural Resources.** Cumulative impacts related to tribal cultural resources are based on the local Native American tribes' culturally significant areas and include, but are not limited to, cultural landscapes and regions to specific heritage sites and other tribal cultural places.
- **Utilities and Service Systems.** Water supply and distribution systems' cumulative impacts are based on potential demand growth within the City's Municipal Operations Department Water Division service area. Wastewater conveyance and treatment cumulative impacts are analyzed based on the City's Wastewater Division's and Orange County Sanitation District's service areas. The geographic scope to analyze whether there would be cumulative impacts to storm drainage systems is the Newport Bay watershed and Orange County Flood Control Division of the Orange County Public Works Department service area. The geographic scope to analyze whether there would be cumulative impacts to solid waste collection and disposal services is the City's Refuse Division and OC Waste & Recycling service areas. The geographic scope to analyze whether there would be cumulative impacts to natural gas and electricity services is the Southern California Gas Company and Southern California Edison service areas.

## 4.5 REFERENCES

- California Air Resources Board (CARB). 2013, October 23. Proposed 2013 Amendments to Area Designations for State Ambient Air Quality Standards.  
<http://www.arb.ca.gov/regact/2013/area13/area13isor.pdf>.
- Geocon West, Inc. 2014, June 12. Geotechnical Investigation, Proposed Mixed-Use Multi-Family Residential Development, 5.6 Acre Area Bounded by Dove Street, Scott Drive, Corinthian Way, and Martingale Way, Newport Beach, California.
- Newport Beach, City of. 2016a, July 26. Newport Beach City Council Staff Report Agenda item No. 14.
- . 2016b, July 26. City Council Meetings.
- Southern California Association of Governments (SCAG). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.  
<http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>.
- US Environmental Protection Agency (USEPA). 2015, October 22. Newport Bay Watershed.  
<http://www3.epa.gov/region9/water/watershed/measurew/newport-bay/>.



## 5. Environmental Analysis

---

Chapter 5 examines the environmental setting of the proposed project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This chapter has a separate section for each environmental issue area that was determined to need further study in the DEIR. This scope was determined in the Notice of Preparation (NOP), which was published November 2017, and through public and agency comments received during the NOP comment period from November 1, 2017, to November 30, 2017 (see Appendix A). Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Air Quality
- 5.3 Biological Resources
- 5.4 Cultural Resources
- 5.5 Geology and Soils
- 5.6 Greenhouse Gas Emissions
- 5.7 Hazards and Hazardous Materials
- 5.8 Hydrology and Water Quality
- 5.9 Land Use and Planning
- 5.10 Noise
- 5.11 Population and Housing
- 5.12 Public Services
- 5.13 Recreation
- 5.14 Transportation and Traffic
- 5.15 Tribal Cultural Resources
- 5.16 Utilities and Service Systems

Sections 5.1 through 5.16 provide a detailed discussion of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts where required and when feasible. The residual impacts following the implementation of any mitigation measure are also discussed.

## 5. Environmental Analysis

### Organization of Environmental Analysis

To assist the reader with comparing information between environmental issues, each section is organized under nine major headings:

- Environmental Setting
- Thresholds of Significance
- Regulatory Requirements and Standard Conditions
- Environmental Impacts
- Cumulative Impacts
- Level of Significance Before Mitigation
- Mitigation Measures
- Level of Significance After Mitigation
- References

In addition, Chapter 1, *Executive Summary*, has a table that summarizes all impacts by environmental issue.

### Terminology Used in This DEIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines:

- **No impact.** The project would not change the environment.
- **Less than significant.** The project would not cause any substantial, adverse change in the environment.
- **Less than significant with mitigation incorporated.** The DEIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and unavoidable.** The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

## 5. Environmental Analysis

### 5.1 AESTHETICS

This section of the Draft Environmental Report (DEIR) discusses the potential impacts to the visual character of the project site and its surroundings associated with implementation of the Newport Crossing Mixed Use project (proposed project). This section includes a discussion of the qualitative aesthetic characteristics of the environment that could be potentially degraded by the project's implementation and the consistency of the proposed project with established relevant policies related to visual resources. The information presented in this section is based on field reconnaissance, review of the project site and aerial photographs, and graphic representations (e.g., building elevations, building renderings) prepared for the proposed project.

#### 5.1.1 Environmental Setting

##### 5.1.1.1 REGULATORY SETTING

State and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

##### **State**

##### *California Building Code: Building Energy Efficiency Standards*

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and most recently revised in 2018 (Title 24, Part 6, of the California Code of Regulations). On May 9, 2018, the California Energy Commission adopted the 2019 Building Energy Efficiency Standards, which go into effect on January 1, 2020. Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. Title 24 requires outdoor lighting controls to reduce energy usage; in effect, this reduces outdoor lighting.

##### *California Department of Transportation: 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. Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Official state-designated scenic highways are maintained by Caltrans in its California Scenic Highway Mapping System (Caltrans 2018). Suitability for designation as a state scenic highway is based on Caltrans's process for officially designating scenic highways. The nearest state-designated scenic highway to the project site (State Route 1, Pacific Coast Highway) is approximately four miles to the south (Caltrans 2018).

## 5. Environmental Analysis

### AESTHETICS

#### Local

##### *City of Newport Beach Municipal Code*

Title 20 (Planning and Zoning) of the City of Newport Beach Municipal Code (also known as the Zoning Code) identifies land use categories, development standards, and other provisions that ensure consistency between the City's General Plan and proposed development and redevelopment projects. The purpose of the City's Zoning Code is to promote growth in Newport Beach in an orderly manner, while promoting public health, safety, peace, comfort, and the general welfare. The following provisions from the City's Zoning Code help minimize aesthetic and light and glare impacts associated with new development projects and are relevant to the proposed project. Adherence to the provisions improves and maintains the visual quality of the community.

- **Chapter 20.30 (Property Development Standards), Section 20.30.060 (Height Limits and Exceptions).** This section establishes regulations for determining compliance with the maximum allowable height limits established for each zoning district.
- **Chapter 20.30 (Property Development Standards), Section 20.30.070 (Outdoor Lighting).** This section outlines outdoor lighting standards to reduce impacts of glare, light trespass, over-lighting, sky glow, and poorly shielded lighting fixtures.

##### A. *General Outdoor Lighting Standards.*

1. All outdoor lighting fixtures shall be designed, shielded, aimed, located, and maintained to shield adjacent properties and to not produce glare onto adjacent properties or roadways. Parking lot light fixtures and light fixtures on buildings shall be full cut-off fixtures.
2. Flashing, revolving, or intermittent exterior lighting visible from any property line or street shall be prohibited, except if approved as an accessory feature on a temporary basis in conjunction with a special event permit.
3. A photometric study may be required as part of an application for a zoning clearance if it is determined that there is potential for a negative impact to surrounding land uses or sensitive habitat areas.
4. If in the opinion of the Director existing illumination creates an unacceptable negative impact on surrounding land uses or sensitive habitat areas the Director may order the dimming of light sources or other remediation upon finding that the site is excessively illuminated.

- ##### C. *Outdoor Lighting Standards for Buildings, Statues, Other Manmade Objects, and Landscapes.* Spotlighting or floodlighting used to illuminate buildings, statues, signs, or any other objects mounted on a pole, pedestal, or platform or used to accentuate landscaping shall consist of full cut-off or directionally shielded lighting fixtures that are aimed and controlled so that the directed light shall be substantially confined to the object intended to be illuminated to minimize glare, sky glow, and light trespass. The beam width shall not be wider than that needed to light the feature with minimum spillover. The lighting shall not shine directly into the window of a residence or directly into a roadway. Light fixtures attached to a building shall be directed downward.

## 5. Environmental Analysis AESTHETICS

### *Newport Place Planned Community*

As shown in Figure 3-3a, *Aerial Photograph: Airport Area*, the project site is in the City's "Airport Area" planning subarea, which is bounded by Campus Drive to the north and west, State Route 73 (SR-73) to the south, and Jamboree Road to the east. Within the Airport Area there are established Planned Community development plans. The project site is in the Newport Place Planned Community (NPPC). The established NPPC Development Standards were adopted by the Newport Beach City Council in December of 1970 (as amended through July of 2012). The NPPC Development Standards address building height, setbacks, parking, landscaping, residential densities (maximum number of dwelling units per acre), nonresidential intensities (maximum building area in square feet), amenities, and neighborhood integration. In conjunction with the City's Zoning Code, the purpose of the NPPC Development Standards is to promote growth in Airport Area in an orderly manner while promoting public health, safety, peace, comfort, and the general welfare.

#### 5.1.1.2 VISUAL SETTING

##### **Visual Character and Land Use**

Existing land use and conditions of the project site and surrounding area are depicted in Figure 3-3b, *Aerial Photograph: Project Site*. As shown in Figure 3-3b, the project site is in a highly urbanized area of the City. The project site and area are characterized by a mix of older retail, commercial, hotel, and professional office development. A mix of low-, medium-, and high-rise office buildings (from 1 to 10 stories) dominate the surrounding project area, with some supporting multitenant commercial, financial, and service uses. For example, a seven- to ten-story Radisson Hotel and a single-story Staples office supply store are to the north across Corinthian Way; a single-story Benihana restaurant and a car wash are to the west across Scott Drive; and two- to four-story office buildings are to the east and west of the site across Martingale Way and Dove Street, respectively.

The urban landscape character and features of the project site and surrounding area are consistent with and typical of urbanized areas of the City. The urban landscape character of the project area is also influenced by John Wayne Airport and its surrounding support uses, services, and facilities, which include multiple car rental businesses and major transportation facilities. The airport is approximately 0.25 mile northwest of the project site (see Figure 3-3b).

Figures 4-1 and 4-2, *Site Photographs*, display photographs of existing conditions within the project site. The site is currently improved with the 58,277-square-foot MacArthur Square shopping center, which was built in 1974. The shopping center consists of eight single-story commercial/retail buildings, surface parking, and various landscape (e.g., ornamental trees, shrubs) and hardscape improvements. MacArthur Square is characterized as an aging, underutilized, and underperforming shopping center that supports a variety of retail and commercial business, including restaurants and retail shops. Current tenants include several restaurants, a dance studio, retail stores, and professional and medical offices. All of the existing buildings but one have flat roofs and range in height between 15 and 20 feet; the exception is a gable-roofed building that is approximately 31 feet in height. The height and massing of the existing buildings are typical of many commercial/retail centers in Newport Beach and surrounding communities. The architecture of the buildings

## 5. Environmental Analysis

### AESTHETICS

is also typical of commercial/retail centers from the 1970s and 1980s: simple and nonarticulated building façades; mostly flat roofs; and building materials consisting of wood, stucco, and brick.

#### Landform and Topography

Overall site topography can be characterized as relatively flat, with no notable change in elevation. The site slopes gently to the west with approximately three feet of vertical relief and no pronounced highs or lows (Geocon 2017). There are no visible landforms (e.g., mountains, hills, creeks) from the project site or surrounding area; there are also no landforms on or near the project site.

#### Scenic Views and Roadways

The Newport Beach General Plan Natural Resources Element identifies several public viewpoints and coastal view roads throughout Newport Beach. Figure NR3 (Coastal Views) of the Natural Resources Element shows no designated public view points on or near the project site. Additionally, there are no designated coastal view roads abutting or near of the site. The nearest designated public viewpoint to the site is approximately one mile to the southwest across SR-73 in the Upper Newport Bay Ecological Reserve. The closest coastal-view-designated portion of Jamboree Road to the project site is south of SR-73, approximately one mile south of the project site.

#### Light and Glare

Given the built-out nature of the project site and surrounding area, substantial sources of light and glare already exist in the project area. Ambient light sources from urban uses in the Airport Area include street lights, building lighting (exterior and interior), security lighting, and parking-area lighting. Also—and to a lesser extent due to the number of existing buildings (including height and massing), structures and trees that lie between the project site and John Wayne Airport—lighting from the airport influences the amount of nighttime ambient light of the project area. Street lights line all roadways surrounding the project site. Another source of nighttime light in the project area is vehicular traffic along surrounding roadways. Daytime glare is associated with reflective surfaces (e.g., glass windows, metal storefronts and window frames) of existing buildings on-site and in the project area.

### 5.1.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- AE-1 Have a substantial adverse effect on a scenic vista.
- AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- AE-3 Substantially degrade the existing visual character or quality of the site and its surroundings.

## 5. Environmental Analysis

### AESTHETICS

- AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

### 5.1.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address aesthetic impacts follow.

#### 5.1.3.1 REGULATORY REQUIREMENTS

- RR AES-1 The proposed project will be designed and constructed in accordance with the applicable provisions of Title 20 (Planning and Zoning) of the City of Newport Beach Municipal Code, including those of Chapter 20.30 (Property Development Standards).
- RR AES-2 The proposed project will be designed and constructed in accordance with the established NPPC Development Standards, which address building height, setbacks, parking, landscaping, residential densities, amenities, neighborhood integration, etc.
- RR AES-3 The proposed project will be required to comply with California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations), which outline mandatory provisions for lighting control devices and luminaires.

#### 5.1.3.2 STANDARD CONDITIONS

- SC AES-1 Lighting shall be in compliance with applicable standards of the Zoning Code. Exterior on-site lighting shall be shielded and confined within site boundaries. No direct rays or glare are permitted to shine onto public streets or adjacent sites or create a public nuisance. "Walpak" type fixtures are not permitted. Parking area lighting shall have zero-cut-off fixtures, and light standards shall be the minimum height required to effectively illuminate the parking area and eliminate spillover of light and glare onto the adjacent property.
- SC AES-2 The site shall not be excessively illuminated based on the luminance recommendations of the Illuminating Engineering Society of North America, or, if in the opinion of the Community Development Director, the illumination creates an unacceptable negative impact on surrounding land uses or environmental resources. The Community Development Director may order the dimming of light sources or other remediation upon finding that the site is excessively illuminated.
- SC AES-3 Prior to the issuance of a building permit, the applicant shall prepare a photometric study in conjunction with a final lighting plan for approval by the Planning Division.
- SC AES-4 Prior to issuance of the certificate of occupancy or of final building permits, the applicant shall schedule an evening inspection by the Code Enforcement and Water Quality Division to confirm control of light and glare specified in the conditions of approval.



## 5. Environmental Analysis

### AESTHETICS

SC AES-5        The site shall not be excessively illuminated based on the luminance recommendations of the Illuminating Engineering Society of North America, or, if in the opinion of the Director of Community Development, the illumination creates an unacceptable negative impact on surrounding land uses or environmental resources. The Director may order the dimming of light sources or other remediation upon finding that the site is excessively illuminated.

#### 5.1.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts (see Appendix A). The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.1-1:    The proposed project would not result in a substantial adverse effect on a scenic vista or alter scenic resources within a state scenic highway. [Thresholds AE-1 and AE-2]**

---

*Impact Analysis:* Following is a discussion of the proposed project’s potential impacts on scenic vistas and resources.

#### Scenic Vistas

Vistas provide visual access or panoramic views to a large geographic area and are generally located at a point where surrounding views are greater than one mile away. Panoramic views are usually associated with vantage points over a section of urban or natural areas that provide a geographic orientation not commonly available. Examples of panoramic views might include an urban skyline, valley, mountain range, a large open space area, the ocean, or other water bodies.

The Newport Beach General Plan Natural Resources Element identifies several public viewpoints and coastal view roads throughout Newport Beach. Policies NR20.1 and NR20.3 in the Natural Resources Element identify public view corridors and points to protect significant scenic and visual resources that include open space, mountains, canyons, ridges, ocean, and harbor from public vantage points. As shown in Figure NR3 (Coastal Views) of the Natural Resources Element, there are no designated public viewpoints on or near the project site. Additionally, there are no designated coastal view roads abutting or near the site. The nearest designated public viewpoint is approximately one mile to the southwest in the Upper Newport Bay Ecological Reserve. The closest coastal-view designated portion of Jamboree Road to the project site is south of SR-73, approximately one mile south of the project site. Due to the distance and highly urbanized nature of the project site and its surroundings, public coastal views from the designated viewpoint and along the designated view corridor would not be impacted by the proposed project.

Furthermore, as shown in Figure 3-3b, *Aerial Photograph*, the project site and surrounding area are in a highly urbanized area of the City. The project site and area are characterized by a mix of older retail, commercial, hotel, and professional office development. A mix of low-, medium-, and high-rise office buildings (from 1 to 10 stories) dominate the surrounding project area. The urban landscape character and features of the project site and surrounding area are consistent with and typical of urbanized areas of the City. The project site and surrounding area do not exhibit any significant visual resources or scenic vistas.

## 5. Environmental Analysis

### AESTHETICS

Overall site topography can be characterized as relatively flat, with no notable change in elevation. There are no visible landforms (e.g., mountains, hills, creeks) from the project site or surrounding area; and no landforms are on or within proximity of the project site. Also, there are no designated open space resources onsite or in the vicinity of the project site, a designation typically used to determine the value of certain public vistas in order to gauge adverse effects.

#### Scenic Resources within a State Scenic Highway

A scenic highway is generally considered a stretch of public roadway that is designated as a scenic corridor by a federal, state, or local agency. Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. As noted above, the project site is in a highly urbanized area of the City. The site is not on or near a state-designated scenic highway, as designated on the California Scenic Highway Mapping System of the California Department of Transportation (Caltrans 2018). The project site is also not visible from the nearest state-designated scenic highway (State Route 1, Pacific Coast Highway), which is approximately four miles to the south (Caltrans 2018).

Additionally, as shown in Figure NR3 (Coastal Views) of the Natural Resources Element, there are no designated coastal view roads abutting or near the project site. Furthermore, the project site does not contain unique or locally important scenic resources. There are several mature ornamental trees throughout the project site, but they are not considered scenic resources. Also, there are no rock outcroppings or historic buildings onsite.

#### Conclusion

Based on the preceding, no significant impacts on scenic vistas or to scenic resources would occur.

*Level of Significance before Mitigation:* Impact 5.1-1 would be less than significant.

---

**Impact 5.1-2: The proposed project would alter the visual appearance of the project site and its surroundings but would not substantially degrade the existing visual character or quality. [Threshold AE-3]**

---

*Impact Analysis:* The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refers to the identification of visual resources and their quality, as well as an overall visual perception of the environment. A project is generally considered to have a significant aesthetic impact if it substantially changes the character or quality of the project site such that the site becomes visually incompatible with or visually unexpected in its surroundings.

Existing land use and conditions of the project site and surrounding area are depicted in Figure 3-3b, *Aerial Photograph: Project Site*, and Figures 4-1 and 4-2, *Site Photographs*. As shown in these figures, the project site and surrounding area are in a highly urbanized area of the City. The project site and area are characterized by a mix of older retail, commercial, hotel, and professional office development. A mix of low-, medium-, and high-rise office buildings (from 1 to 10 stories) dominate the surrounding project area. For example, a seven- to ten-story Radisson Hotel and a single-story Staples office supply store are to the north across Corinthian

## 5. Environmental Analysis

### AESTHETICS

Way; a single-story Benihana restaurant and a car wash are to the west across Scott Drive; and two- to four-story office buildings are to the east and west of the site across Martingale Way and Dove Street, respectively.

The project site, which is currently developed with the MacArthur Square shopping center, is characterized as an aging, underutilized, and underperforming shopping center that supports a variety of retail and commercial business, including restaurants and retail shops. All of the existing buildings but one has flat roofs and range in height between 15 to 20 feet; the exception is a gable-roofed building that is approximately 31 feet in height. The height and massing of the existing buildings are typical of many commercial/retail centers in Newport Beach and surrounding communities. The architecture of the buildings is also typical of commercial/retail centers from the 1970s and 1980s: simple and nonarticulated building façades; mostly flat roofs; and building materials consisting of wood, stucco, and brick.

The urban landscape character and features of the project site and surrounding area are consistent with and typical of urbanized areas of the City. The urban landscape character of the project area is also influenced by John Wayne Airport and its surrounding support uses, services, and facilities, which include multiple car rental businesses and major transportation facilities. The airport is approximately 0.25 mile northwest of the project site (see Figure 3-3b).

Project development includes demolition of the existing buildings, surface parking, and hardscape improvements of MacArthur Square as well as removal of a number of trees and other landscape improvements. Site improvements and features to be demolished and removed are shown in Figures 4-1 and 4-2. Upon clearing, the project site would be redeveloped with the proposed project.

#### **Project Construction Phase**

Project implementation would result in construction activities that would temporarily change the visual character of the project site and its surroundings. Construction activities would involve demolition, site clearing, grading, building, and site improvements. Construction staging areas, including earth stockpiling, storage of equipment and supplies, and related activities would contribute to a generally “disturbed site,” which may be perceived by some as a visual impact.

However, these effects would be typical of any site in the City that undergoes development or redevelopment. Newport Crossings is proposed to be constructed in a single phase of approximately 38 months. It is estimated to occur between December 2019 and February 2023. Demolition and construction activities may be unsightly during the site preparation and construction phases, but they are not considered significant because they are temporary. Construction fencing would be erected to help shield the construction areas and would also be temporary. Therefore, project-related construction activities would not have a significant effect on the existing visual character or quality of the site and its surroundings.

#### **Project Operation Phase**

Upon clearing, the project site would be redeveloped with the proposed project, which would consist of the development of a multistory building that would house 350 apartment units, 2,000 square feet of “casual-dining” restaurant space, and 5,500 square feet of retail space. The project also includes the development of a

## 5. Environmental Analysis AESTHETICS

0.5-acre public park. Figure 3-4, *Conceptual Site and Landscape Plan*, illustrates how the proposed building and public park fit into the overall layout of the project site. As shown in this figure, the proposed building would follow the pentagonal shape of the project site, with building façades on all site frontages. The building is designed as a single structure; however, it includes multiple buildings in varying heights and massing connected to each other through common/shared walls, covered pedestrian corridors and breezeways, and various building elements and architectural features. The proposed building would exceed the base height limit of 55 feet, up to 77 feet 9 inches for stair tower architectural features (including parapets), parking, roof decks, elevator shafts, and mechanical equipment. The habitable portion of the building would be under 55 feet in height.

Figures 3-5a and 3-5b, *Conceptual Building Elevations*, Figures 3-6a and 3-6b, *Conceptual Building Renderings: Daytime*, and Figure 3-7, *Conceptual Building Rendering: Nighttime*, illustrate the proposed architectural style and building elements/features of the proposed project. As shown in these figures, the proposed architectural style would be Contemporary, and design elements (e.g., roof style, window fenestration and details, building materials) would be consistent with this architectural style. For example, design elements would include light sand-finish stucco walls; architectural metal and acrylic panels; wood plank tiles; glass railings; vinyl windows; aluminum storefronts; and metal awnings, sun shades, horizontal slats, and trellises. Building pop-outs and offsets; variations in building heights, landscaping, rooflines, materials, and colors; and balconies would be added and modulated to offset the building's massing, provide human scale, promote visual interest and articulation, and provide relief to and variation in the building form and style. The final building design and architectural style are subject to review and approval by the City's Planning Commission.

The proposed Contemporary architectural style would be complementary to and not detract from the visual character or quality of the surrounding area or uses. As shown in Figures 3-5a through 3-7, building masses, elevations, and rooflines would be modulated to promote visual interest and articulation of the proposed building and structure. Overall, development of the proposed project would enhance and strengthen the character of the project site and its surroundings through new and contemporary buildings, landscaping, hardscape, and other improvements onsite and along the street edges. The proposed architectural and landscape elements and design would ensure that development of the proposed project is not detrimental to the surrounding area or uses. The building masses, landscaping, and various hardscape and landscape improvements proposed throughout the project site would not only be designed to create a sense of uniqueness, but also a sense of unity with the surrounding area and uses.

In fact, project development would result in a beneficial impact to the visual character and quality of the project site and its surroundings. As noted above, the project site, which is currently developed with the MacArthur Square shopping center, is characterized as an aging, underutilized, and underperforming shopping center. The architecture of the buildings is typical of commercial/retail centers from the 1970s and 1980s: simple and nonarticulated building façades; mostly flat roofs; and building materials consisting of wood, stucco, and brick (see Figures 4-1 and 4-2, *Site Photographs*). The buildings and site improvements are outdated and somewhat dilapidated; they are in much need of a major enhancements and renovations. Under the proposed project, the project site and its surroundings would be enhanced through new and contemporary buildings, landscaping, hardscape, and other improvements on-site and along the street edges.

## 5. Environmental Analysis

### AESTHETICS

Additionally, project implementation would provide similar and compatible uses to those existing adjacent to and surrounding the project site. For example, the proposed building (including building massing and heights; see Figures 3-5a through 3-7) would be similar with those of the mix of low-, medium-, and high-rise office buildings that dominate the surrounding project area. The proposed building would be midrise, and with the exception of various building elements and architectural features, as described above, would be well within and consistent with the building heights permitted under the site's land use and zoning designations.

Furthermore, although the proposed building would be newer, taller, and larger in massing than the one- and two-story buildings immediately surrounding the project site, the height and massing of the proposed building would not detract from the visual and urban landscape character of the project site and surrounding area, which as noted above, consists of a mix of low-, medium-, and high-rise office buildings. The proposed project would fit seamlessly into the urban landscape character and features of the project area. It is designed to create a sense of cohesiveness on- and off-site and along the project site boundaries, since the proposed architecture and landscaping, although newer than that of the surrounding area and uses, would complement them and not detract from the visual character of the site or surrounding area.

The provisions of the City's Municipal Code, established NPPC Development Standards, and City's development review process (i.e., development projects are subject to design review and approval by the Planning Commission) would also help ensure that the proposed project is designed and implemented in a manner that would provide cohesiveness and compatibility, not only within the project site, but along the project site frontages and with its surroundings. For example, the proposed project has been designed consistent with the "Amenities and Neighborhood Integration" standards of the NPPC Development Standards. Due to the potential land use incompatibility with the established commercial, retail, and office nature of the project site and its surroundings, the proposed project has incorporated a number of amenities and improvements—e.g., public park, courtyards, pool and spa, club room and fitness facility, rooftop terrace and view deck, pedestrian walkways—for project residents to allow project integration into the existing commercial/office community and potential residential development that may occur in the Airport Area in the future.

The habitable structures of the proposed project would also be constructed within the 55-foot height maximum permitted in the NPPC Development Standards, with limited projections to 77 feet for architectural features, elevator shafts, enclosed stairwell housings, and mechanical equipment. The proposed building would therefore be taller than existing single-story commercial buildings on the project site, but lower than nearby high-rise buildings such as Radisson Hotel Newport Beach to the northwest, across Macarthur Boulevard, which is over 600 feet west of the project site.

The overall project design also promotes a strong pedestrian environment and active street frontage along the surrounding roadway. This is accomplished through the incorporation of various project features, including:

- **Provision of Street-Level Features.** As shown in Figures 3-6a, 3-6b, and 3-7, variations in the front building plane area have been incorporated through the use of varying building setbacks and variations in wall planes. Long expanses of blank walls have been avoided.

## 5. Environmental Analysis

### AESTHETICS

- **Provision of Upper-Level Features.** Upper-floor balconies, windows, and pop-out elements have been provided throughout the building façades, including a rooftop terrace and view deck.
- **Provision of Development Interface.** The proposed project has been designed to be sensitive to the scale and design characteristics of established commercial and office uses and structures abutting and surrounding the project site, with the objective of achieving a harmonious transition between the proposed project's new development and the surrounding commercial and office uses.

Further, as shown in Figures 3-4, 3-6a, 3-6b, and 3-7, a comprehensive landscape plan would be part of the proposed project and would enhance the visual character of the project site and surrounding area. All setbacks and other common areas not occupied by buildings or hardscape improvements (e.g., drive aisles, pedestrian walkways) would be landscaped. The landscape plan includes a variety of new trees, shrubs, and groundcover around the proposed building, along the street frontages, and within the courtyards and common areas. For example, ground-level planters, street trees, and other landscape features would be provided along the street frontages to enhance the pedestrian and visual environment around the project site. Overall, the proposed project's landscape elements would help to visually soften the height and massing of the proposed building when viewed from public areas, as well as help provide visual interest, relief, and variation.

### Conclusion

Based on the preceding, project-related construction and operational activities would not have a significant effect on the existing visual character or quality of the project site and its surroundings. Therefore, impacts would be less than significant.

**Level of Significance before Mitigation:** With implementation of RR AES-1 and RR AES-2, Impact 5.1-2 would be less than significant.

---

**Impact 5.1-3: The proposed project would create new sources of light or glare in the project area, but none of these would adversely affect day or nighttime views in the area. [Threshold AE-4]**

---

**Impact Analysis:** Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and openings, and light from exterior sources (i.e., street lighting, architectural building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Excessive light and/or glare can impair vision, cause annoyance, affect sleep patterns, and generate safety hazards when experienced by drivers. Uses such as residences, elderly care facilities, and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.



## 5. Environmental Analysis

### AESTHETICS

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light on surfaces of buildings or objects, including highly polished surfaces such as glass windows or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation experienced by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior façades largely or entirely composed of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Daytime glare can also be generated by light reflecting off passing or parked cars. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the day and year. Excessive glare not only impedes visibility, but also increases the ambient heat reflectivity in a given area. Glare-sensitive uses include residences, hotels, transportation corridors, and aircraft landing corridors.

Given the built-out nature of the project site and surrounding area, substantial sources of light and glare already exist in the project area. Ambient light sources from urban uses in the Airport Area include street lights, building lighting (exterior and interior), security lighting, and parking-area lighting. Also—and to a lesser extent due to the number of existing buildings (including height and massing), structures, and trees that lie between the project site and John Wayne Airport—lighting from the airport influences the amount of nighttime ambient light of the project area. Street lights line all roadways surrounding the project site. Another source of nighttime light in the project area is vehicular traffic along surrounding roadways. Daytime glare is associated with reflective surfaces (e.g., glass windows, metal storefronts and window frames) of existing buildings onsite and in the project area.

Following is a discussion of the potential day- and nighttime light and glare impacts in the project area as a result of development of the proposed project.

#### Daytime Glare

The proposed project includes building materials and architectural treatments that could cause daytime glare, but not to such an extent that they would result in a significant impact. For example, the architectural treatments of the proposed buildings would include style-appropriate architectural building materials, including light sand-finish stucco walls; architectural metal and acrylic panels; wood plank tiles; glass railings; vinyl windows; aluminum storefronts; and metal awnings, sun shades, horizontal slats, and trellises (see building elevations and perspectives in Figures 3-5a and 3-5b, *Conceptual Building Elevations*, Figures 3-6a and 3-6b, *Conceptual Building Renderings: Daytime*, and Figure 3-7, *Conceptual Building Rendering: Nighttime*). With the exception of the glass, metal, and aluminum building materials, the proposed project's building materials and architectural treatments are not reflective in nature and would therefore not create substantial day or nighttime glare.

The proposed building materials are also similar to building materials used on other similar mixed-use development projects in the City as well as with those of commercial, office, and retail structures in the surrounding vicinity. Also, existing ambient daytime glare is associated with reflective surfaces (e.g., glass windows, metal storefronts and window frames) of existing buildings onsite and in the project area. The



## 5. Environmental Analysis

### AESTHETICS

amount of daytime glare that would be created by the proposed project would be similar to that of existing uses onsite and uses surrounding the project site. Glare that would be generated by the proposed project is typical of the surrounding area and would not increase beyond what is expected for an urban area or already exists in the project area.

Additionally, as shown in Figures 3-5a through 3-7, the exterior façades of the proposed buildings would not include large expanses of glazing (i.e., glass windows and doors). The proposed glazing could increase sources of glare, because it would reflect sunlight during certain times of the day. In addition, vehicles parked onsite would increase the potential for reflected sunlight during certain times of the day. However, glare from these sources is typical of the surrounding area and would not increase beyond what is expected for an urban area. Further, glare generated by new glazing would be buffered to an extent by existing and proposed trees along the site boundaries.

#### Nighttime Lighting and Glare

Lighting for the proposed project would consist of building-mounted light fixtures; lighting for pedestrian walkways, common areas, and outdoor eating, gathering and recreational areas; ground-mounted decorative lighting for landscape and architectural building features; interior building and parking garage lighting; lighting for the public park and associated parking area; and security lighting. See Figure 3-7, *Conceptual Building Rendering: Nighttime*, for an illustration of the potential nighttime lighting scheme of the proposed project. Nighttime lighting and glare introduced under the proposed project would be visible to the surrounding commercial, office, and retail uses from various vantage points, and from surrounding roadways. These new sources of nighttime lighting have the potential to increase nighttime light and glare in the project area.

Development of the project would increase lighting onsite compared to the existing commercial and retail uses onsite. However, although project development would introduce new light sources to the project site and surrounding area, the proposed light sources would be similar to the light sources of the surrounding commercial, office, and retail uses and roadways. Considering the existing sources of lighting in the surrounding vicinity, the amount and intensity of nighttime lighting proposed onsite would not be substantially greater or different than existing lighting. Also, there are no uses abutting or surrounding the project site that are considered light sensitive (e.g., residences, elderly care facilities, and hotels). As shown in Figure 3-3a, *Aerial Photograph: Airport Area*, the nearest light-sensitive land use is the Radisson Hotel Newport Beach to the northwest, across MacArthur Boulevard, which is over 600 feet west of the project site.

Additionally, the City of Newport Beach does not have a lighting ordinance specifying the maximum amount of light that may be generated by new projects. However, the City does have adopted standards that apply to the installation and illumination of light fixtures. All project-related exterior lighting would be designed, arranged, directed, or shielded in such a manner as to contain direct illumination onsite, in accordance with the provisions of Subsection 20.30.070.A (General Outdoor Lighting Standards) of the City's Zoning Code and the City-adopted standard conditions of approval related to lighting (SC AES-1 through SC AES-4; see Subsection 5.1.3.2, *Standard Conditions*, above), thereby preventing excess illumination and light spillover onto adjoining land uses and/or roadways. Lighting would be installed to accommodate safety and security while minimizing impacts on surrounding uses and areas. Also, all proposed exterior ground-mounted decorative

## 5. Environmental Analysis

### AESTHETICS

lighting for landscape and architectural building features would be designed and installed in accordance with the provisions of Subsection 20.30.070.C (Outdoor Lighting Standards for Buildings, Statues, Other Manmade Objects, and Landscapes), which calls for full cut-off or directionally shielded lighting fixtures that are aimed and controlled so that the directed light is substantially confined to the object intended to be illuminated in order to minimize glare, sky glow, and light trespass. Also, consistent with SC AES-3, the project applicant would be required to prepare a photometric study in conjunction with a final lighting plan for approval by the Planning Division to demonstrate that the City's lighting requirements are met.

All project-related exterior lighting would also be required to comply with Policy LU 5.6.3 (Ambient Lighting) of the City's General Plan Land Use Element, which requires that outdoor lighting be located and designed to prevent spillover onto adjoining properties or significantly increase the overall ambient illumination of their location.

Furthermore, project development would be required to comply with California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations, which outlines mandatory provisions for lighting control devices and luminaires. For example, the proposed project's exterior lighting sources would be required to be installed in accordance with the provisions of Section 110.9 (Mandatory Requirements for Lighting Control Devices and Systems, Ballasts, and Luminaires).

Compliance with the lighting provisions of the City's Zoning Code and Title 24 would ensure that the proposed project does not result in significant nighttime light and glare impacts. Compliance with these provisions is ensured through the City's development review and building plan check process.

### Conclusion

Based on the preceding, daytime glare impacts from project-related architectural treatments and building materials would be less than significant. Additionally, no significant nighttime light and glare impacts would occur as a result of project development.

***Level of Significance before Mitigation:*** With implementation of RR AES-3 and SC AES-1 through AES-4, Impact 5.1-3 would be less than significant.

### 5.1.5 Cumulative Impacts

#### Aesthetic/Visual Character

When evaluating cumulative aesthetic impacts, a number of factors must be considered. The cumulative study area for aesthetic impacts is the viewshed that includes the project site and surrounding areas. The context in which a project is being viewed will also influence the significance of the aesthetic impact. The contrast a project has with its surrounding environment may actually be reduced by the presence of other cumulative projects. If most of an area is or is becoming more urbanized, the contrast of a project with the natural surrounding may be less since it would not stand out as much. In order for a cumulative aesthetic impact to

## 5. Environmental Analysis

### AESTHETICS

occur, the proposed elements of the cumulative projects would need to be seen together or in proximity to each other. If the projects were not near each other, the viewer would not perceive them in the same scene.

Because aesthetic impacts are localized to the project site and immediate surrounding area, cumulative impacts would include nearby projects in the Airport Area. As shown in Figures 4-1, *Cumulative Projects Location Map*, and Table 4-1, *Cumulative Projects List*, cumulative projects (both approved and reasonably foreseeable) near the project site include the Koll Center Residences, Uptown Newport Mixed-Use Development, McArthur at Dolphin-Striker Way Commercial Development, Newport Business Plaza, and Press Office Building. As with the proposed project, these cumulative projects would alter the visual character within their immediate vicinity. However, because of the highly developed nature of the overall Airport Area, development of the proposed project and cumulative projects would not negatively impact the visual character of the Airport Area. Additionally, this would not constitute a significant adverse impact because the project site and cumulative development sites are anticipated to be developed in accordance with the City's General Plan and Zoning Code, and the development standards of the Newport Place Planned Community Development Plan (as applicable to each of the cumulative development projects based on their location within the Airport Area). Furthermore, as with the proposed project, the applicants of cumulative development projects would be subject to City's site development review and approval.

In consideration of the preceding factors, the project's contribution to cumulative aesthetic impacts would be rendered less than considerable, and therefore, less than cumulatively significant.

#### **Light and Glare**

Due to the highly developed nature of the project area and the existence of light and glare from the existing commercial, retail, and office uses onsite and the surrounding properties, the proposed project is not anticipated to add significantly to the creation of nighttime light and glare in the project vicinity. Lighting levels would not be substantially greater than existing lighting levels at the project site, and project-related light sources would be similar to those of the surrounding land uses. Lighting from the proposed project would combine with the potential increase in lighting associated with the aforementioned cumulative development. However, as with the proposed project, the cumulative development projects would occur in the Airport Area, a highly urbanized area of the City, and substantial sources of light already exist in their respective development areas. Additionally, the cumulative development projects would be required to adhere to the same lighting standards and requirements as the proposed project.

In consideration of the preceding factors, the project's contribution to cumulative light and glare impacts would be rendered less than considerable, and therefore less than cumulatively significant.

## 5. Environmental Analysis

### AESTHETICS

#### 5.1.6 Level of Significance Before Mitigation

The following impact would be less than significant.

- **Impact 5.1-1** The proposed project would not result in a substantial adverse effect on a scenic vista or alter scenic resources within a state scenic highway.

With implementation of RR AES-1 and RR AES-2, the following impacts would be less than significant.

- **Impact 5.1-2** The proposed project would alter the visual appearance of the project site and its surroundings but would not substantially degrade the existing visual character or quality.

With implementation of RR AES-3 and SC AES-1 through SC AES-5, the following impact would be less than significant.

- **Impact 5.1-3** The proposed project would create new sources of light or glare in the project area, but none of which would adversely affect day or nighttime views in the area.

#### 5.1.7 Mitigation Measures

No significant impacts would occur and no mitigation measures are required.

#### 5.1.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.1.9 References

California Department of Transportation (Caltrans). 2018. Scenic Highways.  
[http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/scenic\\_hwy.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm).

Geocon West, Inc. (Geocon). 2017, July. Updated Geotechnical Investigation.

## 5. Environmental Analysis

### 5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Newport Crossings Mixed Use project (proposed project or project) to impact air quality in a local and regional context. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. Criteria air pollutant emissions modeling for the proposed project is included in Appendix B of this DEIR. Cumulative impacts related to air quality are based on the regional boundaries of the South Coast Air Basin (SoCAB).

#### 5.2.1 Environmental Setting

##### 5.2.1.1 REGULATORY BACKGROUND

Ambient air quality standards (AAQS) have been adopted at the state and federal levels for criteria air pollutants. In addition, both the state and federal government regulate the release of toxic air contaminants (TACs). The proposed project is in the SoCAB and is subject to the rules and regulations imposed by the SCAQMD as well as the California AAQS adopted by California Air Resources Board (CARB) and National AAQS adopted by the United States Environmental Protection Agency (EPA). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized in this section.

#### Federal and State

##### *Ambient Air Quality Standards*

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

## 5. Environmental Analysis

### AIR QUALITY

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.2-1, *Ambient Air Quality Standards for Criteria Pollutants*. These pollutants are ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

**Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants**

Pollutant	Averaging Time	California Standard <sup>1</sup>	Federal Primary Standard <sup>2</sup>	Major Pollutant Sources
Ozone (O <sub>3</sub> ) <sup>3</sup>	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	
Respirable Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>4</sup>	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m <sup>3</sup>	
Lead (Pb)	30-Day Average	1.5 µg/m <sup>3</sup>	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m <sup>3</sup>	
	Rolling 3-Month Average	*	0.15 µg/m <sup>3</sup>	
Sulfates (SO <sub>4</sub> ) <sup>5</sup>	24 hours	25 µg/m <sup>3</sup>	*	Industrial processes.



## 5. Environmental Analysis AIR QUALITY

**Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants**

Pollutant	Averaging Time	California Standard <sup>1</sup>	Federal Primary Standard <sup>2</sup>	Major Pollutant Sources
Visibility Reducing Particles	8 hours	ExCo = 0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H <sub>2</sub> S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m<sup>3</sup>: micrograms per cubic meter

\* Standard has not been established for this pollutant/duration by this entity.

<sup>1</sup> California standards for O<sub>3</sub>, CO (except 8-hour Lake Tahoe), SO<sub>2</sub> (1 and 24 hour), NO<sub>2</sub>, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

<sup>2</sup> National standards (other than O<sub>3</sub>, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

<sup>3</sup> On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

<sup>4</sup> On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>. The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35 µg/m<sup>3</sup>, as was the annual secondary standard of 15 µg/m<sup>3</sup>. The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150 µg/m<sup>3</sup> also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

<sup>5</sup> On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- SB 1078 and SB 107: Renewables Portfolio Standards
- California Code of Regulations (CCR), Title 20: Appliance Energy Efficiency Standards
- 24 CCR, Part 6: Building and Energy Efficiency Standards

## 5. Environmental Analysis

### AIR QUALITY

- 24 CCR, Part 11: Green Building Standards Code

#### *Tanner Air Toxics Act and Air Toxics Hots Information and Assessment Act*

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and reduce exposure to them. The California Health and Safety Code defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health” (17 CCR § 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 US Code § 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics “Hot Spot” Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an “airborne toxics control measure” for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate “toxics best available control technology” to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

CARB has promulgated the following specific rules to limit TAC emissions:

- **13 CCR Chapter 10 § 2485.** Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- **13 CCR Chapter 10 § 2480.** Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- **13 CCR § 2477 and Article 8.** Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

## 5. Environmental Analysis

### AIR QUALITY

#### Air Pollutants of Concern

##### *Criteria Air Pollutants*

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and lead (Pb) are primary air pollutants. Of these, CO, SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are “criteria air pollutants,” which means that AAQS have been established for them. VOC and NO<sub>x</sub> are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O<sub>3</sub>) and nitrogen dioxide (NO<sub>2</sub>) are the principal secondary pollutants.

A description of each of the primary and secondary criteria air pollutants and its known health effects is presented below.

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005; USEPA 2018). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2017).
- **Volatile Organic Compounds** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (SCAQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O<sub>3</sub>, SCAQMD has established a significance threshold.
- **Nitrogen Oxides** are a by-product of fuel combustion and contribute to the formation of ground-level O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The two major forms of NO<sub>x</sub> are nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO<sub>x</sub> produced by combustion is NO, but NO reacts quickly with oxygen to form NO<sub>2</sub>, creating the mixture of NO and NO<sub>2</sub> commonly called NO<sub>x</sub>. NO<sub>2</sub> is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO<sub>2</sub> is only potentially irritating. NO<sub>2</sub> absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO<sub>2</sub> exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO<sub>2</sub> exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between

## 5. Environmental Analysis

### AIR QUALITY

elevated short-term NO<sub>2</sub> concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (SCAQMD 2005; USEPA 2018). The SoCAB is designated an attainment area for NO<sub>2</sub> under the National and California AAQS (CARB 2017).

- **Sulfur Dioxide** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO<sub>2</sub>. When sulfur dioxide forms sulfates (SO<sub>4</sub>) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO<sub>x</sub>). Thus, SO<sub>2</sub> is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO<sub>2</sub> may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO<sub>2</sub>, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO<sub>2</sub> may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (SCAQMD 2005; USEPA 2018). The SoCAB is designated attainment under the California and National AAQS (CARB 2017).
- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM<sub>10</sub>, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or PM<sub>2.5</sub>, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM<sub>10</sub> and PM<sub>2.5</sub> may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that PM<sub>2.5</sub>, which penetrates deeply into the lungs, is more likely than PM<sub>10</sub> to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (SCAQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), have human health implications, because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (SCAQMD 2013). However, the EPA or CARB has yet to adopt AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,<sup>1</sup> environmental damage,<sup>2</sup> and aesthetic damage<sup>3</sup> (SCAQMD 2005; USEPA 2018).

---

<sup>1</sup> PM<sub>2.5</sub> is the main cause of reduced visibility (haze) in parts of the United States.

## 5. Environmental Analysis

### AIR QUALITY

The SoCAB is a nonattainment area for PM<sub>2.5</sub> under California and National AAQS and a nonattainment area for PM<sub>10</sub> under the California AAQS (CARB 2017).<sup>4</sup>

- **Ozone** is commonly referred to as “smog” and is a gas that is formed when VOCs and NO<sub>x</sub>, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O<sub>3</sub> is a secondary criteria air pollutant. O<sub>3</sub> concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O<sub>3</sub> poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O<sub>3</sub> can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O<sub>3</sub> also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O<sub>3</sub> also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O<sub>3</sub> harms sensitive vegetation during the growing season (SCAQMD 2005; USEPA 2018). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2017).
- **Lead** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (SCAQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA’s regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.<sup>5</sup> As a result of these violations,

<sup>2</sup> Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

<sup>3</sup> Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

<sup>4</sup> CARB approved the SCAQMD’s request to redesignate the SoCAB from serious nonattainment for PM<sub>10</sub> to attainment for PM<sub>10</sub> under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM<sub>10</sub> standards from 2004 to 2007. The EPA approved the State of California’s request to redesignate the South Coast PM<sub>10</sub> nonattainment area to attainment of the PM<sub>10</sub> National AAQS, effective on July 26, 2013.

<sup>5</sup> Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and

## 5. Environmental Analysis

### AIR QUALITY

the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (SCAQMD 2012; CARB 2017). Because emissions of lead are found only in projects that are permitted by SCAQMD, lead is not a pollutant of concern for the proposed project.

#### *Toxic Air Contaminants*

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

#### *Diesel Particulate Matter*

In 1998, CARB identified diesel particulate matter as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.

### **Air Quality Management Planning**

SCAQMD is the agency responsible for improving air quality in the SoCAB and assuring that the National and California AAQS are attained and maintained. SCAQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

#### *2016 AQMP*

On March 3, 2017, SCAQMD adopted the 2016 AQMP, which serves as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031
- 2012 National annual PM<sub>2.5</sub> standard by 2025<sup>6</sup>
- 2006 National 24-hour PM<sub>2.5</sub> standard by 2019
- 1997 National 8-hour ozone standard by 2023
- 1979 National 1-hour ozone standard by year 2022

It is projected that total NO<sub>x</sub> emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour

---

Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

<sup>6</sup> The 2016 AQMP requests a reclassification from moderate to serious nonattainment for the 2012 National PM<sub>2.5</sub> standard.



## 5. Environmental Analysis

### AIR QUALITY

ozone standard by year 2022 (SCAQMD 2017), which requires reducing NO<sub>x</sub> emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO<sub>x</sub> emissions would also reduce PM<sub>2.5</sub> concentrations in the SoCAB. However, because the goal is to meet the 2012 federal annual PM<sub>2.5</sub> standard no later than year 2025, SCAQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (SCAQMD 2017).

#### *Lead Implementation Plan*

In 2008, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007-to-2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

#### *SCAQMD Rules and Regulations*

All projects are subject to SCAQMD rules and regulations in effect at the time of activity, including:

- **Rule 401, Visible Emissions.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in visible emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is as dark as or darker than designated No. 1 on the Ringelmann Chart, as published by the US Bureau of Mines.
- **Rule 402, Nuisance.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

## 5. Environmental Analysis

### AIR QUALITY

- **Rule 403, Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and requires best available control measures to be applied to earth moving and grading activities. In general, the rule prohibits new developments from the installation of wood-burning devices.
- **Rule 445, Wood Burning Devices.** This rule is intended to reduce the emission of particulate matter from wood-burning devices and applies to manufacturers and sellers of wood-burning devices, commercial sellers of firewood, and property owners and tenants that operate a wood-burning device.
- **Rule 1113, Architectural Coatings.** This rule serves to limit the VOC content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the SCAQMD must comply with the current VOC standards set in this rule.
- **Rule 1403, Asbestos Emissions from Demolition/Renovation Activities.** The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

#### 5.2.1.2 EXISTING CONDITIONS

##### South Coast Air Basin

The proposed project site is in the SoCAB, which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

##### *Temperature and Precipitation*

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the proposed project is the Newport Beach Harbor Monitoring Station (ID No. 046175). The

## 5. Environmental Analysis

### AIR QUALITY

lowest average low is reported at 46.9°F in January, and the highest average high is 73.4°F in August (WRCC 2018).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 11 inches per year in the proposed project area (WRCC 2018).

#### *Humidity*

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 2005).

#### *Wind*

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 2005).

#### *Inversions*

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the proposed project area (SCAQMD 2005).

## 5. Environmental Analysis

### AIR QUALITY

#### SoCAB Nonattainment Areas

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified.** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment.** A pollutant is in attainment if the AAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment.** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.
- **Nonattainment/Transitional.** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 5.2-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

**Table 5.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin**

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM <sub>10</sub>	Serious Nonattainment	Attainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO <sub>2</sub>	Attainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) <sup>1</sup>
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2017.

<sup>1</sup> In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

#### Multiple Air Toxics Exposure Study IV

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In 2008, SCAQMD conducted its third update, MATES III, based on the Office of Environmental Health Hazards Assessment's (OEHHA) 2003 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk

## 5. Environmental Analysis

### AIR QUALITY

Assessments (2003 HRA Guidance Manual). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, which accounted for 84 percent of the cancer risk (SCAQMD 2008a).

SCAQMD recently released the fourth update, MATES IV, which was also based on OEHHA's 2003 HRA Guidance Manual. The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources, and 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, which accounted for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basinwide population-weighted risk decreased by approximately 57 percent since MATES III (SCAQMD 2015a).

OEHHA updated the guidelines for estimating cancer risks on March 6, 2015 (OEHHA 2015). The new method uses higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined, SCAQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher than the risk identified in MATES IV using the 2015 OEHHA guidance methodology (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (SCAQMD 2015a).

### Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the proposed project site are best documented by measurements taken by the SCAQMD. The proposed project is located within Source Receptor Area (SRA) 18: North Orange County Coastal. The air quality monitoring station closest to the proposed project is the Costa Mesa-Mesa Verde Drive Monitoring Station. However, this station does not monitor PM<sub>10</sub> and PM<sub>2.5</sub>, data for these two criteria air pollutants are from the Mission Viejo-26081 Via Pera Monitoring Station. Data from these stations are summarized in Table 5.2-3, *Ambient Air Quality Monitoring Summary*. The data show that the area regularly exceeds the state and federal one-hour and eight-hour O<sub>3</sub> standards within the last five recorded years. The CO, SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub> and federal PM<sub>2.5</sub> standards have not been exceeded in the last five years in the project vicinity.

## 5. Environmental Analysis

### AIR QUALITY

**Table 5.2-3 Ambient Air Quality Monitoring Summary**

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels				
	2013	2014	2015	2016	2017
<b>Ozone (O<sub>3</sub>)<sup>1</sup></b>					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	1	1	1	0	0
State 8-hour ≥ 0.07 ppm (days exceed threshold)	2	6	2	0	5
Federal 8-Hour > 0.075 ppm (days exceed threshold)	1	4	1	0	1
Max. 1-Hour Conc. (ppm)	0.095	0.096	0.099	0.090	0.088
Max. 8-Hour Conc. (ppm)	0.083	0.079	0.079	0.069	0.080
<b>Carbon Monoxide (CO)<sup>1</sup></b>					
State 8-Hour > 9.0 ppm (days exceed threshold)	*	*	*	*	*
Federal 8-Hour ≥ 9.0 ppm (days exceed threshold)	*	*	*	*	*
Max. 8-Hour Conc. (ppm)	*	*	*	*	*
<b>Nitrogen Dioxide (NO<sub>2</sub>)<sup>1</sup></b>					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.0757	0.0606	0.0524	0.0598	0.0453
<b>Sulfur Dioxide (SO<sub>2</sub>)<sup>1</sup></b>					
State 24-Hour ≥ 0.04 ppm (days exceed threshold)	0	*	*	*	*
Federal 24-Hour ≥ 0.14 ppm (days exceed threshold)	0	*	*	*	*
Max 24-Hour Conc. (ppm)	0.001	*	*	*	*
<b>Coarse Particulates (PM<sub>10</sub>)<sup>2</sup></b>					
State 24-Hour > 50 µg/m <sup>3</sup> (days exceed threshold)	0	0	0	*	*
Federal 24-Hour > 150 µg/m <sup>3</sup> (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	51.0	41.0	49.0	59.0	58.2
<b>Fine Particulates (PM<sub>2.5</sub>)<sup>2</sup></b>					
Federal 24-Hour > 35 µg/m <sup>3</sup> (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	28.0	25.5	31.5	24.7	19.5

Source: CARB 2018.

Notes: ppm = parts per million; ppb = parts per billion; µg/m<sup>3</sup> = micrograms per cubic meter

\* Data not available.

<sup>1</sup> Data obtained from the Costa Mesa-Mesa Verde Drive Monitoring Station at 2850 Mesa Verde Drive East in the City of Costa Mesa.

<sup>2</sup> Data obtained from the Mission Viejo Monitoring Station at 26081 Via Pera in the City of Mission Viejo.

### Existing Emissions

The proposed project site consists of commercial and retail uses. These uses currently generate criteria air pollutant emissions from natural gas use for energy, heating and cooking, vehicle trips associated with each land use, and area sources such as landscaping equipment and consumer cleaning products. Table 5.2-4, *Existing Daily Emissions Inventory*, shows the average daily emissions inventory associated with the existing uses currently in operation.



## 5. Environmental Analysis AIR QUALITY

**Table 5.2-4 Existing Daily Emissions Inventory**

Phase	Operation-Related Regional Emissions (pounds/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	1	<1	<1	0	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile <sup>1</sup>	2	8	23	<1	5	1
<b>Total</b>	<b>3</b>	<b>9</b>	<b>24</b>	<b>&lt;1</b>	<b>5</b>	<b>1</b>

Source: CalEEMod Version 2016.3.2.

Notes: Based on highest winter or summer emissions using 2016 transportation emission rates. Totals may not equal 100 percent due to rounding. Excludes permitted sources of emissions that are covered under SCAQMD regulations.

<sup>1</sup> Based on year 2017 emission factors.

### Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, because the majority of the workers tend to stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population.

The nearest off-site sensitive receptors to the proposed project are the residents at the Carlyle Apartment approximately one-half mile to the north east.

### 5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.
- AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- AQ-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

## 5. Environmental Analysis

### AIR QUALITY

AQ-4 Expose sensitive receptors to substantial pollutant concentrations.

AQ-5 Create objectionable odors affecting a substantial number of people.

#### 5.2.2.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD's website (SCAQMD 1993).<sup>7</sup> CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation based on substantial evidence.

#### Regional Significance Thresholds

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB, shown in Table 5.2-5, *SCAQMD Regional Significance Thresholds*. The table lists thresholds that are applicable for all projects uniformly, regardless of size or scope. There is growing evidence that although ultrafine particulate matter contributes a very small portion of the overall atmospheric mass concentration, it represents a greater proportion of the health risk from PM. However, the EPA and CARB have not adopted AAQS to regulate ultrafine particulate matter; therefore, SCAQMD has not developed thresholds for them.

**Table 5.2-5 SCAQMD Significance Thresholds**

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO <sub>x</sub> )	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO <sub>x</sub> )	150 lbs/day	150 lbs/day
Particulates (PM <sub>10</sub> )	150 lbs/day	150 lbs/day
Particulates (PM <sub>2.5</sub> )	55 lbs/day	55 lbs/day

Source: SCAQMD 2015b.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health effects. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

<sup>7</sup> SCAQMD's Air Quality Significance Thresholds are current as of March 2015 and can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

## 5. Environmental Analysis

### AIR QUALITY

- Increases cancer risk (PM<sub>2.5</sub>, TACs)
- Aggravates respiratory disease (O<sub>3</sub>, PM<sub>2.5</sub>)
- Increases bronchitis (O<sub>3</sub>, PM<sub>2.5</sub>)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O<sub>3</sub>)
- Reduces resistance to infections and increases fatigue (O<sub>3</sub>)
- Reduces lung growth in children (PM<sub>2.5</sub>)
- Contributes to heart disease and heart attacks (PM<sub>2.5</sub>)
- Contributes to premature death (O<sub>3</sub>, PM<sub>2.5</sub>)
- Contributes to lower birth weight in newborns (PM<sub>2.5</sub>) (SCAQMD 2015c)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM<sub>2.5</sub> is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists, in a landmark children's health study, found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (SCAQMD 2015d).

Mass emissions in Table 5.2-5 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed above. SCAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, SCAQMD prepares an AQMP that details regional programs to attain the AAQS. The project's consistency with the AQMP is analyzed below.

### CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles and introduction of cleaner fuels, as well as implementation of control technology on industrial facilities, CO concentrations in the SoCAB and the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by SCAQMD did not predict a violation of

## 5. Environmental Analysis

### AIR QUALITY

CO standards at the busiest intersections in Los Angeles during the peak morning and afternoon periods.<sup>8</sup> As identified in SCAQMD’s 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in years before redesignation were a result of unusual meteorological and topographical conditions and not of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).<sup>9</sup>

### Localized Significance Thresholds

SCAQMD identifies localized significance thresholds, shown in Table 5.2-6, *SCAQMD Localized Significance Thresholds*. Emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated at a project site (offsite mobile-source emissions are not included in the localized significance threshold (LST) analysis) could expose sensitive receptors to substantial concentrations of criteria air pollutants. A project that generates emissions that trigger a violation of the AAQS when added to the local background concentrations would generate a significant impact.

**Table 5.2-6 SCAQMD Localized Significance Thresholds**

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO <sub>2</sub> Standard (CAAQS)	0.18 ppm
Annual NO <sub>2</sub> Standard (CAAQS)	0.03 ppm
24-Hour PM <sub>10</sub> Standard – Construction (SCAQMD) <sup>1</sup>	10.4 µg/m <sup>3</sup>
24-Hour PM <sub>2.5</sub> Standard – Construction (SCAQMD) <sup>1</sup>	10.4 µg/m <sup>3</sup>
24-Hour PM <sub>10</sub> Standard – Operation (SCAQMD) <sup>1</sup>	2.5 µg/m <sup>3</sup>
24-Hour PM <sub>2.5</sub> Standard – Operation (SCAQMD) <sup>1</sup>	2.5 µg/m <sup>3</sup>
Annual Average PM <sub>10</sub> Standard (SCAQMD) <sup>1</sup>	1.0 µg/m <sup>3</sup>

Source: SCAQMD 2015b.

ppm – parts per million; µg/m<sup>3</sup> – micrograms per cubic meter

<sup>1</sup> Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM<sub>10</sub> and PM<sub>2.5</sub>, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

<sup>8</sup> The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

<sup>9</sup> The CO hotspot analysis refers to the modeling conducted by the Bay Area Air Quality Management District for its CEQA Guidelines because it is based on newer data and considers the improvement in mobile-source CO emissions. Although meteorological conditions in the Bay Area differ from those in the Southern California region, the modeling conducted by BAAQMD demonstrates that the net increase in peak hour traffic volumes at an intersection in a single hour would need to be substantial. This finding is consistent with the CO hotspot analysis SCAQMD prepared as part of its 2003 AQMP to provide support in seeking CO attainment for the SoCAB. Based on the analysis prepared by SCAQMD, no CO hotspots were predicted for the SoCAB. As noted in the preceding footnote, the SCAQMD analysis included some of Los Angeles’ busiest intersections, with daily traffic volumes of 100,000 or more peak hour vehicle trips operating at LOS E and F.

## 5. Environmental Analysis

### AIR QUALITY

To assist lead agencies, SCAQMD developed screening-level LSTs to back-calculate the mass amount (pounds per day) of emissions generated onsite that would trigger the levels shown in Table 5.2-6 for projects under five acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, they can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required.

The construction screening-level LSTs in SRA 18 are shown in Table 5.2-7, *SCAQMD Screening-Level Localized Significance Thresholds*. For construction activities, LSTs are based on the acreage disturbed per day based on equipment use (SCAQMD 2011). The different types of construction activities would require different equipment mixes, resulting in multiple LSTs. Because the proposed project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern.

**Table 5.2-7 SCAQMD Screening-Level Localized Significance Thresholds**

Acreage Disturbed	Threshold (lbs/day)			
	Nitrogen Oxides (NO <sub>x</sub> ) <sup>1</sup>	Carbon Monoxide (CO) <sup>1</sup>	Coarse Particulates (PM <sub>10</sub> ) <sup>2</sup>	Fine Particulates (PM <sub>2.5</sub> ) <sup>2</sup>
<b>Construction Phase<sup>1</sup></b>				
=<1 Acre Disturbed per Day	92	647	220	133
1.5 Acres Disturbed per Day	112	804	225	138
2.0 Acres Disturbed per Day	131	962	230	143
2.5 Acres Disturbed per Day	142	1,087	234	147
3.0 Acres Disturbed per Day	153	1,212	238	152
3.5 Acres Disturbed per Day	164	1,336	242	157
4.5 Acres Disturbed per Day	186	1,586	249	166

Source: SCAQMD 2008b, 2011. Based on receptors in SRA 18.

<sup>1</sup> NO<sub>x</sub> and CO screening-level LSTs are based on nonresidential receptors within 82 feet (25 meters) of the proposed project site. PM<sub>10</sub> and PM<sub>2.5</sub> screening-level LSTs are based on residential receptors within 2,675 feet (815 meters) of the proposed project.

### 5.2.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address air quality impacts follow.

#### 5.2.3.1 REGULATORY REQUIREMENTS

RR AIR-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building Energy Efficiency Standards are effective starting on January 1, 2017 and the 2019 Building Energy Efficiency Standards will be effective starting on January 1, 2020. The Building Energy and Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero energy (NZE) for residential buildings by 2020 and nonresidential buildings by 2030. CALGreen and the 2016 Building Energy Efficiency Standards are incorporated by reference under Chapter 15.11 and Chapter 15.17, respectively, of the City Municipal Code.

## 5. Environmental Analysis

### AIR QUALITY

- RR AIR-2 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) requirement to provide electric vehicle parking spaces for new residential buildings (CALGreen Section 4.106.4.2). The proposed project is required to designate at least 3 percent of parking spaces for electric vehicles under CALGreen. CALGreen is currently being updated. An updated version of CALGreen will go into effect on January 1, 2020. The project would be required to comply with the version of CALGreen in effect when the City issues building permits.
- RR AIR 3 Land uses are required to adhere to South Coast Air Quality Management District Rule 402, Nuisance, which states that a project shall not “discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”
- RR AIR-4 Residential developments are required to adhere to South Coast Air Quality Management District Rule 445 for limiting the installment of wood-burning fireplaces.
- RR AIR-5 Construction activities will be conducted in compliance with 13 California Code of Regulations (CCR) Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.
- RR AIR-6 Construction activities will be conducted in compliance with any applicable South Coast Air Quality Management District (SCAQMD) rules and regulations, including but not limited to:
- Rules 201, 203 and 219, which regulate permits for installation and use of equipment that may generate air contaminants, such of commercial kitchen equipment and emergency generators.
  - Rule 403, Fugitive Dust, for controlling fugitive dust and avoiding nuisance.
  - Rule 1113, which limits the volatile organic compound content of architectural coatings.
  - Rule 1186, for controlling fugitive dust from vehicular travel on paved and unpaved roads.
  - Rule 1403, for minimizing asbestos emissions during building demolition.

#### 5.2.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to air quality that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

### 5.2.4 Environmental Impacts

#### 5.2.4.1 METHODOLOGY

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely in conjunction with the type and scale of development associated with



## 5. Environmental Analysis

### AIR QUALITY

the proposed project. Air quality emissions modeling was completed for the proposed project using the California Emissions Estimator Model (CalEEMod) recommended by the SCAQMD. Air quality modeling datasheets are in Appendix B.

Project-related emissions are based on development of the new proposed residential, commercial, and retail uses. The modeling accounts for the average daily vehicle trips generated, energy usage (e.g., natural gas), and area sources (e.g., consumer cleaning products) from operation of the proposed project. Construction emissions are based on information provided for the proposed project. Where specific information was not available, CalEEMod default values were utilized.

- **Transportation.** The weekday average daily trip (ADT) generation was provided by LSA Associates (LSA 2018). Saturday and Sunday average daily trip generation were based on the Institute of Transportation Engineers' Trip Generation Manual (ITE 2017). Overall, the proposed project would generate up to 2,326 weekday ADTs and 2,161 and 1,915 Saturday and Sunday ADTs, respectively. Compared to existing conditions with current occupied buildings, the proposed project would result in a net increase of 1,078 weekday ADTs and 779 and 848 Saturday and Sunday ADTs. The trip lengths are based on CalEEMod defaults. For further details, refer to Appendix B of this study.
- **Energy Use.** It is assumed that the proposed buildings would meet the 2016 Building Energy Efficiency Standards.<sup>10</sup> For purposes of this analysis, while the existing buildings were built in 1974, the historical energy rates in CalEEMod are used for the existing buildings. The historical rates are based on the 2005 Building Energy Efficiency Standards. The net change in emissions from implementation of the proposed project would be conservative as it is assumed that the energy efficiency of the existing buildings would be less than buildings built to meet the 2005 Standards (i.e., less efficient buildings would generate higher emissions, which would result in a smaller net change in emissions).
- **Area Sources.** Area source emissions from use of fireplaces and consumer cleaning products and from paints are based on CalEEMod default values, building and parking lot area, and the number of fireplaces. Per the project applicant, approximately 80 percent of the interior paintable surface areas would be painted, with the remainder covered with wall coverings. Additionally, it is assumed that all 350 dwelling units would have natural gas-powered fireplaces.
- **Construction.** Construction of the proposed project would commence in December 2019 and be completed by the end of January 2023, a duration of approximately 38 months. Table 5.2-8, *Construction Activities, Phasing, and Equipment*, shows the assumed construction activities, phasing, and construction equipment based on information provided and CalEEMod defaults.

---

<sup>10</sup> It is possible, depending on the construction timing, that the 2019 Standards could apply to at least some of the project, making it more efficient than modeled.

## 5. Environmental Analysis

### AIR QUALITY

**Table 5.2-8 Construction Activities, Phasing, and Equipment**

Activities <sup>1</sup>	Start/End Dates <sup>1</sup>	Equipment <sup>1</sup>
Building Demolition	12/1/2019 to 12/27/2019	1 skid steer loader; 2 tractors/loaders/backhoes; 3 excavators; 2 water trucks
Building Demolition Debris Haul	12/5/2019 to 12/27/2019	1 excavator
Asphalt Demolition	12/24/2019 to 12/26/2019	No additional off-road construction equipment
Asphalt Demolition Debris Haul	12/24/2019 to 12/26/2019	1 excavator
Site Preparation	12/26/2019 to 12/26/2019	1 rubber tired dozer; 2 tractors/loaders/backhoes; 1 water truck
Rough Grading	12/29/2019 to 1/1/2020	1 scraper; 2 rubber tired dozers; 1 grader; 1 water truck
Rough Grading Soil Haul	12/31/2019 to 1/2/2020	1 excavator
Fine Grading	1/1/2020 to 1/13/2020	1 grader; 1 water truck
Parking Structure Excavation/Soil Haul/Shoring	1/5/2020 to 1/17/2020	1 excavator; 1 drill rig; 1 crane; 1 tractor/loader/backhoe; 1 water truck
Wet Utilities	1/9/2020 to 3/5/2020	2 excavators; 3 tractors/loaders/backhoes; 1 water truck
Structural Concrete	2/19/2020 to 12/7/2020	1 crane; 1 concrete mortar mixer; 2 rough terrain forklifts; 2 tractors/loaders/backhoes
Multi-Use Structure	2/19/2020 to 1/27/2023	2 rough terrain forklifts; 2 forklifts; 3 cranes
Dry Utilities	3/2/2020 to 3/13/2020	2 tractors/loaders/backhoes; 1 water truck
Street Improvements - Balancing / Aggregate Base	3/16/2020 to 3/20/2020	1 grader; 1 scraper; 1 tractor/loader/backhoe; 1 roller; 1 water truck
Street Improvements - Curb & Gutter	3/23/2020 to 3/27/2020	No off-road construction equipment
Asphalt Paving	4/1/2020 to 4/2/2020	1 grader; 1 paver; 1 roller
Street Improvements - Concrete Flatwork	4/5/2020 to 4/20/2020	1 tractor/loader/backhoe
Architectural Coating	10/27/2022 to 1/27/2023	1 air compressor

Notes: n/a = not applicable

<sup>1</sup> Based on information provided by the applicant.

#### 5.2.4.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts (see Appendix A). The applicable thresholds are identified in brackets after the impact statement.

**Impact 5.2-1: The proposed project is consistent with the applicable air quality management plan. [Threshold AQ-1]**

**Impact Analysis:** A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP.

The regional emissions inventory for the SoCAB is compiled by SCAQMD and SCAG. Regional population, housing, and employment projections developed by SCAG are based, in part, on cities' general plan land use

## 5. Environmental Analysis

### AIR QUALITY

designations. These projections form the foundation for the emissions inventory of the AQMP. These demographic trends are incorporated into the regional transportation plan/sustainable communities strategy, compiled by SCAG to determine priority transportation projects and vehicle miles traveled in the SCAG region. The AQMP strategy is based on projections from local general plans. Projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections and therefore the assumptions in SCAQMD's AQMP. The proposed project would redevelop an existing commercial-retail center into a mixed-use residential development with supporting commercial and retail uses and would change the general type of land use currently in operation. However, as discussed under Impact 5.9-3, the proposed land uses would be permitted under the existing land use and zoning designations of the City's general plan. Additionally, as discussed under Impact 5.11-1, the 550 residents and 12 jobs projected to be generated by the proposed project would be within the projected population and employment growth for the City. Also, as discussed under Impact 5.11-1, the proposed project would be within the projected housing growth. Furthermore, the long-term emissions generated by the proposed project would not generate criteria air pollutants that exceed the SCAQMD significance thresholds. Therefore, the proposed project would be consistent with the AQMP and impacts would be less than significant.

***Level of Significance before Mitigation:*** With implementation of RR AIR-1, RR AIR-2, and RR AIR-4, Impact 5.2-1 would be less than significant.

---

**Impact 5.2-2: Construction activities associated with the proposed project would generate short-term emissions in exceedance of SCAQMD'S threshold criteria for NO<sub>x</sub>. [Thresholds AQ-2 and AQ-3]**

---

***Impact Analysis:*** Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) from demolition and soil-disturbing activities, such as grading and excavation. Air pollutant emissions from construction activities onsite would vary daily as construction activity levels change.

As stated, the proposed project is anticipated to be constructed over an approximately 38-month period from December 2019 through January 2023. Construction air pollutant emissions are based on the preliminary information provided by the project applicant. Construction would entail demolition of existing asphalt and structures; site preparation, grading, and excavation; off-site hauling of demolition debris and soil; street improvements; utilities installation; construction of the proposed building; architectural coating; and asphalt paving. An estimate of maximum daily construction emissions for the proposed project is provided in Table 5.2-9, *Maximum Daily Regional Construction Emissions*.

## 5. Environmental Analysis

### AIR QUALITY

**Table 5.2-9 Maximum Daily Regional Construction Emissions**

Construction Phase	Pollutants (pounds per day) <sup>1, 2</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Year 2019</b>						
Demolition Phase	6	68	51	<1	3	3
Overlap of Demolition and Building Demolition Debris Haul Phases	8	<b>121</b>	66	<1	11	5
Overlap of Demolition, Building Demolition Debris Haul, and Asphalt Demolition Debris Haul Phases	9	<b>132</b>	71	<1	24	7
Overlap of the Demolition, Building Demolition Debris Haul, Asphalt Demolition Debris Haul, and Site Preparation Phases	11	<b>156</b>	88	<1	28	9
Rough Grading Phase	5	58	31	<1	6	4
Overlap of the Rough Grading and Rough Grading Soil Haul Phases	9	<b>211</b>	72	<1	15	7
<b>Year 2020</b>						
Overlap of the Rough Grading, Rough Grading Soil Haul, and Fine Grading Phases	10	<b>217</b>	74	<1	15	7
Overlap of the Rough Grading Soil Haul and Fine Grading Phases	5	<b>161</b>	44	<1	10	3
Fine Grading Phase	1	8	3	<1	1	<1
Overlap of the Fine Grading and Parking Structure Excavation/Shoring/Hauling Phases	3	51	19	<1	3	1
Overlap of the Fine Grading, Parking Structure Excavation/Shoring/Hauling, and Wet Utilities Phases	5	68	31	<1	4	2
Overlap of the Parking Structure Excavation/Shoring/Hauling and Wet Utilities Phases	4	59	28	<1	3	2
Wet Utilities Phase	2	17	11	<1	1	1
Overlap of the Wet Utilities, Multi-Use Structure, and Structural Concrete Phases	6	59	44	<1	5	3
Overlap of the Wet Utilities, Multi-Use Structure, Structural Concrete, and Dry Utilities Phases	6	65	49	<1	5	3
Overlap of the Multi-Use Structure, and Structural Concrete, and Dry Utilities Phases	5	48	38	<1	4	2
Overlap of the Multi-Use Structure and Structural Concrete Phases	4	42	33	<1	4	2
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Balancing/Aggregate Base Phases	7	68	48	<1	5	3
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Curb & Gutter Phases	4	42	33	<1	4	2
Overlap of the Multi-Use Structure, Structural Concrete, and Asphalt Paving Phases	6	56	42	<1	5	3
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Concrete Flatwork Phases	4	44	35	<1	4	2
Multi-Use Structure Phase	3	28	20	<1	3	1

5. Environmental Analysis  
AIR QUALITY

**Table 5.2-9 Maximum Daily Regional Construction Emissions**

Construction Phase	Pollutants (pounds per day) <sup>1, 2</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>2021</b>						
Multi-Use Structure Phase	2	26	19	<1	3	1
<b>2022</b>						
Multi-Use Structure Phase	2	24	19	<1	3	1
Overlap of the Multi-Use Structure and Architectural Coating Phases	37	25	21	<1	3	1
<b>2023</b>						
Overlap of the Multi-Use Structure and Architectural Coating Phases	37	22	21	<1	3	1
Maximum Daily Emissions	36	<b>217</b>	88	<1	28	9
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
<b>Significant?</b>	No	<b>Yes</b>	No	No	No	No

Source: CalEEMod Version 2016.3.2.

Notes: Emissions totals may not equal 100 percent due to rounding.

<sup>1</sup> Based on the preliminary information provided by the applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment.

<sup>2</sup> Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

As shown in these tables, pollutant emissions generated from project-related construction activities would exceed the SCAQMD's regional construction significance threshold for NO<sub>x</sub>. The exceedance would be due to the onsite and offsite (e.g., truck hauling) emissions generation and from the overlapping of various construction activities. Overlap of the rough grading, rough grading soil haul, and fine grading activities would generate a maximum daily emission of 217 pounds per day. The primary source of NO<sub>x</sub> emissions would be from haul trucks associated with the demolition debris and soil hauling activities in addition to the operation of off-road construction equipment. NO<sub>x</sub> is a precursor to the formation of both O<sub>3</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and would contribute to the O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> nonattainment designations of the SoCAB. Therefore, project-related construction activities would result in potentially significant regional air quality impacts.

**Level of Significance before Mitigation:** Even after implementation of RR AIR-5 and RR AIR-6, project-related construction activities would result in potentially significant regional air quality impacts.

**Impact 5.2-3: Long-term operation of the proposed project would not generate additional vehicle trips and associated emissions in exceedance of SCAQMD's threshold criteria. [Thresholds AQ-2 and AQ-3]**

**Impact Analysis:** Operation-phase air pollutant emissions would be generated by the proposed project from transportation sources (resident, employee, and patron vehicle trips), area sources (e.g., landscape fuel use, aerosols, and paints), and energy use (natural gas) associated with the proposed project. Table 5.2-10, *Newport Crossings Mixed-Use Project Maximum Daily Regional Operational Emissions*, identifies the net criteria air pollutant

## 5. Environmental Analysis

### AIR QUALITY

emissions that would result from implementation of the proposed project. As shown in the table, the net project-related air pollutant emissions would not exceed SCAQMD's regional emissions thresholds for operational activities. Therefore, impacts to the regional air quality from operation of the proposed project would be less than significant.

**Table 5.2-10 Newport Crossings Mixed-Use Project Maximum Daily Regional Operational Emissions**

Source	Criteria Air Pollutants (lbs/day)					
	ROG (VOC)	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Existing Conditions</b>						
Area	1	<1	<1	0	<1	<1
Energy <sup>1</sup>	<1	<1	1	<1	<1	<1
Mobile	2	6	15	<1	5	1
<b>Total</b>	<b>2</b>	<b>7</b>	<b>16</b>	<b>&lt;1</b>	<b>5</b>	<b>1</b>
<b>Proposed Project</b>						
Area	11	6	31	<1	1	1
Energy <sup>2</sup>	<1	1	1	<1	<1	<1
Mobile	3	6	41	<1	15	4
<b>Total</b>	<b>14</b>	<b>13</b>	<b>73</b>	<b>&lt;1</b>	<b>16</b>	<b>5</b>
<b>Net Emissions</b>						
Area	11	6	31	<1	1	1
Energy	<1	<1	(<1)	<1	<1	<1
Mobile	1	<1	26	<1	11	3
<b>Total</b>	<b>12</b>	<b>7</b>	<b>57</b>	<b>&lt;1</b>	<b>11</b>	<b>4</b>
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold	No	No	No	No	No	No

Source: CalEEMod, Version 2016.3.2.

Notes: Highest winter or summer. Emissions totals may not equal 100 percent due to rounding.

<sup>1</sup> Utilizes the CalEEMod historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

<sup>2</sup> Assumes the proposed buildings would meet the 2016 Building Energy Efficiency Standards.

**Level of Significance before Mitigation:** With implementation of RR AIR-1, RR AIR-2, and RR AIR-4, Impact 5.2-3 would be less than significant.

**Impact 5.2-4: The proposed project would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-4]**

**Impact Analysis:** The following describes changes in localized impacts from short-term construction activities and long-term operation of the proposed project.

The proposed project could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevated levels. As stated, the nearest off-site sensitive receptors to the proposed project are the residents at the Carlyle Apartment, approximately one-



## 5. Environmental Analysis AIR QUALITY

half mile to the northeast. Unlike the mass of construction and operations emissions shown in the regional emissions analysis in Tables 5.2-9 and 5.2-10, which are described in pounds per day, localized concentrations refer to the amount of pollutant in a volume of air (ppm or  $\mu\text{g}/\text{m}^3$ ) and can be correlated to potential health effects.

### Construction-Phase LSTs

LSTs are the amount of project-related emissions at which localized concentrations (ppm or  $\mu\text{g}/\text{m}^3$ ) could exceed the AAQs for criteria air pollutants for which the SoCAB is designated nonattainment. LSTs are based on the size of the proposed project site and distance to the nearest sensitive receptor. Thresholds are based on the California AAQS, which are the most stringent AAQS, established to protect sensitive receptors most susceptible to further respiratory distress.

Table 5.2-11, *Maximum Daily On-Site Construction Emissions*, show the maximum daily construction emissions (pounds per day) generated during on-site construction activities at the proposed project, compared with the SCAQMD's LSTs. On-site emissions include fugitive dust emissions and exhaust emissions associated with operation of off-road construction equipment and soil and debris loading activities. As shown in the tables, maximum daily onsite construction emissions would not exceed the SCAQMD screening-level construction LSTs. Therefore, project-related construction emissions would not expose sensitive receptors to substantial criteria air pollutant concentrations and localized impacts would be less than significant.

**Table 5.2-11 Maximum Daily Onsite Construction Emissions**

Construction Phase	Pollutants (pounds per day) <sup>1,2</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Overlap of the Rough Grading Soil Haul and Fine Grading Phases	11	5	1	<1
Fine Grading Phase	8	2	<1	<1
Overlap of the Fine Grading and Parking Structure Excavation/Shoring/Hauling Phases	26	12	1	1
Overlap of the Multi-Use Structure and Structural Concrete Phases (2020)	32	25	2	2
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Curb & Gutter Phases	32	25	2	2
Multi-Use Structure Phase (2020)	19	14	1	1
Multi-Use Structure Phase (2021)	18	13	1	1
Multi-Use Structure Phase (2022)	16	13	1	1
Overlap of the Multi-Use Structure and Architectural Coating Phases (2022)	18	15	1	1
Overlap of the Multi-Use Structure and Architectural Coating Phases (2023)	16	15	1	1
<b>1.00-Acre or Less LST</b>	<b>92</b>	<b>647</b>	<b>220</b>	<b>133</b>
<b>Exceeds LST?</b>	No	No	No	No
Wet Utilities Phase	17	10	1	1
Overlap of the Multi-Use Structure, Structural Concrete, and	47	34	2	2

## 5. Environmental Analysis

### AIR QUALITY

**Table 5.2-11 Maximum Daily Onsite Construction Emissions**

Construction Phase	Pollutants (pounds per day) <sup>1,2</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Asphalt Paving Phases				
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Concrete Flatwork Phases	24	27	2	2
<b>1.50-Acre LST</b>	<b>112</b>	<b>804</b>	<b>225</b>	<b>138</b>
<b>Exceeds LST?</b>	No	No	No	No
Overlap of the Parking Structure Excavation/Shoring/Hauling and Wet Utilities Phases	34	20	1	1
Overlap of the Multi-Use Structure, and Structural Concrete, and Dry Utilities Phases	38	29	2	2
<b>2.00-Acre LST</b>	<b>131</b>	<b>962</b>	<b>230</b>	<b>143</b>
<b>Exceeds LST?</b>	No	No	No	No
Rough Grading Phase	58	30	5	4
Overlap of the Rough Grading and Rough Grading Soil Haul Phases	61	32	6	4
Overlap of the Fine Grading, Parking Structure Excavation/Shoring/Hauling, and Wet Utilities Phases	42	22	2	1
Overlap of the Wet Utilities, Multi-Use Structure, and Structural Concrete Phases	49	35	2	2
<b>2.50-Acre LST</b>	<b>142</b>	<b>1,087</b>	<b>234</b>	<b>147</b>
<b>Exceeds LST?</b>	No	No	No	No
Demolition Phase	67	50	3	3
Overlap of Demolition and Building Demolition Debris Haul Phases	71	52	8	3
Overlap of Demolition, Building Demolition Debris Haul, and Asphalt Demolition Debris Haul Phases	75	54	20	5
Overlap of the Rough Grading, Rough Grading Soil Haul, and Fine Grading Phases	67	33	6	4
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Balancing/Aggregate Base Phases	58	40	3	3
<b>3.00-Acre LST</b>	<b>153</b>	<b>1,212</b>	<b>238</b>	<b>152</b>
<b>Exceeds LST?</b>	No	No	No	No
Overlap of the Wet Utilities, Multi-Use Structure, Structural Concrete, and Dry Utilities Phases	55	40	3	2
<b>3.50-Acre LST</b>	<b>164</b>	<b>1,336</b>	<b>242</b>	<b>157</b>
<b>Exceeds LST?</b>	No	No	No	No

## 5. Environmental Analysis AIR QUALITY

**Table 5.2-11 Maximum Daily Onsite Construction Emissions**

Construction Phase	Pollutants (pounds per day) <sup>1,2</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Overlap of the Demolition, Building Demolition Debris Haul, Asphalt Demolition Debris Haul, and Site Preparation Phases	98	71	23	8
<b>4.50-Acre LST</b>	<b>186</b>	<b>1,586</b>	<b>249</b>	<b>166</b>
<b>Exceeds LST?</b>	No	No	No	No

Source: CalEEMod Version 2016.3.2; SCAQMD 2008, 2011.

Notes: In accordance with SCAQMD methodology, only on-site stationary sources and mobile equipment occurring on the proposed project site are included in the analysis. NO<sub>x</sub> and CO screening-level LSTs are based on nonresidential receptors within 82 feet (25 meters) of the proposed project site. PM<sub>10</sub> and PM<sub>2.5</sub> screening-level LSTs are based on residential receptors within 2,675 feet (815 meters) of the proposed project site. The acres per day is based on the number of graders, dozers, tractors, and scrapers used for a construction activity and the daily number of hours these off-road equipment are operated.

Emissions totals may not equal 100 percent due to rounding.

<sup>1</sup> Based on the information provided by the applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment.

<sup>2</sup> Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

### Health Risk

SCAQMD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The OEHHA adopted guidance for the preparation of health risk assessments in March 2015. OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. SCAQMD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. The proposed project would be developed a little over three years. The relatively short duration when compared to a 30-year time frame would limit exposures to on-site and off-site receptors. In addition, exhaust emissions from off-road vehicles associated with overall project-related construction activities would not exceed the screening-level LSTs. For these reasons, it is anticipated that construction emissions would not pose a threat to off-site receptors near the proposed project, and project-related construction health impacts would be less than significant.

**Level of Significance before Mitigation:** With implementation of RR AIR-5 and RR AIR-6, Impact 5.2-4 would be less than significant.

**Impact 5.2-5: Operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-4]**

**Impact Analysis:** The following describes changes in localized impacts from operation of the proposed project.

### Operational Phase LSTs

Operation of the proposed project would not generate substantial quantities of emission from on-site stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions

## 5. Environmental Analysis

### AIR QUALITY

that would require a permit from SCAQMD include industrial land uses, such as chemical processing and warehousing operations where substantial truck idling could occur onsite. The proposed project does not fall within these categories of uses. While operation of the proposed project could result in the use of standard onsite mechanical equipment such as heating, ventilation, and air conditioning units along with the occasional use of landscaping equipment for site maintenance, air pollutant emissions generated from these on-site activities would be nominal (see Table 5.2-10). Therefore, localized air quality impacts related to stationary-source emissions would not expose sensitive receptors to pollutant concentrations.

#### CO Hotspots

Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact. The proposed project would result in up to 123 net peak hour trips and would be below the CO hotspots screening criteria (LSA 2018). Thus, implementation of the proposed project would not produce the volume of traffic required to generate a CO hotspot. Therefore, implementation of the proposed project would not have the potential to substantially increase CO hotspots at intersections near the proposed project site, and impacts would be less than significant.

*Level of Significance before Mitigation:* With implementation of RR AIR-4, Impact 5.2-5 would be less than significant.

---

#### **Impact 5.2-6: The proposed project would not create objectionable odors. [Threshold AQ-5]**

---

*Impact Analysis:* Nuisance odors from land uses in the SoCAB are regulated under SCAQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatment plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed mixed-use residential and commercial project would not result in the types of odors generated by the aforementioned land uses. In addition, the proposed project would be subject to SCAQMD Rule 402, which would minimize and control for any odors associated with typical food preparation for patrons. Emissions from construction equipment, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities, may also generate odors.

## 5. Environmental Analysis

### AIR QUALITY

However, these odors would be low in concentration, temporary. Therefore, overall, any odors generate from construction and operation of the proposed project are not expected to affect a substantial number of people and odor impacts would be less than significant.

*Level of Significance before Mitigation:* With implementation of RR AIR-3, Impact 5.2-6 would be less than significant.

#### 5.2.5 Cumulative Impacts

In accordance with SCAQMD's methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Cumulative projects in the local area include new development and general growth in the proposed project area. The greatest source of emissions in the SoCAB is mobile sources. Due to the extent of the area potentially impacted by cumulative project emissions (i.e., the SoCAB), SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds shown in Table 5.2-5 (SCAQMD 1993). No significant cumulative impacts were identified with regard to CO hotspots.

#### Construction

The SoCAB is designated nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> under the California and National AAQS and nonattainment for PM<sub>10</sub> and lead (Los Angeles County only) under the National AAQS. Ozone is created by chemical reactions between NO<sub>x</sub> and volatile organic compounds; thus, NO<sub>x</sub> is a precursor to O<sub>3</sub>. Construction of cumulative projects will further degrade the regional and local air quality. The project would not make a cumulative considerable contribution to PM<sub>2.5</sub> or PM<sub>10</sub>, but air quality from NO<sub>x</sub> would be temporarily impacted during construction activities. However, as discussed below, implementation of mitigation would reduce project-related construction NO<sub>x</sub> emissions to below the SCAQMD significance threshold on a project and cumulative basis. Therefore, the proposed project's contribution to cumulative air quality impacts would not be cumulatively considerable with incorporation of mitigation.

#### Operation

For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values is not considered by SCAQMD to be a substantial source of air pollution and does not make a cumulatively considerable contribution to a cumulative air quality impact. Operation of the proposed project would not result in emissions in excess of the SCAQMD regional emissions thresholds for VOC, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The project also would not make a cumulatively considerable contribution to significant health impacts from air quality exceedances. Therefore, the air pollutant emissions associated with the proposed project would not be cumulatively considerable.

#### 5.2.6 Level of Significance Before Mitigation

Upon implementation of RR AIR-1 through RR AIR-6, the following impacts would be less than significant: 5.2-1, 5.2-3, 5.2-4, 5.2-5, and 5.2-6.

## 5. Environmental Analysis

### AIR QUALITY

Without mitigation, this impact would be potentially significant:

- **Impact 5.2-2** Project-related construction activities would exceed the SCAQMD regional significance threshold for NO<sub>x</sub>.

### 5.2.7 Mitigation Measures

#### Impact 5.2-2

AQ-1 The construction contractor shall implement the following measure to reduce construction exhaust emissions during rough grading and rough grading soil hauling activities:

- Hauling of soil generated from rough grading activities shall be limited to a maximum of 269 trucks per day (538 one-way haul trips per day if 14-cubic-yard trucks are used) assuming a one-way haul distance of 20 miles. If the one-way truck haul distance for export of soil from rough grading activities is greater than 20 miles, as identified by the contractor(s), hauling shall be restricted to no more than 10,760 miles per day.
- Rough grading and rough grading soil hauling activities shall not overlap with other construction activities (demolition, site preparation, utilities, etc..).

These requirements shall be noted on all construction management plans and verified by the City of Newport Beach prior to issuance of any construction permits and during rough grading and rough grading soil hauling activities.

AQ-2 The construction contractor shall implement the following measure to reduce construction exhaust emissions during demolition and demolition debris material export activities:

- Hauling of building demolition debris shall be limited to a maximum of 47 trucks per day (94 one-way haul trips per day if 18-cubic-yard trucks are used) assuming a one-way haul distance of 30 miles. If the one-way truck haul distance for export of building demolition debris is greater than 30 miles, as identified by the contractor(s), hauling shall be restricted to no more than 2,850 miles per day.
- All demolition and demolition debris (building asphalt) hauling activities shall not overlap with other non-demolition construction activities (rough grading, site preparation, utilities, etc..).

These requirements shall be noted on all construction management plans and verified by the City of Newport Beach prior to issuance of any construction permits and during demolition and demolition debris hauling activities.

AQ-3 Construction contractors shall, at minimum, use equipment that meets the EPA's Tier 3 emissions standards for off-road diesel-powered construction equipment with more than 50



## 5. Environmental Analysis

### AIR QUALITY

horsepower for all building and asphalt demolition, building and asphalt demolition debris hauling, rough grading, and rough grading soil hauling activities, unless it can be demonstrated to the City of Newport Beach Building Division that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by Tier 3 emissions standards for a similarly sized engine, as defined by the California Air Resources Board's regulations.

Prior to construction, the project engineer shall ensure that all construction (e.g., demolition and grading) plans clearly show the requirement for EPA Tier 3 emissions standards for construction equipment over 50 horsepower for the specific activities stated above. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the City of Newport Beach. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to 5 minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.

### 5.2.8 Level of Significance After Mitigation

#### Impact 5.2-2

As shown in Table 5.2-12, *Maximum Daily Regional Construction Emissions with Mitigation*, with incorporation of Mitigation Measures AQ-1 through AQ-3, construction-related NO<sub>x</sub> emissions would be reduced to below the SCAQMD regional significance threshold. Implementation of Mitigation Measures AQ-1 and AQ-2 would limit the amount of truck haul trips per day associated with the building demolition debris and rough grading soil hauling operations. Mitigation Measure AQ-3 would require the use off-road construction equipment during demolition and rough grading activities that meet Tier 3 emissions standards. Because NO<sub>x</sub> emissions would be reduced to below its respective regional significance threshold, Impact 5.2-2 would be reduced to less than significant.

## 5. Environmental Analysis

### AIR QUALITY

**Table 5.2-12 Maximum Daily Regional Construction Emissions with Mitigation**

Construction Phase	Pollutants (pounds per day) <sup>1, 2</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Year 2019</b>						
Demolition Phase	2	41	48	<1	2	2
Overlap of Demolition and Building Demolition Debris Haul Phases	4	85	63	<1	8	3
Overlap of Demolition, Building Demolition Debris Haul, and Asphalt Demolition Debris Haul Phases	4	97	70	<1	21	5
Building Demolition Debris Haul Phase	1	43	15	<1	6	2
<b>Year 2020</b>						
Building Demolition Debris Haul Phase	1	40	15	<1	17	4
Site Preparation Phase	2	24	18	<1	4	2
Rough Grading Phase	1	26	29	<1	4	3
Overlap of the Rough Grading and Rough Grading Soil Haul Phases	3	95	51	<1	9	4
Fine Grading Phase	1	8	3	<1	1	<1
Overlap of the Fine Grading and Parking Structure Excavation/Shoring/Hauling Phases	3	51	19	<1	3	1
Overlap of the Fine Grading, Parking Structure Excavation/Shoring/Hauling, and Wet Utilities Phases	5	68	31	<1	4	2
Overlap of the Parking Structure Excavation/Shoring/Hauling and Wet Utilities Phases	4	59	28	<1	3	2
Wet Utilities Phase	2	17	11	<1	1	1
Overlap of the Wet Utilities, Multi-Use Structure, and Structural Concrete Phases	6	59	44	<1	5	3
Overlap of the Wet Utilities, Multi-Use Structure, Structural Concrete, and Dry Utilities Phases	6	65	49	<1	5	3
Overlap of the Multi-Use Structure, and Structural Concrete, and Dry Utilities Phases	5	48	38	<1	4	2
Overlap of the Multi-Use Structure and Structural Concrete Phases	4	42	33	<1	4	2
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Balancing/Aggregate Base Phases	7	68	48	<1	5	3
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Curb & Gutter Phases	4	42	33	<1	4	2
Overlap of the Multi-Use Structure, Structural Concrete, and Asphalt Paving Phases	6	56	42	<1	5	3
Overlap of the Multi-Use Structure, Structural Concrete, and Street Improvements – Concrete Flatwork Phases	4	44	35	<1	4	2
Multi-Use Structure Phase	3	28	20	<1	3	1
<b>Year 2021</b>						
Multi-Use Structure Phase	2	26	19	<1	3	1

5. Environmental Analysis  
AIR QUALITY

**Table 5.2-12 Maximum Daily Regional Construction Emissions with Mitigation**

Construction Phase	Pollutants (pounds per day) <sup>1, 2</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Year 2022</b>						
Multi-Use Structure Phase	2	24	19	<1	3	1
Overlap of the Multi-Use Structure and Architectural Coating Phases	37	25	21	<1	3	1
<b>Year 2023</b>						
Overlap of the Multi-Use Structure and Architectural Coating Phases	37	22	21	<1	3	1
Maximum Daily Emissions	37	97	70	<1	21	5
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
<b>Significant?</b>	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.

Notes: Emissions totals may not equal 100 percent due to rounding.

<sup>1</sup> Based on the preliminary information provided by the applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment.

<sup>2</sup> Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. Also includes requirements of Mitigation Measures AQ-1 through AQ-3.

## 5.2.9 References

Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines.

California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

California Air Resources Board (CARB). 1998, April 22. The Report on Diesel Exhaust.  
<http://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm>.

———. 1999. Final Staff Report: Update to the Toxic Air Contaminant List.

———. 2016, May 4. Ambient Air Quality Standards. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

———. 2017, December 19. Area Designations Maps/State and National.  
<http://www.arb.ca.gov/desig/desig.htm>.

———. 2018. Air Pollution Data Monitoring Cards (2013, 2014, 2015, 2016, and 2017). Accessed July 25, 2018. <http://www.arb.ca.gov/adam/topfour/topfour1.php>.

Institute of Transportation Engineers (ITE). 2017, September. Trip Generation Manual. 10th edition.

LSA Associates. 2018, July. Traffic Impact Analysis: Newport Crossings.

## 5. Environmental Analysis

### AIR QUALITY

- Office of Environmental Health Hazard Assessment (OEHHA). 2015, February. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf).
- South Coast Air Quality Management District (SCAQMD). 1992. Federal Attainment Plan for Carbon Monoxide.
- . 1993. California Environmental Quality Act Air Quality Handbook.
- . 2003. Final 2003 Air Quality Management Plan. <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/2003-aqmp>.
- . 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/home/library/documents-support-material/planning-guidance/guidance-document>.
- . 2008a, September. Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III). <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii>.
- . 2008b, July. Final Localized Significance Threshold Methodology.
- . 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>.
- . 2012, May 4. Final 2012 Lead State Implementation Plan: Los Angeles County. <http://www.aqmd.gov/home/library/clean-air-plans/lead-state-implementation-plan>.
- . 2013, February. 2012 Final Air Quality Management Plan. <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.
- . 2015a, October 3. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV). <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iv>.
- . 2015b, March (revised). SCAQMD Air Quality Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
- . 2015c. Health Effects of Air Pollution. <http://www.aqmd.gov/home/library/public-information/publications>.
- . 2015d, October. “Blueprint for Clean Air: 2016 AQMP White Paper.” 2016 AQMP White Papers Web Page. <http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers>.

## 5. Environmental Analysis

### AIR QUALITY

- . 2017, March 4. Final 2016 Air Quality Management Plan.  
<http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>.
- US Environmental Protection Agency (EPA). 2018. Criteria Air Pollutants. Accessed July 25, 2018.  
<https://www.epa.gov/criteria-air-pollutants>.
- Western Regional Climate Center (WRCC). 2017. Western U.S. Climate Historical Summaries: Newport Beach Harbor Monitoring Station (Station ID No. 046175). Accessed July 25, 2018.  
<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6175>.

## 5. Environmental Analysis

### AIR QUALITY

*This page intentionally left blank.*



## 5. Environmental Analysis

### 5.3 BIOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Newport Crossings Mixed-Use Project (proposed project) to impact biological resources. The analysis in this section is based in part on the following technical study:

- *Biological Resources Technical Memorandum*, Cadre Environmental, February 27, 2018.

A complete copy of this study is included as Appendix C to this DEIR.

#### 5.3.1 Environmental Setting

##### 5.3.1.1 APPLICABLE PLANS AND REGULATIONS

Federal, state, and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

#### Federal

##### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act of 1918 (MBTA) (United States Code, Title 16, Sections 703-712), as amended in 1972, affirms and implements the United States' commitment to four international conventions—with Canada, Japan, Mexico, and Russia—to protect shared migratory bird resources. The MBTA governs the take, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these items, except under a valid permit or as permitted in the implementing regulations. The US Fish and Wildlife Services (USFWS) administers permits to take migratory birds in accordance with the MBTA.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protect all species and subspecies of these families.

USFWS issued guidance on April 11, 2018, limiting take—which includes harm, harassment, and collecting—under the MBTA to intentional take. Take of birds by activities not intended to take birds, such as habitat modification for a development project, is not prohibited by the MBTA (USFWS 2018a). A coalition of environmental organizations filed suit opposing the change in May 2018, and eight state attorneys general filed a separate, parallel lawsuit in September 2018 (Audubon 2018).

## 5. Environmental Analysis

### BIOLOGICAL RESOURCES

#### State

##### *Nesting Bird Protection, California Fish and Game Code*

Under Sections 3503 and 3503.5 of the California Fish and Game Code, activities are prohibited that would result in the taking, possessing, or destroying of any birds-of-prey; taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds protected by the MBTA; or the taking of any nongame bird pursuant to California Department of Fish and Game Code Section 3800. Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA.

Section 3503.5 explicitly provides protection for all birds of prey, including their eggs and nests. It states that it is “unlawful to take, possess, or destroy any birds of prey (in the order Falconiformes or Strigiformes) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto.” Construction-related disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by CDFW.

#### Local

##### *Newport Beach Tree Ordinance and Policies*

The City of Newport Beach has several ordinances and policies protecting trees. Regulations for the retention, removal, maintenance, reforestation, and supplemental trimming of City trees are included in Chapter 13.09 (Parkway Trees) of the City’s Municipal Code. In addition, City Council Policy G-1 (Retention, Removal, and Maintenance of City Trees) was adopted to establish definitive standards for the retention, removal, maintenance, reforestation, tree trimming standards, and supplemental trimming of City trees. Furthermore, City Council Policy G-3 (Preservation of Views) was adopted with the intent to preserve views and to preserve and promote the aesthetic and environmental benefits provided by trees (City of Newport Beach 2018). Both the tree ordinance and the City’s policies relating to trees are applicable only to City trees, i.e., those on City property and within public parkways.

#### 5.3.1.2 EXISTING CONDITIONS

As shown in Figure 3-3, *Aerial Photograph*, and Figures 4-1 and 4-2, *Site Photographs*, the project site is improved with the MacArthur Square shopping center, which contains various commercial buildings, parking lot and other hardscape improvements, and ornamental landscaping throughout. The site is fully developed and in a highly urbanized area of the City and is surrounded by a mix of commercial and office development. The existing landscaping throughout the project site (which includes of mix of trees, shrubs, and ground cover) consists of nonnative ornamental landscaping that is common in urban landscapes. There are no wetlands or riparian habitats onsite.

## 5. Environmental Analysis BIOLOGICAL RESOURCES

### 5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- B-1 Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- B-3 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- B-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- B-6 Conflict with the provisions of an adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

No impacts were identified related to thresholds B-1, B-2, and B-6; these thresholds are analyzed in Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR.

### 5.3.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address biological resources impacts follow.

#### 5.3.3.1 REGULATORY REQUIREMENTS

- RR BIO-1 The proposed project shall be implemented in compliance with the conditions set forth in Chapter 13.09 (Parkway Trees) of the City's Municipal Code and City Council Policies G-1 (Retention, Removal, and Maintenance of City Trees) and G-3 (Preservation of Views).

#### 5.3.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to biological resources that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

## 5. Environmental Analysis

### BIOLOGICAL RESOURCES

#### 5.3.4 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.3-1: Development of the proposed project would not result in an impact on federally designated wetlands through direct removal, filling, hydrological interruption, or other means. [Threshold B-3]**

---

*Impact Analysis:* Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as streams, swamps, marshes, and bogs.

No wetlands regulated by the US Army Corps of Engineers), California Department of Fish and Wildlife, or Santa Ana Regional Water Quality Control Board are present on or abutting the project site. The National Wetlands Mapper does not show any streams, wetlands, or other water bodies or any riparian habitat on, adjacent to, or within proximity of the proposed project site (USFWS 2018b).

Per the National Wetlands Mapper, the nearest designated wetlands are the freshwater ponds of Koll Center, approximately 0.2 mile southeast of the project site. Other wetlands in the project vicinity include Upper Newport Bay in Newport Beach, over one mile south/southwest of the site, and San Joaquin Marsh in Irvine, approximately 0.85 mile east of the site (USFWS 2018b). Development of the proposed project would not result in any direct or indirect impacts on any of these offsite designated wetlands through removal, filling, hydrological interruption, or any other means. Additionally, the proposed project would not result in the discharge of any runoff (either directly or indirectly) to the Koll Center freshwater ponds or San Joaquin Marsh. For an analysis of potential impacts to water quality from runoff, see Section 5.8, *Hydrology and Water Quality*.

No wetlands were identified on or abutting the project site, and project development would not impact wetlands.

*Level of Significance before Mitigation:* No impact would occur.

---

**Impact 5.3-2: Removal of trees and shrubs onsite during site clearance could impact nesting migratory birds. [Threshold B-4]**

---

*Impact Analysis:* As shown in Figure 3-3, *Aerial Photograph*, the project site is fully developed and in a highly urbanized area of the City and is surrounded by a mix of commercial, retail and office development. The project site and its surroundings do not provide habitat for the movement of any native resident or migratory fish or wildlife species. Although the proposed project may provide some habitat for limited wildlife movement and live-in habitat—particularly for reptile and avian species and small to medium mammals that are adapted to urban settings—the proposed project does not function as a wildlife corridor. Additionally, the site and environs have not been identified or designated as a wildlife corridor in the Natural Resources Element of the Newport Beach General Plan.

## 5. Environmental Analysis

### BIOLOGICAL RESOURCES

The project site does, however, include a number of large ornamental trees along the site boundaries and internal to the site (see Figure 3 and Figures 4-1 and 4-2, *Site Photographs*), the majority of which would be removed under the proposed project. These trees may be used for nesting by migratory birds protected under the federal MBTA and Section 3513 et seq. of the California Fish and Game Code.<sup>1</sup> Section 3513 provides protection to the birds listed under the MBTA, essentially all native migratory birds. Additionally, Section 3503 of the code makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Under the provisions of the MBTA, it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds except as permitted by regulations issued by USFWS. The term “take” is defined by USFWS regulation to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird or any part, nest or egg of any migratory bird covered by the conventions, or to attempt those activities. USFWS administers permits to take migratory birds in accordance with the MBTA. This impact would be potentially significant during construction activities, which can disturb nesting birds and damage trees where birds are nesting.

*Level of Significance before Mitigation:* Impact 5.3-2 would be potentially significant.

---

**Impact 5.3-3: Development of the proposed project could potentially result in a conflict with the City's local policies or ordinances protecting biological resources. [Threshold B-5]**

---

*Impact Analysis:* The site includes a number of ornamental trees along the site boundaries and internal to the site (see Figure 3-3b, *Aerial Photograph, Project Site*, and Figures 4-1 and 4-2, *Site Photographs*), most of which would be removed under the proposed project. Some of the existing trees onsite (Italian Stone pines) are proposed to remain and would be integrated into the landscape plan for the proposed project. None of the onsite trees to be removed are considered native species or trees of importance to the City. Additionally, the City's Municipal Code does not protect trees or other biological resources on private property. Furthermore, although the proposed project would include removal of the majority of the trees onsite, it would provide a greater number of trees onsite (for instance, clusters of trees and double rows of trees along much of the site perimeter, and trees in the proposed public park) than currently exist.

As shown in Figures 3-3b and 4-2, there are a number of trees that are just outside of and abut the site boundary. These trees are planted in landscaped parkways that are within the City's public right-of-way. The trees are considered City trees, i.e., those on City property and within public parkways. Project construction activities may impact City trees. For example, the introduction of new driveways and replacement of existing public sidewalks may result in the removal of some of these trees. However, the City has ordinances and policies protecting City trees. Regulations for the retention, removal, maintenance, reforestation, and supplemental trimming of City trees are codified in Chapter 13.09 (Parkway Trees) of the City's Municipal Code and in City Council Policies G-1 (Retention, Removal, and Maintenance of City Trees) and G-3 (Preservation of Views). For example, pursuant to City Council G-1, the removal of City trees requires review and approval by the City's Parks, Beaches and Recreation Commission. The project applicant would be

---

<sup>1</sup> The MBTA covers 1,026 bird species (see Code of Federal Regulations, Title 50, Section 10.13); that is, about 90 percent of the bird species occurring in the United States.

## 5. Environmental Analysis

### BIOLOGICAL RESOURCES

required to comply with these tree protection and preservation ordinances and policies. Compliance with these requirements would be ensured through the City's development review process.

*Level of Significance before Mitigation:* With implementation of RR BIO-1, Impact 5.3-3 would be less than significant.

#### 5.3.5 Cumulative Impacts

The majority of other cumulative development projects in the City (see Table 4-1, *Cumulative Projects*, and Figure 4-3, *Cumulative Projects Location Map*) would involve redevelopment of existing developed sites.

Development of some of these other projects may impact federally protected wetlands (note that several development sites considered in the cumulative analysis are on or near the shores of Newport Bay or Upper Newport Bay). Other City projects that could impact wetlands would be required to conduct jurisdictional delineations of those project sites; the delineations would include preliminary identification of areas of wetlands, Waters of the US, and Waters of the State that would be impacted by those projects and recommend mitigation measures for such impacts. Implementation of recommended mitigation measures would be required as conditions of regulatory permits. In addition, any of the other projects that has the potential to impact wetlands or Waters of the United States or the State would need to obtain approval from the US Army Corps of Engineers, and/or the Regional Water Quality Control Board, and/or California Department of Fish and Wildlife; and some such projects also could require California Coastal Commission approval. If within any of these resource agencies' jurisdictions, the resource agency also would require mitigation to reduce potential impacts of projects under their jurisdiction.

The proposed project would not impact federally designated wetlands, and therefore, would not have the potential to combine with the potential impacts of other projects to result in cumulative considerable impacts.

The proposed project and other projects considered in the cumulative impact analysis would be required to comply with the City's tree protection ordinances, which would prevent a significant cumulative impact related to the violation of those ordinances. Compliance with the City's tree protection ordinance would be a condition of project approval, and therefore the project would not make a cumulatively considerable contribution to potential cumulative impacts related to violation of the City's tree protection ordinances.

As noted above, construction activities associated with development of the proposed project would result in the removal and/or replacement of trees on- and off-site. The trees to be removed could be used for nesting by migratory birds protected under federal and state laws—the off-site trees that could be impacted are also considered City trees. As with the proposed project, other cumulative development projects in the City could result in the removal or disturbance of trees on- and off-site, and thereby, have similar impacts to migratory bird nesting and City trees. However, as with the proposed project, cumulative development projects would be required to comply with the MBTA and the City's ordinances and policies that relate to the protection and preservation of City trees. Compliance with the MBTA and the City's ordinances and policies would ensure that there is no significant cumulative impact and that the project's contribution to cumulative impacts would be less than cumulatively considerable.



## 5. Environmental Analysis

### BIOLOGICAL RESOURCES

In summary, the proposed project would not combine with other cumulative development projects in the City to result in cumulatively considerable impacts to biological resources. Cumulative impacts would be less than significant.

#### 5.3.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, including RR BIO-1, the following impacts would be less than significant: Impact 5.3-1 and 5.3-3.

Without mitigation, the following impact would be potentially significant.

- **Impact 5.3-2:** Removal of trees and other vegetation onsite could impact nesting migratory birds protected by federal and state laws.

#### 5.3.7 Mitigation Measures

##### Impact 5.3-2

BIO-1 Prior to the commencement of any proposed actions (e.g., site clearing, demolition, grading) during the breeding/nesting season (September 1 through February 15), a qualified biologist contracted by the project applicant shall conduct a preconstruction survey(s) to identify any active nests in and adjacent to the proposed project site no more than three days prior to initiation of the action. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. However, if the biologist finds an active nest within or directly adjacent to the action area (within 100 feet) and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest using temporary plastic fencing or other suitable materials, such as barricade tape and traffic cones. The buffer zone shall be determined by the biologist in consultation with applicable resource agencies and in consideration of species sensitivity and existing nest site conditions, and in coordination with the construction contractor. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. Only specified construction activities (if any) approved by the qualified biologist shall take place within the buffer zone until the nest is vacated. At the discretion of the qualified biologist, activities that may be prohibited within the buffer zone include but not be limited to grading and tree clearing. Once the nest is no longer active and upon final determination by the biologist, the proposed action may proceed within the buffer zone.

The qualified biologist shall prepare a survey report/memorandum summarizing his/her findings and recommendations of the preconstruction survey. Any active nests observed during the survey shall be mapped on a current aerial photograph, including documentation of GPS coordinates, and included in the survey report/memorandum. The completed survey report/memorandum shall be submitted to the City of Newport Beach Community

## 5. Environmental Analysis

### BIOLOGICAL RESOURCES

Development Department prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

#### 5.3.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.3.9 References

National Audubon Society. 2018, September 5. New York Leads Eight States in Filing Federal Lawsuit to Restore Bird Protection Law. <https://www.audubon.org/news/new-york-leads-eight-states-filing-federal-lawsuit-restore-bird-protection-law>.

Cadre Environmental, 2018, February 27. Biological Resources Technical Memorandum.

Newport Beach, City of. 2018. Council Policy Manual. <http://www.newportbeachca.gov/government/city-council/council-policy-manual>.

US Fish and Wildlife Service (USFWS). 2018a, April 11. Guidance on the recent M-Opinion affecting the Migratory Bird Treaty Act. <http://src.bna.com/ynP>.

———. 2018b. National Wetlands Mapper. <http://www.fws.gov/wetlands/Data/Mapper.html>.

## 5. Environmental Analysis

### 5.4 CULTURAL RESOURCES

Cultural resources comprise paleontological, archaeological, and historical resources. Paleontological resources are the fossilized remains of plants and animals. Archaeology is the branch of paleontology that studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are generally at least 50 years old and are significant for their engineering, architecture, cultural use or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed Use project (proposed project) to impact cultural resources in the City of Newport Beach and its sphere of influence (SOI). The analysis in this section is based in part on the following information:

- *Cultural and Paleontological Resources Technical Memo for The Newport Crossings Mixed-Use, Newport Beach, Orange County, California*, Cogstone, February 2018.

A complete copy of this study is included as Appendix D to this DEIR.

#### 5.4.1 Environmental Setting

##### 5.4.1.1 REGULATORY BACKGROUND

Federal, state, and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

##### **Federal and State**

###### *National Historic Preservation Act*

The National Historic Preservation Act of 1966 (NHPA) coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

###### *Archaeological Resources Protection Act*

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

## 5. Environmental Analysis

### CULTURAL RESOURCES

#### *Native American Graves Protection and Repatriation Act*

NAGPRA is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

#### *California Public Resources Code*

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the California Public Resources Code (PRC). In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register of Historical Resources and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation (OHP), which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the Native American Heritage Commission (NAHC); require that descendants be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

PRC Section 21083.2 requires a lead agency to determine whether a project may have a significant effect on unique archaeological resources and address such impacts. PRC Section 21083.2 provides that mitigation for such impacts may include but are not limited to: (1) planning construction to avoid archaeological sites, (2) deeding archaeological sites into permanent conservation easements, (3) capping or covering archaeological sites with a layer of soil before building on the sites, and (4) planning parks, greenspace, or other open space to incorporate archaeological sites. This code section suggests a preference for mitigation by preservation in place and limits excavation as mitigation to those parts of a unique archaeological resource that would be damaged or destroyed by the project. Section 21083.2 also authorizes a lead agency to make provisions for archaeological sites accidentally discovered during construction. These provisions may include an immediate evaluation of the find and, where the find is determined to be a unique archaeological resource, contingency funding and a time allotment sufficient to allow recovering an archaeological sample or to employ an avoidance measure. A lead agency can permit construction work to continue on other parts of the building site while archaeological mitigation takes place.

#### *California Health and Safety Code*

In accordance with California Health and Safety Code, Section 7050.5, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County

## 5. Environmental Analysis CULTURAL RESOURCES

Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify NAHC in Sacramento within 48 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

### Local

#### *City of Newport Beach*

##### *Historic Resources*

The City of Newport Beach maintains a Register of Historical Property (City Register), and the City's General Plan includes a Historic Resources Element. Ten properties are listed on the City Register, eight of which are extant; all of those are on the Balboa Peninsula and Balboa Island and in Corona Del Mar, and none are in or near the Airport Area (Newport Beach 2006, 2015).

##### *Archeological and Paleontological Resources*

The City of Newport Beach has adopted archaeological and paleontological guidelines that govern the identification and evaluation of these resources and are used to guide the development or redevelopment of lands within the City.

With respect to paleontological resources, City Policy K-4 (adopted on August 26, 1974, amended on September 27, 2011) requires that impacts to paleontological resources caused by development be mitigated in accordance with CEQA. With respect to archaeological resources, City Policy K-5 (adopted on January 13, 1975, amended on September 27, 2011) requires that an impact to significant archaeological resources caused by any development be mitigated in accordance with CEQA.

On August 8, 2017, the City amended Policy K-5 to incorporate Policy K-4 and Policy K-5 and rename the combined policy Policy K-5 (Paleontological and Archeological Resource Protection Guidelines). As stated in the amended Policy K-5, the City will ensure that potential impacts to paleontological and archaeological resources by public or private development are properly evaluated and mitigated in accordance with the General Plan, Local Coastal Program, and CEQA. Procedures to be used to assess paleontological resources are:

- Determination if paleontological or archaeological resources exist at or near a project site during preparation of an Initial Study.
- Preparation of a preliminary investigation report by a qualified professional archaeologist or paleontologist if resources are known to exist at or near a project site or if the project could otherwise affect known resources.

## 5. Environmental Analysis

### CULTURAL RESOURCES

- No further analysis or additional investigative work depending the outcome of the preliminary investigation report.
- Halting of construction activities in the general area of the discovery if paleontological or archaeological resources are discovered during construction.

#### 5.4.1.2 EXISTING CONDITIONS

##### Natural Setting

California is divided into geomorphic provinces, which are distinct, generally easy-to-recognize natural regions in which the geologic record, types of landforms, pattern of landscape features, and climate in all parts are similar. The proposed project is located in Orange County in the northern Peninsular Ranges Geomorphic Province. This province is composed of mountain ranges separated by northwest-trending valleys. The Peninsular Ranges Province is bound by the Transverse Range Province to the north and the Transverse Range and Colorado Desert provinces to the east.

More specifically, the proposed project site is in the northeastern portion of the City of Newport Beach, adjacent to the City of Irvine and approximately five miles from the Pacific Ocean. The 5.7-acre site has been developed since the 1970s with the MacArthur Place commercial uses.

##### Cultural Setting

###### *Prehistoric Setting*

The prehistoric chronology for the project region is divided into the Encinitas Tradition, extending from about 8,500 to 3,500 years before present (YBP), and the Del Rey Tradition from about 3,500 to 150 YBP.

The Encinitas Tradition is characterized by abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, and very few projectile points, with subsistence focusing on collecting (plants, shellfish, etc.).<sup>1</sup> The Del Rey tradition is characterized by increasing use of mortars and pestles; a wider variety of small projectile points; stone-lined ovens; and, after about 1,300 YBP, appearance of cottonwood arrow points, shell beads and disks, and some imported pottery.

The proposed project is in the territory of the Tongva (Gabrielino), who are thought by many archaeologists to have moved into southern California from the Great Basin about 4,000 YBP. Houses constructed by the Tongva were domed, circular structures thatched with tulle or similar materials. The best-known artifacts were made of steatite (soapstone) and were highly prized by the Tongva. The Tongva diet consisted mostly of plants, but wild game and marine animals were also hunted or gathered, including from the open ocean.

---

<sup>1</sup> Metates and manos are grinding stones: a metate is a flat or gently concave slab; a mano is slid back and forth by hand over the metate. By comparison, a pestle is rotated by hand in a bowl-shaped mortar.



## 5. Environmental Analysis CULTURAL RESOURCES

### *Historic Setting*

Between 1769 and 1822 the Spanish colonized California and established missions, presidios, and pueblos throughout the area. After winning its independence from Spain in 1821, Mexico worked to lessen the wealth and power held by these missions. In 1833, with the passage of the Secularization Act, the missions and their lands were given to the Mexican governor, who redistributed them in the form of grants to private owners, who set up ranchos.

When California was granted statehood in 1850, the US promised to honor rancho land grants. However, the process of defining land boundaries and proving legal ownership was often costly and time consuming. In combination with environmental factors detrimental to the cattle industry, many ranchos incurred debt and went into bankruptcy. This resulted in ranchos being divided up and sold inexpensively.

The proposed project area lies within the boundaries of what was Rancho San Joaquin, the result of two land grants awarded to Jose Andres Sepulveda in 1837 and 1842. In 1864 Sepulveda sold the rancho to a group of four investment partners, one of whom was James Irvine. Twelve years later in 1876, Irvine bought out his partners and became the sole owner of the Irvine Ranch.

### *Historic Land Uses Onsite*

The project site was vacant until the early 1970s. Historical USGS topographic maps from 1902 and 1935 show the site as fairly isolated with no buildings within the immediate vicinity. Some surrounding areas began to be developed after MacArthur Boulevard was completed in 1948. The site is shown as vacant in aerial photographs dating from between 1938 and 1952. The existing MacArthur Square commercial development was built in phases from the early 1970s through the 1980s (BBG 2017). All of the existing buildings but one have flat roofs and range in height between 15 and 20 feet; the exception is a gable-roofed building that is approximately 31 feet in height. The height and massing of the existing buildings are typical of many commercial/retail centers in Newport Beach and surrounding communities. The architecture of the buildings is also typical of commercial/retail centers from the 1970s: simple and nonarticulated building façades; mostly flat roofs; and building materials consisting of wood, stucco, and brick.

### **Historical Resources**

No historic resources were identified in a field survey of the site.

### **Archaeological Resources**

No archaeological resources were identified in a field survey of the site. There are 10 known prehistoric sites within one mile of the proposed project: 4 habitation and shell midden sites, and 6 shell midden sites (a midden is a domestic trash deposit, often containing bone, shell, and stone). The nearest recorded Tongva village, Tevaaxa'anga, is about 1.5 miles to the west. There were several wetlands near the proposed project before the area was developed. Therefore, the site is considered moderately sensitive for buried archaeological resources.

## 5. Environmental Analysis

### CULTURAL RESOURCES

#### Paleontological Resources

Paleontological resources are fossils, that is, organisms or fragments, impressions, or traces of organisms preserved in rock. The proposed project consists of artificial fill to depths of up to four feet below ground surface (bgs) overlaying Pleistocene-age marine terrace deposits generally consisting of silty sand to sandy silt, silt and clay.<sup>2</sup> A paleontological records search for the site and a one-mile radius surrounding the site was conducted by the Los Angeles County Museum of Natural History. Although there were no records of fossils from within the proposed boundaries of the site, many of the vertebrate fossils from the City of Newport Beach were recovered from late to middle Pleistocene alluvial deposits. Three fossil localities were listed near the proposed project as well as fifteen localities in the terraces east of Newport Bay. Mammoth, camel, and sea turtle are known from the nearest localities. Throughout Orange County, extinct Pleistocene animals are well known from alluvial sediments. Columbian mammoths, American mastodons, ground sloths, short-faced bears, American lions, saber-toothed cats, dire wolves, horses, tapirs, ancient bison, long horned bison, camels, llamas, and dwarf pronghorns have been recovered. Ice Age fossils begin appearing at a depth of 8 to 10 feet bgs within southern California valleys.

#### 5.4.2 Thresholds of Significance

CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated the with lives of persons important in our past;
- 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; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (PRC § 5024.1; 14 CCR § 4852)

The fact that a resource is not listed in the California Register of Historical Resources, not determined to be eligible for listing, or not included in a local register of historical resources does not preclude a lead agency from determining that it may be a historical resource.

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- C-1 Cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5.

---

<sup>2</sup> The Pleistocene Epoch extends from about 11,700 YBP to approximately 2.59 million YBP.

## 5. Environmental Analysis

### CULTURAL RESOURCES

- C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- C-3 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- C-4 Disturb any human remains, including those interred outside of dedicated cemeteries.

### 5.4.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address cultural resources impacts follow.

#### 5.4.3.1 REGULATORY REQUIREMENTS

RR CUL-1 In accordance with California Health and Safety Code, Section 7050.5, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 48 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

RR CUL-2 Project development would be required to be reviewed in accordance with City Policy K-5.

#### 5.4.3.2 STANDARD CONDITIONS

The City's standard condition of approval respecting disturbance of human remains consists of regulatory requirements and is therefore set forth in Section 5.4.3.1, *Regulatory Requirements*.

### 5.4.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Project development would involve ground disturbance on the entire site. Existing soils would be removed to a depth of about five feet bgs on most of the site. Utility trenches are expected to extend up to eight feet bgs. Site grading would involve approximately 7,300 cubic yards (cy) of cut grading, 2,600 cy of fill grading, and net export of about 4,600 cy of soil.

## 5. Environmental Analysis

### CULTURAL RESOURCES

---

#### **Impact 5.4-1: Development of the proposed project would not impact an identified historic resource. [Threshold C-1]**

---

**Impact Analysis:** The site is developed with the MacArthur Square commercial center, which consists of eight retail/commercial buildings, surface parking (462 parking spaces), walkways, and ornamental trees (see Figures 4-1 and 4-2, Site Photographs). The commercial center was built in phases from 1974 through the 1980s. The site is vacant in aerial photographs dating between 1938 and 1952, and on topographic maps dated 1902 to 1935. Project development would involve demolition of all existing buildings onsite.

The existing buildings onsite are less than 45 years old and unassociated with any historic events or individuals; buildings 45 years old and older are typically evaluated by historical resource assessments. All of the existing buildings but one have flat roofs and range in height between 15 and 20 feet; the exception is a gable-roofed building that is approximately 31 feet in height. The height and massing of the existing buildings are typical of many commercial/retail centers in Newport Beach and surrounding communities. The architecture of the buildings is also typical of commercial/retail centers in Orange County from the 1970s and 1980s: simple and nonarticulated building façades; mostly flat roofs; and building materials consisting of wood, stucco, and brick. They do not demonstrate any unique architectural qualities or styles. The existing buildings are unremarkable commercial buildings unassociated with historic events or people, lacking any distinctive characteristics of high artistic value, and unlikely to yield information important in history. Thus, the existing buildings are not considered significant historical resources.

Furthermore, no historic resources were identified onsite during preparation of the Cultural and Paleontological Resources Technical Memo for the project site (see Appendix D). The project site and existing buildings are also not identified on historic resource lists/databases—the National Register of Historic Places and the California State Historical Landmarks, Points of Historical Interest, and Register of Historic Places. It is also not expected that historic resources from past land uses could be buried in site soils.

Finally, 10 properties are listed on the City Register, 8 of which are extant; all of those are on the Balboa Peninsula and Balboa Island and in Corona Del Mar; none are on or in the vicinity of the project site (Newport Beach 2006, 2015).

In summary, no impact to historic resources would occur.

**Level of Significance Before Mitigation:** Impact 5.4-1 would be less than significant.

---

#### **Impact 5.4-2: Project development could result in an impact on archaeological resources. [Threshold C-2]**

---

**Impact Analysis:** As shown in Figure 3, *Aerial Photograph*, the project site is developed with MacArthur Square commercial center. The project site is in a highly-urbanized area of the City and is surrounded by a mix of retail, commercial, hotel, and professional office development. While unlikely, the presence of subsurface archaeological resources on the project site remains possible, and these could be affected by ground-disturbing activities associated with grading and construction at the site. It is possible that subsurface disturbance might occur at levels not previously disturbed (e.g., deeper excavation than previously performed)

## 5. Environmental Analysis CULTURAL RESOURCES

or may uncover undiscovered archeological resources at the site. For example, project site grading would involve removal of existing soils to depths of about 5 feet bgs on most of the site, and utility trenches would extend up to 8 feet bgs. Site soils are also considered moderately sensitive for buried archaeological resources due to the presence of 10 archaeological sites within about one mile of the project site and the presence of several wetlands near the site before the area was developed. Therefore, ground disturbance during site grading and construction could damage archaeological resources that may be buried in site soils.

***Level of Significance Before Mitigation:*** Even with implementation of Regulatory Requirement RR CUL-2, impact 5.4-2 is potentially significant.

---

**Impact 5.4-3: The proposed project could result in an impact on paleontological resources. [Threshold C-3]**

---

***Impact Analysis:*** As noted above, the project site is fully developed and in a highly-urbanized area of the City. However, the Pleistocene-age marine terrace deposits underlying the project site are considered moderately sensitive for fossils. Excavations during project construction are expected to extend to about eight feet bgs, while fossils in similar sediments in the region are typically found at depths of 8 to 10 feet or more bgs. This impact would be significant in the event that ground disturbance during project construction encountered fossils.

***Level of Significance Before Mitigation:*** Even with implementation of Regulatory Requirement RR CUL-2, impact 5.4-3 is potentially significant.

---

**Impact 5.4-4: Grading activities could potentially disturb human remains. [Threshold C-4]**

---

***Impact Analysis:*** There are no known human remains or cemeteries on or near the project site. Also, as noted above, the project site is fully developed and in a highly urbanized area of the City. Given the highly disturbed condition of the project site and its surroundings, the likelihood that human remains may be discovered during site clearing and grading activities is considered extremely low.

However, development of the Proposed Project would involve ground-disturbing activities that could have the potential to disturb previously undiscovered subsurface human remains, if any exist. There is some possibility that project ground-disturbing activities could disturb human remains that may be buried in site soils, considering that there are 10 prehistoric sites, including 4 habitation sites, known within one mile of the proposed project.

In the unlikely event that human remains are uncovered during ground-disturbing activities, California Health and Safety Code Section 7050.5 requires that disturbance of the site shall remain halted until the Los Angeles Coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner is required to make a determination within two working days of notification of the discovery of the human remains. If the coroner determines that the

## 5. Environmental Analysis

### CULTURAL RESOURCES

remains are not subject to his or her authority or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

*Level of Significance Before Mitigation:* Upon implementation of Regulatory Requirement RR CUL-1, Impact 5.4-4 would be less than significant.

#### 5.4.5 Cumulative Impacts

The area considered for cumulative impacts to cultural resources is a one-half-mile radius from the site, roughly coextensive with the City of Newport Beach Airport Area. Other projects in the area would involve ground disturbance and could damage archaeological resources, including human remains, and paleontological resources that could be buried in those project sites. As with the proposed project, other projects would require archaeological and paleontological monitoring and recovery, identification, and curation of any resources discovered. In the event ground disturbances by other projects encountered human remains, ground disturbance by those project(s) would be halted, and the Orange County Coroner would be notified immediately. Cumulative impacts to cultural resources would be less than significant, and project contribution would not be cumulatively considerable.

#### 5.4.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, including RR CUL-1, the following impacts would be less than significant: 5.4-1 and 5.4-4.

Without mitigation, these impacts would be **potentially significant**:

- Impact 5.4-2 Project ground-disturbing activities could damage buried archaeological resources.
- Impact 5.4-3 Project ground-disturbing activities could damage buried paleontological resources.

#### 5.4.7 Mitigation Measures

##### Impact 5.4-2

CUL-1 Prior to the issuance of a grading permit by the City of Newport Beach, the project applicant shall retain a qualified archaeologist to periodically monitor ground-disturbing activities onsite and provide documentation of such retention to the City of Newport Beach Community Development Director. The archaeologist shall train project construction workers on the types of archaeological resources that could be found in site soils. The archaeologist shall periodically monitor project ground-disturbing activities. If archaeological resources are encountered, all construction work within 50 feet of the find shall cease, and the archaeologist shall assess the find for importance and whether preservation in place without impacts is feasible. Construction activities may continue in other areas. If, in consultation with the City, the discovery is determined to not be important, work will be



## 5. Environmental Analysis

### CULTURAL RESOURCES

permitted to continue in the area. Any resource that is not Native American in origin and that cannot be preserved in place shall be curated at a public, nonprofit institution with a research interest in the materials, such as the South Central Coastal Information Center at California State University, Fullerton.

#### Impact 5.4-3

CUL-2 Prior to the issuance of a grading permit by the City of Newport Beach, the project applicant shall retain a qualified paleontologist to be available on-call during ground-disturbing activities onsite and provide documentation of such retention to the City of Newport Beach Community Development Director. If fossils are encountered, all construction work within 50 feet of the find shall cease, and the paleontologist shall assess the find for importance. Construction activities may continue in other areas. If, in consultation with the City, the discovery is determined to not be important, work will be permitted to continue in the area. Any resource shall be curated at a public, nonprofit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Cooper Center (a partnership between California State University, Fullerton and the County of Orange).

### 5.4.8 Level of Significance After Mitigation

#### Impact 5.4-2

Impacts to archaeological resources would be less than significant after implementation of Mitigation Measure 5.4-1 requiring periodic archaeological monitoring and recovery, identification, and preservation or curation of any resources found.

#### Impact 5.4-3

Impacts to fossil resources would be less than significant after implementation of Mitigation Measure 5.4-2 requiring on-call paleontological monitoring and recovery, identification, and curation of any resources found

### 5.4.9 References

BBG Assessment. 2017, February 7. Phase I Environmental Site Assessment Performed on: MacArthur Square [8 addresses specified on Corinthian Way, Martingale Way, Scott Drive, and Dove Street], Newport Beach, California 92660.

Newport Beach, City of. 2006, September 22. City of Newport Beach General Plan Historic Resources Element.

[http://www.newportbeachca.gov/PLN/General\\_Plan/07\\_Ch6\\_HistoricalResources\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/07_Ch6_HistoricalResources_web.pdf).

———. 2015, August 4. Register of Historical Property.

[http://www.newportbeachca.gov/Pln/MAP\\_DOCUMENTS/Historical%20Register.pdf](http://www.newportbeachca.gov/Pln/MAP_DOCUMENTS/Historical%20Register.pdf).

## 5. Environmental Analysis

### CULTURAL RESOURCES

*This page intentionally left blank.*

## 5. Environmental Analysis

### 5.5 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed Use project (proposed project) to impact geological and soil resources in the City of Newport Beach and its sphere of influence (SOI). The analysis in this section is based in part on the following technical report(s):

- *Updated Geotechnical Investigation*, Geocon West, July 14, 2017.

A complete copy of this study is included as Appendix E to this DEIR.

#### 5.5.1 Environmental Setting

##### 5.5.1.1 REGULATORY SETTING

Laws, regulations, and plans that are potentially applicable to the proposed project are summarized below.

##### **Federal**

###### *Earthquake Hazards Reduction Act*

The Earthquake Hazards Reduction Act was enacted in 1997 to “reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program.” To accomplish this, the act established the National Earthquake Hazard Reduction Program (NEHRP), which refined the description of agency responsibilities, program goals, and objectives. NEHRP’s mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. NEHRP designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards.

##### **State**

###### *California Alquist-Priolo Earthquake Fault Zoning Act*

The California Alquist-Priolo Earthquake Fault Zoning Act was signed into state law in 1972, and amended, with its primary purpose being to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. This act (or state law) was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. The act requires the State Geologist (California Geologic Survey, CGS) to delineate regulatory zones known as “earthquake fault zones” along faults that are “sufficiently active” and “well defined” and to issue and distribute appropriate maps to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed

## 5. Environmental Analysis

### GOLOGY AND SOILS

construction. Pursuant to this act and as stipulated in Section 3603(a) of the California Code of Regulations, structures for human occupancy are not permitted to be placed across the trace of an active fault. The act also prohibits structures for human occupancy within 50 feet of the trace of an active fault, unless proven by an appropriate geotechnical investigation and report that the development site is not underlain by active branches of the active fault, as stipulated in Section 3603(a) of the California Code of Regulations. Furthermore, the act requires that cities and counties withhold development permits for sites within an earthquake fault zone until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting, as stipulated in Section 3603(d) of the California Code of Regulations.

#### *Seismic Hazard Mapping Act*

The Seismic Hazard Mapping Act was adopted by the state in 1990 for the purpose of protecting the public from the effects of nonsurface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The CGS prepares and provides local governments with seismic hazard zones maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures.

#### *California Building Code*

Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the code is under Title 24, Part 2, of the California Code of Regulations. The CBC provides minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground shaking with a specified probability at a site. The 2016 CBC took effect on January 1, 2017.

#### *Requirements for Geotechnical Investigations*

Requirements for geotechnical investigations are included in CBC Appendix J, Grading, Section J104; additional requirements for subdivisions requiring tentative and final maps and for other specified types of structures are in California Health and Safety Code Sections 17953 to 17955 and in CBC Section 1802. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness. CBC Section J106 sets forth requirements for inspection and observation during and after grading.

## 5. Environmental Analysis GEOLOGY AND SOILS

### *Storm Water Pollution Prevention Plans*

Pursuant to the CWA, in 2012, the State Water Resources Control Board issued a statewide general NPDES Permit for stormwater discharges from construction sites (National Pollutant Discharge Elimination System No. CAS000002). Under this Statewide General Construction Activity permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the State Water Resources Control Board and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list best management practices (BMPs) implemented on the construction site to protect stormwater runoff and must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a monitoring plan if the site discharges directly to a water body listed on the state’s 303(d) list of impaired waters.

### **Local**

#### *City of Newport Beach Municipal Code*

Chapter 15.10 (Excavation and Grading Code) of the City’s municipal code regulates grading, drainage, and hillside construction. Section 15.10.060 requires grading permits for all project sites requiring excavation, fills, and paving. Each application for a grading permit requires plans and specifications and applicable soils engineering and engineering geology reports. Similarly, Section 15.10.065 requires plans and specifications accurately showing the existing conditions and proposed alterations for drainage permits. Section 15.10.070 requires grading plan and drainage plan review fees for all requested permits.

### **5.5.1.2 EXISTING CONDITIONS**

#### **Regional Geologic Setting**

The project site is in the Los Angeles Basin, which is part of the Peninsular Range Geomorphic Province of California. The Peninsular Ranges are characterized by a series of northwest trending mountain ranges separated by valleys (CGS 2002).

Specifically, the site is at the southern margin of the Los Angeles Basin, which ends abruptly with the Newport-Inglewood uplift. The uplift is characterized by coastal mesas of late Miocene to early Pleistocene marine sediments and late Pleistocene marine terrace deposits.

#### **Project Site**

The project site is underlain by artificial fill consisting of clayey sand, silty sand, sandy clay and sandy silt; and which is slightly moist and medium dense or firm; to depths of up to four feet below ground surface (bgs).

## 5. Environmental Analysis

### GOLOGY AND SOILS

The artificial fill is underlain by Pleistocene-age marine terrace deposits generally consisting of silty sand to sandy silt, silt and clay; slightly moist to moist and firm to stiff or loose to medium dense; to depths of up to 50.5 feet bgs, that is, the maximum depth explored in the geotechnical investigation.

Groundwater was encountered under the project site at depths of 30 and 34 feet bgs.

### Faulting and Seismic Hazards

The nearest active fault to the project site is a strand of the Newport-Inglewood Fault about 5.8 miles to the southwest. Other active faults in the region include the Whittier Fault about 16.5 miles to the north-northwest, the Elsinore Fault Zone approximately 17 miles to the northeast, and the Palos Verdes Fault Zone offshore about 16 miles to the southwest (see Figure 5.5-1, *Fault Map*). Active faults are those showing surface expression of displacement within about the last 11,000 years.

The project site is above the San Joaquin Hills Blind Thrust, a deep thrust fault underlying the San Joaquin Hills at the southern margin of the Orange County coastal plain. The San Joaquin Hills Blind Thrust can generate earthquakes, but it is not expressed at the ground surface and does not pose a surface fault rupture hazard.

The nearest Alquist-Priolo Earthquake Fault Zone to the project site is about 6.5 miles to the west along the Newport-Inglewood Fault.

The energy released by an earthquake is measured as moment magnitude (Mw). The moment magnitude scale is logarithmic; therefore, each one-point increase in magnitude represents a 10-fold increase in amplitude of the waves as measured at a specific location and a 32-fold increase in energy. That is, a magnitude 7 earthquake produces 100 times (10 x 10) the ground motion amplitude of a magnitude 5 earthquake.

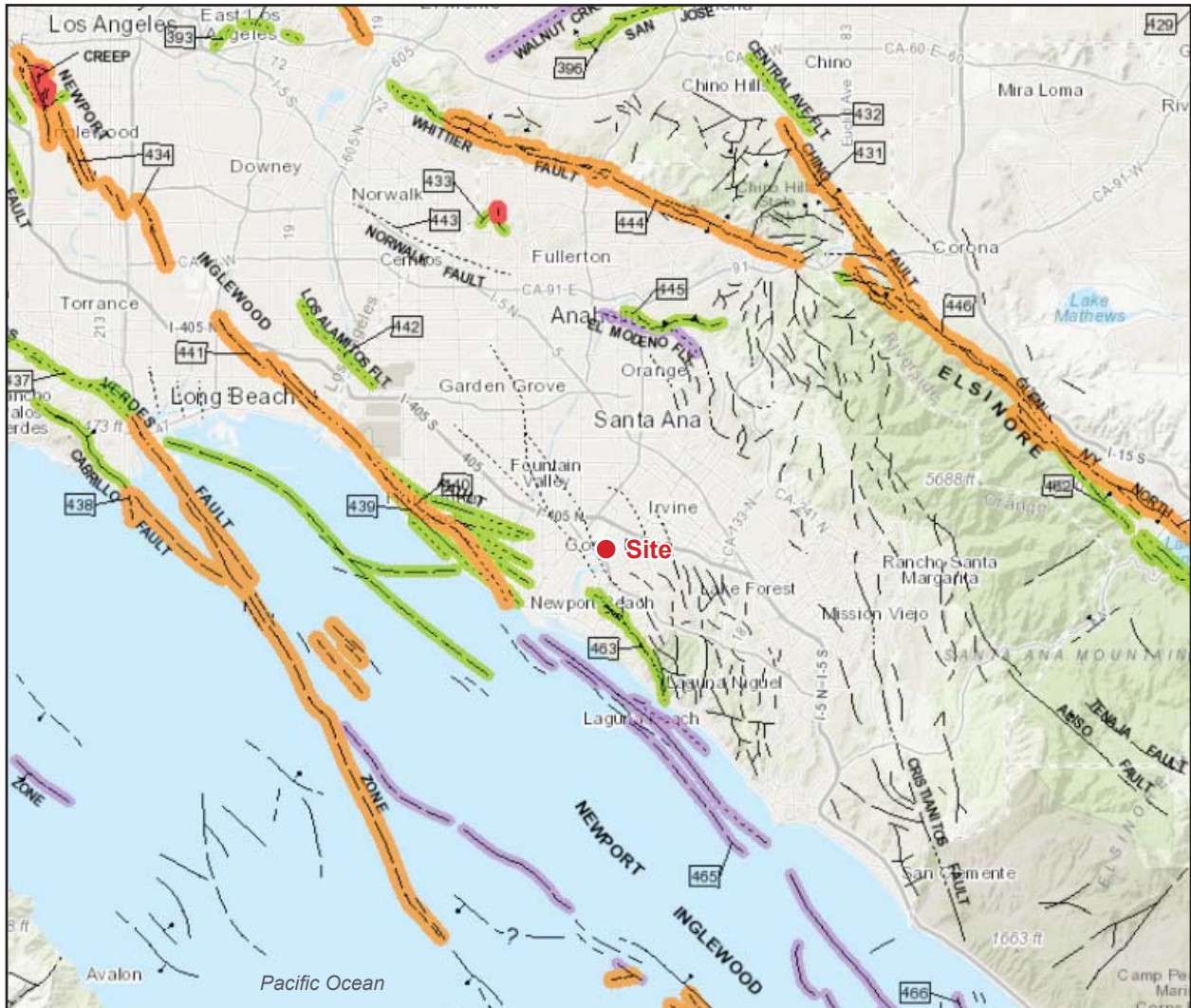
Notable earthquakes affecting the greater Los Angeles region within the last 50 years include:






- The 1971 San Fernando Earthquake, magnitude 6.6; caused 65 deaths and over \$500 million in property damage (SCEDC 2018).
- The 1992 Landers Earthquake, magnitude 7.3; caused three fatalities.
- The 1992 Big Bear Earthquake, magnitude 6.4.
- The 1994 Northridge Earthquake, magnitude 6.7; caused at least 57 fatalities and property damage estimated between \$13 billion and \$40 billion.

The 1933 Long Beach earthquake occurred on the Newport-Inglewood Fault immediately offshore of the Balboa Peninsula in the City of Newport Beach (SCEDC 2018).



Figure 5.5-1 - Fault Map  
5. Environmental Analysis



-  Fault along which historic (last 200 years) displacement has occurred
-  Holocene fault displacement (during past 11,700 years) without historic record
-  Late Quaternary fault displacement
-  Quaternary fault (age undifferentiated; Quaternary Period extends from the present to 1.6 million years before present)
-  Pre-Quaternary

NOTE: Fault traces on land are indicated by solid lines where well located, by dashed lines where approximately located or inferred, and by dotted lines where concealed by younger rocks or by lakes or bays.



## 5. Environmental Analysis

### GOLOGY AND SOILS

*This page intentionally left blank.*

## 5. Environmental Analysis GEOLOGY AND SOILS

### *Surface Fault Rupture*

The project site is not subject to surface rupture of a known active fault, as the nearest such fault to the site is about 5.8 miles away.

### *Ground Shaking*

The peak ground acceleration estimated to occur on the project site with a 2 percent probability of exceedance in 50 years—that is, an average recurrence interval of 2,475 years—is 0.617g where g is the acceleration of gravity. Ground acceleration of 0.617g correlates with intensity VIII on the Modified Mercalli Intensity (MMI) Scale (Wald et al. 1999), a subjective scale of how earthquakes are felt by people and the effects of earthquakes on buildings. The MMI Scale is a 12-point scale where Intensity I earthquakes are generally not felt by people; in Intensity XII earthquakes damage is total and objects are thrown into the air (USGS 2017).

In an intensity VIII earthquake, damage is slight in specially designed structures; considerable damage occurs in ordinary substantial buildings with partial collapse; and damage is great in poorly built structures. Chimneys, factory stacks, columns, monuments, and walls fall, and heavy furniture is overturned (USGS 2017).

### *Liquefaction and Related Ground Failure*

Strong ground shaking in sediment layers that are saturated with groundwater may cause them to lose strength and behave as a fluid. Liquefaction near or at the ground surface can result in property damage and structural failure. Surface ground failure usually takes the form of lateral spreading, flow failures, ground oscillation, and/or general loss of bearing strength. Sand boils (injections of fluidized sediment) commonly accompany these types of failure.

Three major factors determine a region's susceptibility to liquefaction:

- Intensity and Duration of Ground Shaking.
- Age and Texture of the Alluvial Sediments. Generally, the younger, less compacted sediments are more susceptible to liquefaction. The texture of sediment also plays a role. Sand and silty sands deposited in river channels and floodplains tend to be more susceptible to liquefaction than coarser or finer grained alluvial materials.
- Depth to Groundwater. Earthquake-induced liquefaction requires that sediments be saturated. In general, groundwater depths shallower than 10 feet to the surface cause the highest liquefaction susceptibility.

Liquefaction potential under the project site is considered very low due to the well-consolidated, fine-grained soils and the depth to groundwater (30 and 34 feet bgs).

## 5. Environmental Analysis

### GOLOGY AND SOILS

#### *Earthquake-Induced Landslides*

The project site has a south slope of just under 1 percent grade. There are no slopes on or near the site susceptible to earthquake-induced landslides.

#### **Geologic Hazards**

##### *Expansive Soils*

Expansive soils contain substantial amounts of clay that swells when wetted and shrinks when dried; the swelling or shrinking can shift, crack, or break structures built on such soils. The upper five feet of soils are considered to have low to moderate expansion potential based on expansion index test results of 44 and 51.

##### *Subsidence*

Subsidence occurs when a large portion of land sinks, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. The site is not in an area of known ground subsidence. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at or near the site. There appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the site.

##### *Corrosive Soils*

Site soils are considered moderately corrosive to corrosive regarding iron-containing metals and alloys.

### **5.5.2 Thresholds of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- G-1 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)
  - ii) Strong seismic ground shaking.
  - iii) Seismic-related ground failure, including liquefaction.
  - iv) Landslides.
- G-2 Result in substantial soil erosion or the loss of topsoil.

## 5. Environmental Analysis

### GEOLOGY AND SOILS

- G-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- G-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform building Code (1994), creating substantial risks to life or property.
- G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

No impacts were identified related to threshold G-5; this threshold is analyzed in Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR.

### 5.5.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address geology and soils impacts follow.

#### 5.5.3.1 REGULATORY REQUIREMENTS

- RR GEO-1 The proposed project will be designed and constructed in accordance with the Newport Beach Building Code, which adopts the California Building Code (CBC), which is based on the International Building Code (IBC). New construction, alteration, or rehabilitation shall comply with applicable ordinances set forth by the City and/or by the most recent City building and seismic codes in effect at the time of project design. In accordance with Section 1803.2 of the 2016 CBC, a geotechnical investigation is required that must evaluate soil classification, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness, as necessary, determined by the City building official. The geotechnical investigation must be prepared by registered professionals (i.e., California Registered Civil Engineer or Certified Engineering Geologist). Recommendations of the report pertaining to structural design and construction recommendations for earthwork, grading, slopes, foundations, pavements, and other necessary geologic and seismic considerations must be incorporated into the design and construction of the proposed project.
- RR HYD-1 The proposed project will be constructed in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities, Order No 2009- 0009-DWQ, NPDES No. CAS000002 (or the latest approved Construction General Permit). Compliance requires filing a notice of intent (NOI), a risk assessment, a site map, a Storm Water Pollution Prevention Plan (SWPPP) and associated best management practices (BMPs), an annual fee, and a signed certification statement.

## 5. Environmental Analysis

### GOLOGY AND SOILS

#### 5.5.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to geology and soils that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.5.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Project development would involve demolition of all the existing buildings and improvements onsite and soil disturbance on the entire site. Site grading would involve approximately 7,300 cubic yards (cy) of cut grading, 2,600 cy of fill grading, and net export of about 4,600 cy of soil.

---

**Impact 5.5-1: Project residents, workers, and visitors would be subject to strong ground shaking. Project development would not subject people or structures to substantial hazards from surface rupture of a known active fault, liquefaction, or earthquake-induced landslides. [Thresholds G-1.i through G-1.iv]**

---

##### *Impact Analysis:*

#### **Surface Fault Rupture**

The project site is not subject to surface rupture of a known active fault because the nearest such fault is about 5.8 miles from the site.

#### **Ground Shaking**

Project development would subject persons onsite to strong ground shaking. The peak ground acceleration estimated to occur on the site with a 2 percent probability of exceedance in 50 years—that is, an average recurrence interval of 2,475 years—is 0.617g where g is the acceleration of gravity. Ground acceleration of 0.617g correlates with intensity VIII on the Modified Mercalli Intensity (MMI) Scale (Wald et al. 1999). In an intensity VIII earthquake, damage is slight in specially designed structures; considerable damage occurs in ordinary substantial buildings with partial collapse; and damage is great in poorly built structures. Chimneys, factory stacks, columns, monuments, and walls fall, and heavy furniture is overturned (USGS 2017).

Structures for human occupancy must be designed to meet or exceed 2016 CBC standards for earthquake resistance. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with a specified probability at the site. The required geotechnical investigation for the proposed project would calculate seismic design parameters, pursuant to CBC requirements, that must be used in the design of the proposed building. Impacts would be less than significant.



## 5. Environmental Analysis GEOLOGY AND SOILS

### Liquefaction

Liquefaction potential under the site is considered very low due to the well-consolidated, fine-grained soils and the depth to groundwater. Project development would not subject people or structures to liquefaction hazards, and impacts would be less than significant.

### Earthquake-Induced Landslides

There are no slopes on or near the site susceptible to earthquake-induced landslides, and no impact would occur.

*Level of Significance before Mitigation:* With implementation of RR GEO-1, Impact 5.5-1 would be less than significant.

---

#### **Impact 5.5-2: Project development could cause substantial soil erosion. [Threshold G-2]**

---

*Impact Analysis:* Erosion is the movement of soil from place to place, and is a natural process. The main natural agents of erosion in the region are wind and flowing water. Erosion can be accelerated dramatically by ground-disturbing activities if effective erosion control measures are not used. Soil can be carried off construction sites or bare land by wind and water, and tracked off construction sites by vehicles.

The project applicant would prepare a SWPPP for the proposed project. The SWPPP would specify BMPs to be used to minimize stormwater pollution from project construction, including erosion and sediment. The project construction contractor would implement the specified BMPs. Categories of BMPs specified in SWPPPs are described in Table 5.5-1. Impacts would be less than significant after implementation of BMPs.

**Table 5.5-1 Construction Best Management Practices**

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping
Tracking Controls	Minimize the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Non-storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Source: CASQA 2003.

## 5. Environmental Analysis

### GOLOGY AND SOILS

At project completion the entire project site would be developed with buildings, surface parking, walkways and other paved areas, and landscaping; thus, soil onsite would not be susceptible to substantial erosion.

*Level of Significance before Mitigation:* With implementation of RR HYD-1, Impact 5.5-2 would be less than significant.

---

**Impact 5.5-3: Project development could expose people and structures to substantial hazards from collapsible soils and/or expansive soils. Development would not subject people or structures to substantial hazards from ground subsidence. [Thresholds G-3 (part) and G-4]**

---

*Impact Analysis:*

#### Collapsible Soils

Collapsible soils shrink upon being wetted and/or being subject to a load. The geotechnical investigation report recommends removing the upper five feet of existing soil within proposed building footprints, and deeper excavations as needed to completely remove all artificial fill and any soft, unsuitable alluvium at the direction of the geotechnical engineer. Impacts would be less than significant after compliance with the specified recommendations in the geotechnical investigation, as required by RR GEO-1.

#### Subsidence

There appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the site. Project development would not subject people or structures to substantial hazards from ground subsidence, and impacts would be less than significant.

#### Expansive Soils

Expansive soils contain substantial amounts of clay that swells when wetted and shrinks when dried; the swelling or shrinking can shift, crack, or break structures built on such soils. Soils onsite within 15 feet of the ground surface consist of sandy silt, sandy clay, clayey sand, silty sand, sand, and clay. Thus, some subsurface site soils could be expansive. The upper five feet of soils are considered to have low to moderate expansion potential based on expansion index test results of 44 and 51. To ensure that risks from expansive soils remain less than significant, the geotechnical investigation report includes recommendations for maintaining the moisture content in the slab and subgrade to minimize potential soil expansion after grading and prior to concrete placement. Impacts would be less than significant after implementation of those recommendations in the geotechnical investigation, as required by RR GEO-1.

*Level of Significance before Mitigation:* With implementation of RR GEO-1, Impact 5.5-3 would be less than significant.

## 5. Environmental Analysis GEOLOGY AND SOILS

### 5.5.5 Cumulative Impacts

Geology and soils impacts are site specific and generally do not combine to result in cumulative impacts. Similar to the proposed project, future development projects would be required to comply with applicable state and local building regulations, including the CBC and City of Newport Beach Municipal Code Chapter 15.10. Site-specific geologic hazards would be addressed in each project's geotechnical investigation. Therefore, no significant cumulative impact would occur.

### 5.5.6 Level of Significance Before Mitigation

With implementation of RR GEO-1, the following impacts would be less than significant.

- **Impact 5.5-1** The proposed project would not expose people or structures to adverse seismic-related hazards including surface rupture and earthquake-induced landslides.
- **Impact 5.5-3** The proposed project would not expose people or structures to substantial hazards from unstable geologic units or soil.

With implementation of RR HYD-1, the following impact would be less than significant.

- **Impact 5.5-2** Project construction would not cause substantial soil erosion.

All impacts related to hydrology and water quality that have no impact are included in Chapter 8.

### 5.5.7 Mitigation Measures

No mitigation measures are required.

### 5.5.8 Level of Significance After Mitigation

Impacts would be less than significant.

### 5.5.9 References

California Geological Survey (CGS). 2001, January 17. Earthquake Zones of Required Investigation: Tustin Quadrangle. [http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/TUSTIN\\_EZRIM.pdf](http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/TUSTIN_EZRIM.pdf).

———. 2002, December. Note 36: California Geomorphic Provinces. [http://www.conservation.ca.gov/cgs/information/publications/cgs\\_notes/Pages/index.aspx](http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/Pages/index.aspx).

California Stormwater Quality Association (CASQA). 2003, January. Stormwater Best Management Practice Handbook: Construction.

Fusco Engineers, Inc. 2017, December. Sewer Analysis Report, Newport Crossings, Newport Beach, CA.

## 5. Environmental Analysis

### GOLOGY AND SOILS

- Newport Beach, City of. 2003. City of Newport Beach General Plan. Figure S2: Seismic Hazards.  
[http://www.newportbeachca.gov/PLN/General\\_Plan/Figures/FigS2\\_SeismicHazards\\_17x11color\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/Figures/FigS2_SeismicHazards_17x11color_web.pdf).
- Newport Beach, City of, and Earth Consultants. 2006, June 7. City of Newport Beach General Plan. Figure S2: Seismic Hazards.  
[http://www.newportbeachca.gov/PLN/General\\_Plan/Figures/FigS2\\_SeismicHazards\\_17x11color\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/Figures/FigS2_SeismicHazards_17x11color_web.pdf).
- Office of Emergency Services (OES). 2018, February 6. MyHazards. <http://myhazards.caloes.ca.gov/>.
- Orange County Water District (OCWD). 2015, June 17. Ground Water Management Plan 2015 Update.  
[http://www.ocwd.com/media/3622/groundwatermanagementplan2015update\\_20150624.pdf](http://www.ocwd.com/media/3622/groundwatermanagementplan2015update_20150624.pdf).
- Southern California Earthquake Data Center (SCEDC). 2013, May 14. Significant Earthquakes and Faults: Chronological Earthquake Index. <http://scedc.caltech.edu/significant/>.
- US Geological Survey (USGS). 2017, March 15. The Modified Mercalli Intensity Scale.  
<http://earthquake.usgs.gov/learn/topics/mercalli.php>.
- Wald, David J., et al. 1999, August. Relationships Between Peak Ground Acceleration, Peak Ground Velocity, and Modified Mercalli Intensity in California. *Earthquake Spectra* 15 No. 3.

## 5. Environmental Analysis

### 5.6 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed Use project (proposed project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG, climate change impacts of a project are considered on a cumulative basis.

This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). GHG emissions modeling was conducted using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2, and model outputs are in Appendix B of this DEIR.

#### Terminology

- **Greenhouse gases (GHG).** Gases in the atmosphere that absorb infrared light, thereby retaining heat in the atmosphere and contributing to a greenhouse effect.
- **Global warming potential (GWP).** Metric used to describe how much heat a molecule of a greenhouse gas absorbs relative to a molecule of carbon dioxide (CO<sub>2</sub>) over a given period of time (20, 100, and 500 years). CO<sub>2</sub> has a GWP of 1.
- **Carbon dioxide-equivalent (CO<sub>2</sub>e).** The standard unit to measure the amount of greenhouse gases in terms of the amount of CO<sub>2</sub> that would cause the same amount of warming. CO<sub>2</sub>e is based on the GWP ratios between the various GHGs relative to CO<sub>2</sub>.
- **MTCO<sub>2</sub>e.** Metric ton of CO<sub>2</sub>e.
- **MMTCO<sub>2</sub>e.** Million metric tons of CO<sub>2</sub>e.

#### 5.6.1 Environmental Setting

##### 5.6.1.1 GREENHOUSE GASES AND CLIMATE CHANGE

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and ozone (O<sub>3</sub>)—that are the likely cause of an increase in global average temperatures observed in the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent are nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).<sup>1,2</sup> The major GHGs are briefly described.

---

<sup>1</sup> Water vapor (H<sub>2</sub>O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant because it is considered part of the feedback loop rather than a primary cause of change.

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

- **Carbon dioxide (CO<sub>2</sub>)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH<sub>4</sub>)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in landfills and water treatment facilities.
- **Nitrous oxide (N<sub>2</sub>O)** is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have a stronger greenhouse effect than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 5.6-1, *GHG Emissions and their Relative Global Warming Potential Compared to CO<sub>2</sub>*. The GWP is used to convert GHGs to CO<sub>2</sub>-equivalence (CO<sub>2</sub>e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4), GWP values for CH<sub>4</sub>, 10 MT of CH<sub>4</sub> would be equivalent to 250 MT of CO<sub>2</sub>.

**Table 5.6-1 GHG Emissions and Their Relative Global Warming Potential Compared to CO<sub>2</sub>**

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO <sub>2</sub> <sup>1</sup>	Fourth Assessment Report Global Warming Potential Relative to CO <sub>2</sub> <sup>1</sup>
Carbon Dioxide (CO <sub>2</sub> )	50 to 200	50 to 200	1	1
Methane <sup>2</sup> (CH <sub>4</sub> )	12 (±3)	12	21	25
Nitrous Oxide (N <sub>2</sub> O)	120	114	310	298

Source: IPCC 1995, 2007.

Notes: The IPCC published updated GWP values in its Fifth Assessment Report (2013) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO<sub>2</sub>. However, GWP values identified in AR4 are used by SCAQMD to maintain consistency in statewide GHG emissions modeling. In addition, the 2014 Scoping Plan Update was based on the GWP values in AR4.

<sup>1</sup> Based on 100-year time horizon of the GWP of the air pollutant compared to CO<sub>2</sub>.

<sup>2</sup> The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO<sub>2</sub> is not included.

2 Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

### California's GHG Sources and Relative Contribution

In 2017, the statewide GHG emissions inventory was updated from 2000 to 2015 emissions using the GWPs in IPCC's AR4. Based on these GWPs, California produced 440 MMTCO<sub>2</sub>e GHG emissions in 2015. California's transportation sector was the single largest generator of GHG emissions, producing 37.4 percent of the state's total emissions. Industrial sector emissions made up 20.8 percent, and electric power generation made up 19.0 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (8.6 percent), agriculture (7.9 percent), high GWP GHGs (4.3 percent), and recycling and waste (2.0 percent) (CARB 2017b).<sup>3</sup>

California's GHG emissions have followed a declining trend since 2007. In 2015, emissions from routine emitting activities statewide were 1.5 million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2</sub>e) lower than 2014 levels, representing an overall decrease of 10 percent since peak levels in 2004. During the 2000 to 2015 period, per capita GHG emissions in California dropped from a peak in 2001 of 14.0 MTCO<sub>2</sub>e per person to 11.3 MTCO<sub>2</sub>e per person in 2015, a 19 percent decrease. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) is declining, representing a 33 percent decline since the 2001 peak, while the state's GDP has grown 37 percent during this period (CARB 2017c).

### Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century, however, scientists observed a rapid change in the climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities. The amount of CO<sub>2</sub> in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are hard to predict. Projections of climate change depend heavily upon future human activity. Therefore, climate models are based on different emission scenarios that account for historical trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-

---

<sup>3</sup> High GWP gases are fluorinated gases, such as those sometimes used for refrigerants and in the semi-conductor industry (CARB 2017d).

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

change scenarios are affected by varying degrees of uncertainty. For example, there are varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in frequency of warm spells/heat waves over most land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.
- Larger areas affected by drought.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

### Potential Climate Change Impacts for California

Observed changes over the last several decades across the western United States reveal clear signs of climate change. Statewide, average temperatures increased by about 1.7°F from 1895 to 2011, with the Sierra Nevada experiencing the greatest warming (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1 to 8.6°F, depending on emissions levels (CCCC 2012).

In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; 4) advanced shift in the timing of snowmelt of 5 to 30 days earlier in the spring; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). Overall, California has become drier over time, with five of the eight years of severe to extreme drought occurring between 2007 and 2016, with unprecedented dry years occurring in 2014 and 2015 (OEHHA 2018). Statewide precipitation has become increasingly variable from year to year, with the driest consecutive four years occurring from 2012 to 2015 (OEHHA 2018). According to the California Climate Action Team—a committee of state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency—even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up, their long atmospheric lifetimes (see Table 5.6-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.6-2, *Summary of GHG Emissions Risks to California*, and include impacts to public health, water resources, agriculture, coastal sea level, forest and biological resources, and energy.

**5. Environmental Analysis  
GREENHOUSE GAS EMISSIONS**

**Table 5.6-2 Summary of GHG Emissions Risks to California**

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer Fewer extremely cold nights Poor air quality made worse Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snow pack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise Increasing coastal floods Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pest and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006; CEC 2009; CCCC 2012; CNRA 2014.

**5.6.1.2 REGULATORY SETTING**

This section describes the federal, state, and local regulations applicable to GHG emissions.

**Federal**

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA’s final findings respond to the 2007 US Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings did not themselves impose any emission reduction requirements, but allowed the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, hydrofluorocarbons, perfluorocarbons, and SF<sub>6</sub>—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the proposed project's GHG emissions inventory because they constitute the majority of GHG emissions; per SCAQMD guidance, they are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

#### *US Mandatory Reporting Rule for GHGs (2009)*

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MTCO<sub>2e</sub> or more per year are required to submit an annual report.

#### *Update to Corporate Average Fuel Economy Standards (2010/2012)*

The current Corporate Average Fuel Economy standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers were required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017 to 2025 that will require a fleet average of 54.5 miles per gallon in 2025. However, the EPA is reexamining the 2017–2025 emissions standards.

#### *EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)*

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. However, the EPA is reviewing the Clean Power Plan under President Trump's Energy Independence Executive Order.

### **State**

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Orders S-03-05, B-30-15, and B-55-18; Assembly Bill (AB) 32; Senate Bill (SB) 32; SB 375; and SB 100.

#### *Executive Order S-03-05*

Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

### *Assembly Bill 32, the Global Warming Solutions Act (2006)*

State of California guidance and targets for reductions in GHG emissions are generally embodied in the Global Warming Solutions Act, adopted with passage of AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 emissions reduction goal established in Executive Order S-03-05.

### *CARB 2008 Scoping Plan*

The first Scoping Plan was adopted by the California Air Resources Board (CARB) on December 11, 2008. The 2008 Scoping Plan identified that GHG emissions in California are anticipated to be 596 MMTCO<sub>2e</sub> in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMTCO<sub>2e</sub> (471 million tons) for the state (CARB 2008). To effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MTCO<sub>2e</sub> per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

### *First Update to the Scoping Plan*

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan, adopted May 22, 2014, highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 MMTCO<sub>2e</sub> 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, are slightly higher at 431 MMTCO<sub>2e</sub> (CARB 2014).

As identified in the Update to the Scoping Plan, California is on track to meet the goals of AB 32. The update also addresses the state's longer-term GHG goals in a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goal, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals (CARB 2014). CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014).

### *Executive Order B-30-15*

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent below 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

#### *Senate Bill 32 and Assembly Bill 197*

In September 2016, Governor Brown signed Senate Bill 32 and Assembly Bill 197, making the Executive Order goal for year 2030 into a statewide, mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

#### *2017 Climate Change Scoping Plan*

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB approved the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO<sub>2e</sub> for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017d).

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conserve agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and TACs emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZE buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency and utilizes near-zero emissions technology and deployment of ZE trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California’s land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the state’s long-term GHG reduction goals and recommended local actions to reduce GHG emissions—for example, statewide targets of no more than 6 MTCO<sub>2e</sub> or less per capita by 2030 and 2 MTCO<sub>2e</sub> or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust and quantitative locally appropriate goals that align with the statewide per capita targets and sustainable development objectives, and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the state’s 1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population) consistent with the Scoping Plan and the state’s long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from vehicle miles traveled (VMT), and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the “business as usual” yardstick—that is, what would the GHG emissions look like if the state did nothing at all beyond the policies that are already required and in place to achieve the 2020 limit, as shown in Table 5.6-3, *2017 Climate Change Scoping Plan Emissions Reductions Gap*. It includes the existing renewables requirements, advanced clean cars, the “10 percent” LCFS, and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 MMTCO<sub>2e</sub> above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology deployment, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

**Table 5.6-3 2017 Climate Change Scoping Plan Emissions Reductions Gap**

Modeling Scenario	2030 GHG Emissions MMTCO <sub>2e</sub>
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	<b>260</b>
Gap to 2030 Target	<b>60</b>

Source: CARB 2017d.

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

Table 5.6-4, *2017 Climate Change Scoping Plan Emissions Change by Sector*, provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

**Table 5.6-4 2017 Climate Change Scoping Plan Emissions Change by Sector**

Scoping Plan Sector	1990 MMTCO <sub>2</sub> e	2030 Proposed Plan Ranges MMTCO <sub>2</sub> e	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink <sup>1</sup>	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
<b>Total</b>	<b>431</b>	<b>260</b>	<b>-40%</b>

Source: CARB 2017d.

Notes: TCU = Transportation, Communications, and Utilities; TBD = To Be Determined.

<sup>1</sup> Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

#### *Senate Bill 1383*

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH<sub>4</sub>. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also establishes targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Final Proposed Short-Lived Climate Pollutant Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017a). In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. SCAQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces their particulate emissions by over 80 percent (CARB 2017a). Additionally, SCAQMD Rule 445 limits installation of new fireplaces in the South Coast Air Basin.

#### *Senate Bill 375*

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO<sub>2e</sub> of reductions by 2020 and 15 MMTCO<sub>2e</sub> of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

#### *2017 Update to the SB 375 Targets*

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies, and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted Sustainable Community Strategies (SCSs, discussed below) to achieve the SB 375 targets. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMTCO<sub>2e</sub> in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent). CARB anticipates adoption of the updated targets and methodology in 2018 and subsequent SCSs adopted afterwards would be subject to these new targets (CARB 2018).

#### *SCAG's 2016-2040 RTP/SCS*

SB 375 requires the MPOs to prepare a sustainable communities strategy in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016, and is an update to the 2012 RTP/SCS (SCAG 2016). In general,

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016). However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency. It is anticipated that SCAG will update the SCS to address the revised 2035 target of 19 percent per capita GHG reduction from 2005 levels.

#### *Assembly Bill 1493*

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases with requirements for greater numbers of ZE vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less global warming gases and 75 percent less smog-forming emissions.

#### *Executive Order S-01-07*

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO<sub>2</sub>e gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

### *Senate Bills 1078, 107, X1-2, and Executive Order S-14-08*

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

### *Senate Bill 100*

On September 10, 2018, Governor Brown signed SB 100, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

### *Senate Bill 350*

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

### *Executive Order B-55-18*

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO<sub>2</sub>e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

### *Executive Order B-16-2012*

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California's state vehicle fleet to increase through



## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions 80 percent below 1990 levels.

#### *California Building Code: Building Energy Efficiency Standards*

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards, which were recently adopted on May 9, 2018, go into effect starting January 1, 2020.

The 2016 Standards improve upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are generally 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015). Buildings that were constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the previous 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. Although the 2016 standards do not achieve zero net energy, they get very close to the state's goal and take important steps toward changing residential building practices in California.

The 2019 standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multifamily buildings of three stories and less. The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and single-family homes will be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

#### *California Building Code: CALGreen*

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.<sup>4</sup> The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last

---

<sup>4</sup> The green building standards became mandatory in the 2010 edition of the code.



## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

updated in 2016. The 2016 Standards became effective on January 1, 2017. The CEC adopted the voluntary standards of the 2019 CALGreen on October 3, 2018. The 2019 CALGreen standards become effective January 1, 2020.

#### *2006 Appliance Efficiency Regulations*

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as “business as usual,” they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

#### *Solid Waste Regulations*

California’s Integrated Waste Management Act of 1989 (AB 939, Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2016 CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014 Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

#### *Water Efficiency Regulations*

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

- The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

#### 5.6.1.3 EXISTING CONDITIONS

The proposed project site consists of commercial and retail uses. These existing uses currently generate GHG emissions from natural gas used for heating, electricity usage, vehicle trips, water usage, wastewater generation, and solid waste generation associated with the employees and patrons, and area sources from landscaping equipment. Table 5.6-5, *Existing GHG Emissions Inventory*, shows the average annual emissions inventory associated with the existing uses currently in operation.

**Table 5.6-5 Existing GHG Emissions Inventory – Project Site**

Source	GHG Emissions	
	MTCO <sub>2</sub> e Per Year	Percent
Area	<1	<1%
Energy <sup>1</sup>	388	31%
Mobile <sup>2</sup>	846	68%
Solid Waste	11	1%
Water	2	<1%
<b>Subtotal</b>	<b>1,246</b>	<b>100%</b>

Source: CalEEMod, Version 2016.3.2.

Totals may not equal 100 percent due to rounding.

<sup>1</sup> Existing buildings were constructed prior to the 2005 Building Energy Efficiency Standards; therefore, the "historic" rates in CalEEMod were used to estimate energy use.

<sup>2</sup> Based on year 2017 emission rates.

#### 5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

### South Coast Air Quality Management District

SCAQMD has adopted a significance threshold of 10,000 MTCO<sub>2e</sub> per year for permitted (stationary) sources of GHG emissions for which SCAQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) in September 2010, SCAQMD identified a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency (SCAQMD 2010a).

- **Tier 1.** If a project is exempt from CEQA, project-level and contribution to significant cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (e.g., city or county), project-level and contribution to significant cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and contribution to significant cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. Project-related GHG emissions include on-road transportation, energy use, water use, wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The SCAQMD Working Group identified that because construction activities would result in a "one-time" net increase in GHG emissions, construction activities should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation. SCAQMD identified a screening-level threshold of 3,000 MTCO<sub>2e</sub> annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO<sub>2e</sub> for commercial projects, 3,500 MTCO<sub>2e</sub> for residential projects, and 3,000 MTCO<sub>2e</sub> for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions. SCAQMD recommends use of the 3,000 MTCO<sub>2e</sub> bright-line threshold for all project types (SCAQMD 2010b).

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

SCAQMD has identified an efficiency target for projects that exceed the bright-line threshold: a 2020 efficiency target of 4.8 MTCO<sub>2e</sub> per year per service population (MTCO<sub>2e</sub>/year/SP) for project-level analyses and 6.6 MTCO<sub>2e</sub>/year/SP for plan-level projects (e.g., general plans). Service population is

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

generally defined as the sum of residential and employment population of a project. The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB’s 2008 Scoping Plan.<sup>5</sup> Based on the latest statewide emissions inventory in the 2017 Scoping Plan, the project-level efficiency target for year 2020 is 5.1 MTCO<sub>2e</sub>/year/SP.

#### Post-2020 GHG Emissions Thresholds

For projects that would be implemented beyond year 2020, the efficiency targets have been adjusted based on the GHG reduction targets of SB 32. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO<sub>2e</sub> for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 as established under SB 32. While the State has identified additional GHG reduction goal for year 2050 (Executive Order S-03-05), because buildout of the proposed project would occur by 2030, the applicable threshold is based on the GHG reduction target for the buildout year of the proposed project and the legislative target under SB 32. As shown in Table 5.6-6, *Post-2020 Project-Level GHG Reduction Targets*, using the latest land use emissions inventory developed for the 2017 Scoping Plan, the estimated 2030 GHG project-level efficiency target would be 3.2 MTCO<sub>2e</sub> per service population per year (MTCO<sub>2e</sub>/SP/yr).

**Table 5.6-6 Post-2020 Project-Level GHG Reduction Targets**

GHG Sector <sup>1</sup>	Scoping Plan Scenario GHG Emissions MMTCO <sub>2e</sub>
<b>Emissions Inventory</b>	
Year 2020 Emissions Inventory <sup>2</sup>	287
Year 2030 Emissions Inventory	191
<b>2030 Project-Level Efficiency Target</b>	
2030 Population <sup>3</sup>	43,939,250
2030 Employment <sup>4</sup>	16,454,761
2030 Service Population	60,394,011
<b>2030 Efficiency Target</b>	<b>3.2 MTCO<sub>2e</sub>/SP</b>

Sources:

<sup>1</sup> CARB 2017d.

<sup>2</sup> CARB 2007.

<sup>3</sup> CDOF 2018.

<sup>4</sup> Caltrans 2017.

The proposed project has an anticipated buildout year beyond 2020. SCAQMD’s bright-line threshold of 3,000 MTCO<sub>2e</sub> per year is used as screening criteria to determine if additional analysis of project-related emissions exceed the year 2030 efficiency metric of 3.2 MTCO<sub>2e</sub>/SP/yr, respectively. If the project operation-phase emissions exceed the bright-line and efficiency targets, GHG emissions would be considered potentially significant in the absence of mitigation measures.

<sup>5</sup> SCAQMD took the 2020 statewide GHG reduction target for “land use only” GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

### 5.6.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address GHG impacts follow.

#### 5.6.3.1 REGULATORY REQUIREMENTS

- RR GHG-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building Energy Efficiency Standards and CALGreen are effective starting on January 1, 2017, and the 2019 standards are effective starting January 1, 2020. The Building Energy Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero energy or residential buildings by 2020 and nonresidential buildings by 2030. The 2016 CALGreen and Building Energy Efficiency Standards are incorporated by reference under Chapter 15.11 and Chapter 15.17, respectively, of the City Municipal Code.
- RR GHG-2 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) requirement to provide electric vehicle parking spaces for new residential buildings (CALGreen Section 4.106.4.2). The proposed project is required to designate at least 3 percent of parking spaces for electric vehicles, as identified in CALGreen.
- RR GHG-3 Residential developments are required to adhere to South Coast Air Quality Management District Rule 445 for limiting the installment of wood-burning fireplaces.
- RR GHG-4 Construction activities will be conducted in compliance with 13 California Code of Regulations (CCR) Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.

#### 5.6.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to greenhouse gas emissions that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

### 5.6.4 Environmental Impacts

#### 5.6.4.1 METHODOLOGY

This GHG emissions evaluation was prepared in accordance with the requirements of CEQA to determine if significant GHG impacts are likely in conjunction with the type and scale of development associated with the proposed project. GHG emissions modeling was completed for the proposed project using CalEEMod, as recommended by the SCAQMD. Modeling datasheets are in Appendix B.

Project-related emissions are based on development of the new proposed residential, commercial, and retail uses. The modeling accounts for the average daily vehicle trips generated, energy (i.e., natural gas) usage, and

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

area sources (e.g., consumer cleaning products) from operation of the proposed project. Construction emissions are based on information provided for the proposed project. Where specific information was not available, CalEEMod default values were utilized. Life cycle emissions are not included in this analysis because not enough information is available.<sup>6</sup>

- **Transportation.** The average daily trip (ADT) generation was provided by LSA Associates (LSA 2018). Saturday and Sunday average daily trip generation were based on the Institute of Transportation Engineers Trip Generation Manual (ITE 2017). Overall, the proposed project would generate up to 2,326 weekday ADTs and 2,161 and 1,915 Saturday and Sunday ADTs, respectively. Compared to existing conditions with current occupied buildings, the proposed project would result in a net increase of 1,078 weekday ADTs and 779 and 848 Saturday and Sunday ADTs. The trip lengths are based on CalEEMod defaults. For further details, refer to Appendix B of this study.
- **Energy Use.** Proposed buildings would be built to meet the Building Energy Efficiency Standards in effect when the building permits issue. The analysis assumes that the project would meet the 2016 Building Energy Efficiency Standards.<sup>7</sup> For purposes of this analysis, while the existing buildings were built in 1974, the historical energy rates in CalEEMod are used for the existing buildings. The historical rates are based on the 2005 Building Energy Efficiency Standards. The net change in emissions from implementation of the proposed project would be conservative as it is assumed that the energy efficiency of the existing buildings would be less than buildings built to meet the 2005 Standards (i.e., less efficient buildings would generate higher emissions, which would result in a smaller net change in emissions).
- **Area Sources.** Area source emissions from use of fireplaces and consumer cleaning products are based on CalEEMod default values, building and parking lot area, and the number of fireplaces. It is assumed the 350 dwelling units would have natural gas-powered fireplaces.
- **Water/Wastewater.** Total annual water demand and wastewater generation for the existing and proposed land uses are based on the data compiled in Table 5.16-1, *Estimated Project Wastewater Generation*, and Table 5.16-5, *Estimated Project Water Demand*, of Chapter 5.16, *Utilities and Service Systems*. GHG emissions from this sector are attributed to the energy used for treatment and distribution of water and wastewater.

---

<sup>6</sup> Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analysis was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials is also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

<sup>7</sup> It is possible, depending on the construction timing, that the 2019 Standards could apply to at least some of the project, making it more efficient than modeled.



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

- **Solid Waste.** Total annual solid waste generation for the existing and proposed uses is based on the data compiled in Table 5.16-7, *Estimated Project Solid Waste Generation*, of Chapter 5.16, *Utilities and Service Systems*. GHG emissions are associated with the decomposition of solid waste.
- **Construction.** Construction of the proposed project is anticipated to commence December 2019 and be completed by end of January 2023, for a duration of approximately 38 months. Construction activities would entail demolition of the existing retail development, grading, and construction of the proposed building and parking structure (see Table 5.2-8, *Construction Activities, Phasing, and Equipment*, of Chapter 5.2, *Air Quality*, for further construction details).

### 5.6.4.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.6-1: Implementation of the proposed project would not generate a net increase in GHG emissions, either directly or indirectly, that would have a significant impact on the environment. [Threshold GHG-1]**

---

*Impact Analysis:* Implementation of a development project could contribute to global climate change through direct emissions of GHGs from onsite area sources and vehicle trips generated by the proposed project, and indirectly through offsite energy production required for onsite activities, water use, and waste disposal. Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis.

The net increases in GHG emissions over existing conditions that would result from project implementation are shown in Table 5.6-7, *Newport Crossings Mixed Use Operational Phase GHG Emissions*. Annual GHG emissions were calculated for construction and operation of the proposed project and the existing land uses. The proposed project operational phase emissions are from operation of the proposed land use and from new, project-related vehicle trips. Existing emissions are associated with the existing land uses currently operating onsite and vehicle trips associated with them. Construction emissions were amortized into the operational phase in accordance with SCAQMD's methodology (SCAQMD 2009).

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

**Table 5.6-7 Newport Crossings Mixed Use Operational Phase GHG Emissions**

Source	GHG Emissions	
	MTCO <sub>2</sub> e Per Year	Percent
<b>Existing Uses</b>		
Area	<1	<1%
Energy <sup>1</sup>	388	31%
Mobile <sup>2</sup>	846	68%
Solid Waste	11	1%
Water	2	<1%
<i>Subtotal</i>	<i>1,246</i>	<i>100%</i>
<b>Proposed Uses</b>		
Area	91	2%
Energy <sup>3</sup>	1,253	33%
Mobile	2,145	56%
Solid Waste	96	2%
Water	156	4%
Construction-Amortized <sup>4</sup>	96	3%
<i>Subtotal</i>	<i>3,837</i>	<i>100%</i>
<b>Net Emissions</b>		
Area	91	3%
Energy	866	33%
Mobile	1,299	50%
Solid Waste	85	3%
Water	154	6%
Construction-Amortized	96	4%
<b>Total All Sectors</b>	<b>2,591</b>	<b>100%</b>
Proposed SCAQMD Bright-Line Threshold	3,000 MTCO <sub>2</sub> e	NA
<b>Exceeds Threshold?</b>	<b>No</b>	<b>NA</b>

Source: CalEEMod, Version 2016.3.2.

Notes: Totals may not equal 100 percent due to rounding.

<sup>1</sup> Utilizes the CalEEMod historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

<sup>2</sup> Based on year 2017 emission rates.

<sup>3</sup> Assumes the proposed buildings would meet the 2016 Building Energy Efficiency Standards. Modeling also includes applicable water efficiency improvements required under CALGreen.

<sup>4</sup> Construction emissions are amortized over a 30-year Project lifetime per recommended SCAQMD methodology (SCAQMD 2009).

As shown in the table, the primary sources of GHG emissions are from project-related vehicle trips, followed by emissions generated from energy usage. Overall, development of the proposed project would generate annual net GHG emissions of 2,591 MTCO<sub>2</sub>e per year and would fall below SCAQMD bright-line screening threshold of 3,000 MTCO<sub>2</sub>e per year. Therefore, GHG emissions generated by the proposed project would not make a cumulatively considerable contribution to significant cumulative GHG emissions, and impacts would be less than significant.

**Level of Significance before Mitigation:** With implementation of RR GHG-1, RR GHG-2, RR GHG-3, and RR GHG-4, Impact 5.6-1 would be less than significant.

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

---

**Impact 5.6-2: Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. [Threshold GHG-2]**

---

**Impact Analysis:** Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's 2016-2040 RTP/SCS. A consistency analysis with these plans for the proposed project is presented below.

### **CARB Scoping Plan**

The CARB Scoping Plan is applicable to state agencies, but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require the City to adopt policies, programs, or regulations to reduce GHG emissions). However, new regulations adopted by the state agencies outlined in the Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other statewide actions that would affect a local jurisdiction's emissions inventory from the top down. Statewide strategies to reduce GHG emissions include the LCFS, changes in the corporate average fuel economy standards (e.g., Pavley I and Pavley California Advanced Clean Cars program), and the Cap-and-Trade program. Although measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced by compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted, and will not prevent the implementation of any such measures. Therefore, the proposed project would be consistent with the CARB Scoping Plan, and impacts are less than significant.

### **SCAG's Regional Transportation Plan/Sustainable Communities Strategy**

SCAG's 2016-2040 RTP/SCS was adopted April 7, 2016. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in the 2016-2040 RTP/SCS is to plan for the southern California region to grow in more compact communities in existing urban areas; provide neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands (SCAG 2016). The 2016-2040 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecast development that is generally consistent with regional-level general plan data. The projected regional development pattern, when integrated with the proposed regional transportation network identified in the 2016-2040 RTP/SCS, would reduce per capita vehicular travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region. The 2016-2040 RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the 2016-2040 RTP/SCS, but provides incentives for consistency for governments and developers.

Table 5.6-8, *SCAG 2016 RTP/SCS Transportation Land Use Strategies Consistency*, evaluates the proposed project in comparison to the three primary transportation-land use strategies in the RTP/SCS. As discussed in the table, the proposed project would be consistent with these strategies. Therefore, the proposed project would

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

not interfere with SCAG’s ability to implement the regional strategies outlined in the 2016-2040 RTP/SCS, and impacts are considered less than significant.

**Table 5.6-8 SCAG 2016 RTP/SCS Transportation Land Use Strategies Consistency**

Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
<p><b>Focus new growth around High Quality Transit Areas (HQTA).</b> The 2016 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region’s high quality transit areas (HQTA). The 2016 RTP/SCS assumes that 46 percent of new housing and 55 percent of new employment locations developed between 2012 and 2040 will be located within QTAs, which comprise only three percent of the total land area in the SCAG region (SCAG 2016).</p>	<p>Additional local policies that ensure that development in QTAs achieve the intended reductions in VMT and GHG emissions include:</p> <ul style="list-style-type: none"> <li>▪ Affordable housing requirements</li> <li>▪ Reduced parking requirements</li> <li>▪ Adaptive reuse of existing structures</li> <li>▪ Density bonuses tied to family housing units such as three- and four bedroom units</li> <li>▪ Mixed-use development standards that include local serving retail</li> <li>▪ Increased Complete Streets investments around QTAs.</li> </ul>	<p><b>Consistent:</b> While the proposed project is not within an HQTA, it would convert an existing retail use to a mixed residential/retail use consisting primarily of residential, including 30 percent affordable units. As a result, the proposed project would increase residential land use density near existing services and places of employment.</p>
<p><b>Plan for growth around Livable Corridors.</b> SCAG’s livable corridors strategy seeks to revitalize commercial strips through integrated transportation and land use planning that results in increased economic activity and improved mobility options.</p>	<p>Additional livable corridors strategies include:</p> <ul style="list-style-type: none"> <li>▪ Transit improvements, including dedicated lane Bus Rapid Transit (BRT) or semi-dedicated BRT-light. The remaining corridors have the potential to support other features that improve bus performance (enhanced bus shelters, real-time travel information, off-bus ticketing, all door boarding and longer distances between stops to improve speed and reliability).</li> <li>▪ Active transportation improvements: Livable corridors include increased investments in complete streets to make these corridors and the intersecting arterials safe for biking and walking.</li> <li>▪ Land use policies: Livable Corridor strategies include the development of mixed-use retail centers at key nodes along the corridors, increasing neighborhood-oriented retail at more intersections and zoning that allows for the replacement of under-performing auto-oriented strip retail between nodes with higher density residential and employment.</li> </ul>	<p><b>Consistent:</b> The proposed project is not within a transportation corridor. not within a high-quality transit corridor. However, the project would replace an under-performing, auto-oriented mall with a mixed-use higher density residential development with accompanying neighborhood-oriented retail and restaurant uses. Additionally, the proposed project would provide a minimum of four open rack bicycle spaces for short-term parking and four covered and secured bicycle lockers for long-term parking. Furthermore, pedestrian access to the site would be from multiple points, including all building façades facing Scott Drive, Corinthian Way, Dove Street, and Martingale Way, to promote easy pedestrian access. Private passageways would connect the residential uses to the street, and public passageways would connect the retail space and the public park. Where modes intersect (i.e., streets and sidewalks), accessible ramps would be incorporated</p>

## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

**Table 5.6-8 SCAG 2016 RTP/SCS Transportation Land Use Strategies Consistency**

Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
<p><b>Provide more options for short trips in Neighborhood Mobility Areas and Complete Communities:</b> Neighborhood mobility areas have a high intersection density, low to moderate traffic speeds and robust residential retail connections. These areas are suburban in nature, but can support slightly higher density in targeted locations. The land use strategies include shifting retail growth from large centralized retail strip malls to smaller distributed centers throughout a neighborhood mobility area.</p>	<ul style="list-style-type: none"> <li>▪ Neighborhood mobility area land use strategies include pursuing local policies that encourage replacing motor vehicle use with Neighborhood Electric Vehicle (NEV) use. NEVs are a federally designated class of passenger vehicle rated for use on roads with posted speed limits of 35 miles per hour or less. Steps needed to support NEV use include providing state and regional incentives for purchases, local planning for charging stations, designating a local network of low speed roadways and adopting local regulations that allow smaller NEV parking stalls</li> <li>▪ Complete communities strategies include creation of mixed-use districts through a concentration of activities with housing, employment, and a mix of retail and services, located in close proximity to each other. Focusing a mix of land uses in strategic growth areas creates complete communities wherein most daily needs can be met within a short distance of home, providing residents with the opportunity to patronize their local area and run daily errands by walking or cycling rather than traveling by automobile.</li> </ul>	<p><b>Consistent:</b> The proposed project would be an infill redevelopment project that would develop 350 multifamily dwelling units and ancillary retail and restaurant uses in a predominantly office/commercial area. It would provide housing options closer to the existing office/commercial uses in addition to retail amenities.</p>

Source: SCAG 2016.

*Level of Significance before Mitigation:* Impact 5.6-2 would be less than significant.

### 5.6.5 Cumulative Impacts

Project-related GHG emissions are not confined to a particular air basin, but are dispersed worldwide. Therefore, impacts identified under Impact 5.6-1 are not project-specific impacts to global warming, but the proposed project's contribution to this cumulative impact. As discussed above, because the proposed project would not exceed SCAQMD's bright-line screening criteria, the proposed project's GHG emissions and contribution to global climate change impacts are not considered cumulatively considerable.

### 5.6.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, all impacts would be less than significant: 5.6-1 and 5.6-2.

### 5.6.7 Mitigation Measures

No mitigation measures are required.

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

#### 5.6.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.6.9 References

- California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.
- California Air Resources Board. 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.
- . 2007, November. California Air Resources Board 1990 Inventory. California Greenhouse Gas Inventory (millions of metric tonnes of CO<sub>2</sub> equivalent) — Summary by Economic Sector. <https://www.arb.ca.gov/cc/inventory/1990level/1990data.htm>.
- . 2010, August. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.
- . 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. <http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.
- . 2017a, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.
- . 2017b, June 6. 2017 Edition California Greenhouse Gas Inventory for 2000-2015: By Category as Defined in the 2008 Scoping Plan. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.
- . 2017c, June 6. California Greenhouse Emissions for 2000 to 2015 – Trends of Emissions and Other Indicators. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.
- . 2017d, November. California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target. [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_pp\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf).
- . 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. [https://www.arb.ca.gov/cc/sb375/sb375\\_target\\_update\\_final\\_staff\\_report\\_feb2018.pdf](https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf).
- California Climate Action Team (CAT). 2006, March. Climate Action Team Report to Governor Schwarzenegger and the Legislature.
- California Climate Change Center (CCCC). 2012, July. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California.



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

- California Department of Finance (CDOF). 2018, March 8. Report P-1 (County): State and County Total Population Projections, 2010-2060 (1 -year increments).  
<http://www.dof.ca.gov/Forecasting/Demographics/Projections/>.
- California Department of Transportation (Caltrans). 2017. Long-Term Socio-Economic Forecasts by County.  
[http://www.dot.ca.gov/hq/tpp/offices/eab/socio\\_economic.html](http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic.html).
- California Energy Commission (CEC). 2006. Our Changing Climate: Assessing the Risks to California. 2006 Biennial Report. CEC-500-2006-077. California Climate Change Center.
- . 2009, May. The Future Is Now: An Update on Climate Change Science, Impacts, and Response Options for California. CEC-500-2008-0077.
- . 2015. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation.  
<http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/> June 10.
- .2018a. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation.  
[http://www.energy.ca.gov/releases/2018\\_releases/2018-05-09\\_building\\_standards\\_adopted\\_nr.html](http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html).
- .2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions.  
[http://www.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).California Natural Resources Agency. 2014, July. Safeguarding California: Reducing Climate Risk, An Update to the 2009 California Climate Adaptation Strategy.
- California Natural Resources Agency. 2014, July. Safeguarding California: Reducing Climate Risk, An Update to the 2009 California Climate Adaptation Strategy.
- Governor's Office of Planning and Research (OPR). 2008, June. CEQA and Climate Change: Addressing Climate Change through CEQA Review. Technical Advisory.  
<http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>.
- Institute of Transportation Engineers (ITE). 2017, September. Trip Generation Manual, 10th Edition.
- Intergovernmental Panel on Climate Change (IPCC). 1995. *Second Assessment Report: Climate Change 1995*.
- . 2001. *Third Assessment Report: Climate Change 2001*. New York: Cambridge University Press.
- . 2007. *Fourth Assessment Report: Climate Change 2007*. New York: Cambridge University Press.
- . 2013. *Fifth Assessment Report: Climate Change 2013*. New York: Cambridge University Press.
- LSA Associates. 2018, July. *Traffic Impact Analysis: Newport Crossings*.

## 5. Environmental Analysis

### GREENHOUSE GAS EMISSIONS

Office of Environmental Health Hazards Assessment (OEHHA). 2018, May. Indicators of Climate Change in California. <https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf>.

South Coast Air Quality Management District (SCAQMD). 2009, November 19. GHG Meeting 14 Main Presentation. Greenhouse Gases (GHG) CEQA Significance Threshold Working Group. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).

———. 2010a, September 28. Agenda for Meeting 15. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2).

———. 2010b, September 28. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf).

Southern California Association of Governments (SCAG). 2016, April 7. Final 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. <http://scagrtpscscs.net/Pages/FINAL2016RTPSCS.aspx>.

US Environmental Protection Agency (USEPA). 2009, December. EPA: Greenhouse Gases Threaten Public Health and the Environment: Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity. [https://archive.epa.gov/epapages/newsroom\\_archive/newsreleases/08d11a451131bca585257685005bf252.html](https://archive.epa.gov/epapages/newsroom_archive/newsreleases/08d11a451131bca585257685005bf252.html).

## 5. Environmental Analysis

### 5.7 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the Newport Crossings Mixed-Use project (proposed project) on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary. The analysis in this section is based, in part, upon the following source(s):

- *Phase I Environmental Site Assessment Performed on: MacArthur Square [8 addresses specified on Corinthian Way, Martingale Way, Scott Drive, and Dove Street], Newport Beach, California 92660.* BBG Assessment, February 7, 2017. A complete copy of this study is included as Appendix F.1 to this DEIR.
- *Phase II Investigation Report*, Leymaster Environmental Consulting, Inc., April 22, 2013. A complete copy of this study is included as Appendix F.2 to this DEIR.
- *Technical Memorandum (Soil and Soil Gas Investigation Report)*, AECOM, May 18, 2017. A complete copy of this study is included as Appendix F.3 to this DEIR.

#### 5.7.1 Environmental Setting

##### 5.7.1.1 REGULATORY FRAMEWORK

Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

##### **Federal**

##### *Comprehensive Environmental Response, Compensation and Liability Act*

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List, which are called Superfund sites. This law (U.S. Code Title 42, Chapter 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

##### *Emergency Planning and Community Right-To-Know Act*

In 1986, Congress passed the Superfund Amendments and Reauthorization Act. Title III of this regulation is called the “Emergency Planning and Community Right-to-Know Act of 1986” (EPCRA). The act required the establishment of state commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plan. Under its requirements, local emergency planning committees

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

(LEPCs) are responsible for developing a plan for preparing for and responding to a chemical emergency, including:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting drills to test the plan.

The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The Orange County Environmental Health Department (OC EHD) is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city departments and local and state agencies. The goal is to improve public and private sector readiness and to mitigate local impacts resulting from natural or manmade emergencies.

Another purpose of the EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to state and local agencies the location and quantities of chemicals stored onsite. Under section 313 of EPCRA, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are also required to report offsite transfers of waste for treatment or disposal at separate facilities, pollution prevention measures, and chemical recycling activities. The US Environmental Protection Agency (EPA) maintains the Toxic Release Inventory database that documents the information that regulated facilities are required to report annually.

#### *Resource Conservation and Recovery Act*

The Resource Conservation and Recovery Act (RCRA) is the principal federal law that regulates generation, management, and transportation of hazardous waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste.

#### *Clean Water Act*

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the Waters of the United States<sup>1</sup> and gives the federal Environmental Protection Agency (EPA) the authority to implement pollution-control programs, such as setting wastewater standards

---

<sup>1</sup> Waters of the United States generally include surface waters—lakes, rivers streams, bays, the ocean, dry streambeds, wetlands, and storm sewers that are tributary to any surface water body.

## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

for industry. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution.

Several sections of the Clean Water Act are discussed in Section 5.8, *Hydrology and Water Quality*, of this DEIR.

### *Hazardous Waste Operations and Emergency Response Standards*

OSHA issued the Hazardous Waste Operations and Emergency Response (HAZWOPER) standards, 29 CFR 1910.120 and 29 CFR 1926.65, to protect workers and enable them to handle hazardous substances safely and effectively. The latter standard is for the construction industry and is identical to 29 CFR 1910.120.

The HAZWOPER standard covers employers performing the following general categories of work operations:

- Hazardous waste site cleanup operations.
- Operations involving hazardous waste that are conducted at treatment, storage, and disposal (TSD) facilities.
- Emergency response operations involving hazardous substance releases.

The HAZWOPER standards provide information and training criteria to employers, emergency response workers, and other workers potentially exposed to hazardous substances to improve workplace safety and health and reduce workplace injuries and illnesses from exposures to hazardous substances. It is critical that employers and their workers understand the scope and application of HAZWOPER and can determine which sections apply to their specific work operations.

### *Title 40, Code of Federal Regulations, Section 61 Subpart M*

Title 40 CFR Section 61 Subpart M—National Emissions Standards for Asbestos—sets forth emissions standards for asbestos from demolition and renovation activities, and for waste disposal from such activities.

### *Title 29, Code of Federal Regulations, Section 1926.62*

Title 29 CFR Section 1926.62, sets standards for occupational health and environmental controls for lead exposure in construction, regardless of the lead content of paints and other materials. The standards include requirements addressing exposure assessment, methods of compliance, respiratory protection, protective

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation and monitoring.

#### *Title 14, Code of Federal Regulations, Part 77*

Title 14 CFR Part 77 comprises Federal Aviation Regulations Part 77 which, in part, governs obstructions to navigation within specified areas above and surrounding airports. Part 77 requires notification of the Federal Aviation Administration (FAA) before construction of structures above certain heights.

### **State**

#### *Hazardous Materials Release Notification*

Many state statutes require emergency notification of a hazardous chemical release:

- California Health and Safety Codes Sections 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Codes Sections 13271, 13272,
- California Labor Code Section 6409.1 (b)10

Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. In addition, all releases that result in injuries or harmful exposure to workers must be immediately reported to the California Occupational Safety and Health Administration pursuant to the California Labor Code Section 6409.1(b).

#### *Uniform Hazardous Waste and Hazardous Materials Management Regulatory Program*

The Unified Program administered by the State of California consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs, which include: Hazardous Materials Release Response Plans and Inventories (business plans), the California Accidental Release Prevention (CalARP) Program, and the Underground Storage Tank (UST) Program. The Unified Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs).

The CUPA for the Newport Beach area is the OC EHD, which is responsible for regulating hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, aboveground storage tanks, and risk management plans.



## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

### *Hazardous Materials Business Plans*

Both the federal government (CFR) and the State of California (California Health and Safety Code) require all businesses that handle more than a specified amount—or “reporting quantity”—of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its CUPA. According to the EHD guidelines, the preparation, submittal, and implementation of a business plan is required by any business that handles a hazardous material or a mixture containing a hazardous material in specified quantities.

Business plans must include an inventory of the hazardous materials at the facility. Businesses must update the whole plan at least every three years and the chemical portion every year. Also, business plans must include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures for immediate notification of all appropriate agencies and personnel, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

The EHD currently reviews submitted business plans and updates. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. The EHD is also charged with the responsibility of conducting compliance inspections of regulated facilities in Orange County.

### *California Accidental Release Prevention Program*

CalARP became effective on January 1, 1997, in response to Senate Bill 1889 (Chapter 715, Statutes of 1996). CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. This requirement is coupled with the requirements for preparation of hazardous materials business plans under the Unified Program, implemented by the CUPA.

### *Leaking Underground Storage Tanks*

Leaking USTs have been recognized since the early 1980s as the primary cause of groundwater contamination from gasoline compounds and solvents. In California, regulations aimed at protecting against UST leaks have been in place since 1983 (Health and Safety Code). This was a year before RCRA was amended to add Subtitle I, which required UST systems to be installed in accordance with standards that address the prevention of future leaks. The State Water Resources Control Board has been designated the lead California regulatory agency in the development of UST regulations and policy.

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

Older tanks are typically single-walled steel tanks. Many of these have leaked as a result of corrosion, punctures, and detached fittings. As a result, the State of California required the replacement of older tanks with new double-walled fiberglass tanks with flexible connections and monitoring systems. UST owners were given 10 years to comply with the new requirements—the deadline was December 22, 1998. However, many UST owners did not act by the deadline, so the state granted an extension for their replacement ending January 1, 2002. The California Regional Water Quality Control Boards, in cooperation with the Office of Emergency Services, maintain an inventory of leaking USTs in a statewide database.

#### *California Code of Regulations, Title 22, Division 4.5*

Title 22, Division 4.5, of the California Code of Regulations (CCR) sets forth the requirements for hazardous-waste generators; transporters; and owners or operators of treatment, storage, or disposal facilities. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste. These regulations specify the requirements for transporting shipments of hazardous waste, including manifesting, vehicle registration, and emergency accidental discharges during transportation.

#### *California Fire Code*

The 2013 California Fire Code (CCR Title 24 Part 9) sets requirements pertaining to fire safety and life safety, including for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials.

#### *California Building Code*

**CCR Title 24, Part 2, Section 907.2.11.2.** Smoke alarms shall be installed and maintained on the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms, in each room used for sleeping purposes, and in each story within a dwelling unit. The smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup.

#### *California Health and Safety Code, Sections 17920.10 and 105255*

Lead must be contained during demolition activities.

#### *8 CCR Sections 1529 and 1532.1: Worker Safety Standards: Asbestos and Lead*

CCR Title 8 Section 1529 sets forth worker safety standards for lead exposure for employees conducting demolition, construction, and renovation work, including painting and decorating.

CCR Title 8 Section 1532.1 sets forth worker safety standards for employees in work including construction, demolition, renovation, and maintenance.

## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

### Regional

#### *South Coast Air Quality Management District*

SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing material (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage and disposal requirements for asbestos-containing waste materials.

### Local

#### *City of Newport Beach Fire Department Fire Prevention Guidelines*

The Newport Beach Fire Department Life Safety Division has set fire prevention guidelines that address such matters as fire flow, fire access, building construction, flammable and combustible liquids, and fire protection systems.

#### *Newport Beach Municipal Code: Building Height Limits for Airport Environs*

Building height limits within the height restriction zone designated in the Airport Environs Land Use Plan for John Wayne Airport are regulated under Section 20.30.060(E), Height Limits and Exceptions, of the Newport Beach Municipal Code.

- E. Airport Environs Land Use Plan (AELUP) for John Wayne Airport and Airport Land Use Commission (ALUC) Review Requirements.
  - 1. AELUP Requirements.
    - a. Buildings and structures shall not penetrate Federal Aviation Regulation (FAR) Part 77, Obstruction—Imaginary Surfaces, for John Wayne Airport unless approved by the Airport Land Use Commission (ALUC).
    - b. In compliance with FAR Part 77, applicants proposing buildings or structures that penetrate the 100:1 Notification Surface shall file a Form 7460-1, Notice of Proposed Construction or Alteration with the FAA. A copy of the FAA application shall be submitted to the ALUC and the applicant shall provide the City with FAA and ALUC responses.
  - 2. Citywide Requirements. Development projects that include structures higher than two hundred (200) feet above existing grade shall be submitted to the Airport Land Use Commission (ALUC) for review. In addition, projects that exceed a height of two hundred (200) feet above existing grade shall file Form 7460-1 with the Federal Aviation Administration (FAA). (Ord. 2012-11 § 1 (Exh. A), 2012; Ord. 2010-21 § 1 (Exh. A)(part), 2010).

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

#### 5.7.1.2 EXISTING CONDITIONS

##### Historical Uses of Property and Previous Environmental Site Assessments

Historical uses of the site were assessed from historical aerial photographs and City of Newport Beach building records. The site is shown in agricultural use in four aerial photographs dated 1938 through 1963. The existing MacArthur Square commercial development was built in phases from the early 1970s through the 1980s.

##### *Phase I and Phase II Environmental Site Assessments: 2013 and 2013*

A Phase I Environmental Site Assessment (ESA) of the proposed project site was completed in July 2012, and a Phase II Limited Subsurface Investigation of the site was completed in April 2013, both by Leymaster Environmental Consulting, LLC.

A former dry cleaner, Enjay Cleaners, operated onsite at 1701 Corinthian Way Suite H from 1984 through 1997. Green Hanger Cleaners reportedly operated at 4250 Scott Drive from 2002 through 2015; that space is currently vacant. All dry-cleaning equipment and materials have been removed from the former Green Hanger Cleaners location. In addition, areas of vinyl tile flooring were removed. Minor areas of staining indicative of typical daily operations were noted, but no staining indicative of significant leaks, spills, or releases was observed. Green Hanger Cleaners reportedly used hydrocarbon-based cleaning solvents. Additionally, Emerald Cleaners, 4341 MacArthur Blvd., has been present opposite Corinthian Way northeast of the proposed project since 1996. Perchloroethylene (PCE), though not used as the primary cleaner, may have been used for spot treatment, and low levels of PCE have been detected at facilities using hydrocarbon solvents.

##### *Soil Vapor Sampling and Testing: 2013*

The 2013 Phase II investigation included three subslab soil-vapor samples collected from directly beneath the slab below the former dry cleaner at 4250 Scott Drive. In addition, seven subsurface soil vapor samples were collected from the property perimeter at depths of 5 feet bgs. The PCE concentration in one of the three subslab samples was 0.73 µg/L (that is, 0.73 part per billion), above the California Health Hazard Screening Level (CHHSL) of 0.48 µg/L for residential land use; concentrations in the other two samples were below the CHHSL. The location this sample was taken from is shown in Figure 5.7-1, *Soil and Soil Vapor Sampling Locations*. Soil vapor samples from two of the seven locations sampled on the site perimeter yielded PCE concentrations of 1.5 and 1.4 µg/L, respectively, also above the CHHSL for residential use. One location is on the northwest site boundary, and the other is on the northern part of the eastern site boundary (see Figure 5.7-1). The concentrations of PCE detected indicated groundwater contamination may be present.

##### *Soil and Soil Vapor Sampling and Testing: 2017*

In 2017 eight borings were made in the site for soil and soil vapor sampling. Four were in the north end of the proposed project site near locations where subslab soil vapor samples were obtained and tested in 2013. The remaining four were in the central part of the site (see Figure 5.7-1). Soil vapor samples were obtained from seven of the borings; no sample was obtained from one of the borings in the central part of the site due to no-flow conditions.

## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

Volatile organic compounds (VOCs) were not detected in any of the soil samples except one acetone detection. Therefore, there is no evidence of a release from the historical dry cleaner operations.

PCE was the only compound detected in soil vapor that exceeded its residential screening value for indoor vapor intrusion (0.48 µg/L). PCE soil gas detection in probes SV-8 through SV-11 exceeded the residential screening levels at 5 feet below ground surface (bgs). In each of these probes, concentrations were higher at 15 feet bgs compared with concentrations at 5 feet bgs (see Table 5.7-1 below), indicating that the detections were likely associated with regional groundwater impacts.

**Table 5.7-1 Perchloroethylene Soil Vapor Concentrations Exceeding CHHSL for Residential Land Use, 2017, µg/L**

Soil Vapor Probe <sup>1</sup>	Soil Vapor PCE Concentration (µg/L)	
	5 feet bgs	15 feet bgs
SV-8	1.3	3.9
SV-9	1.3	4.4
SV-10	1.1	4.4
SV-11	1.2	4.4

Source: AECOM 2017.

CHHSL = California Health Hazard Screening Level

<sup>1</sup> Probe locations are shown on Figure 5.7-1, *Soil and Soil Vapor Sampling Locations*.

### *Human Health Risk Assessment: 2017*

A human health risk assessment was conducted on concentrations of hazardous chemical identified at five feet bgs in the 2017 soil vapor testing. The cancer risk estimated for the highest soil vapor concentration of each chemical from the entire project site is four in one million (0.000004), above the State standard of one in one million (0.000001) acceptable for residential land use. The corresponding cancer risk for the three soil vapor concentrations from the southern part of the project site was one in one million, considered acceptable for residential use. The noncancer hazard indices were well below 1.0, the level considered acceptable for residential use.

### **Environmental Records Search Results**

#### *On-Site Listings*

MacArthur Square Cleaners, formerly at 1701-H Corinthian Way, was identified on the Emissions Inventory Data (EMI), Resource Conservation and Recovery Act Small-Quantity Generator (RCRA-SQG), Enforcement and Compliance History Online (ECHO), Facility Index System (FINDS), HAZNET, and EDR Historical Cleaner databases. MacArthur Cleaners was present by 1986 through at least 2005.

Green Hanger Cleaners at 4250 Scott Drive, was identified on the EDR Historical Cleaner and DRYCLEANERS databases. Both former dry-cleaners are considered recognized environmental conditions (REC) for the project site. The subsurface soil vapor samples described above were taken from below the sites of these two former cleaners.

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

Bacons Airport Photo Inc., which formerly operated on-site at 4251-B Martingale Way, was identified on the RCRA-SQG database. This former business is not considered a REC (see Appendix F.1 for further discussion).

#### *Off-Site Listings*

The Phase I ESA included a search of environmental records within radii of up to one mile from the project site, depending on the type of site listed. Off-site hazardous materials sites identified in the records search and discussed in the ESA are listed below in Table 5.7-2. None of these sites are considered RECs for the proposed project site due to distance from the project site, and regulatory cases for many of these sites have been closed.

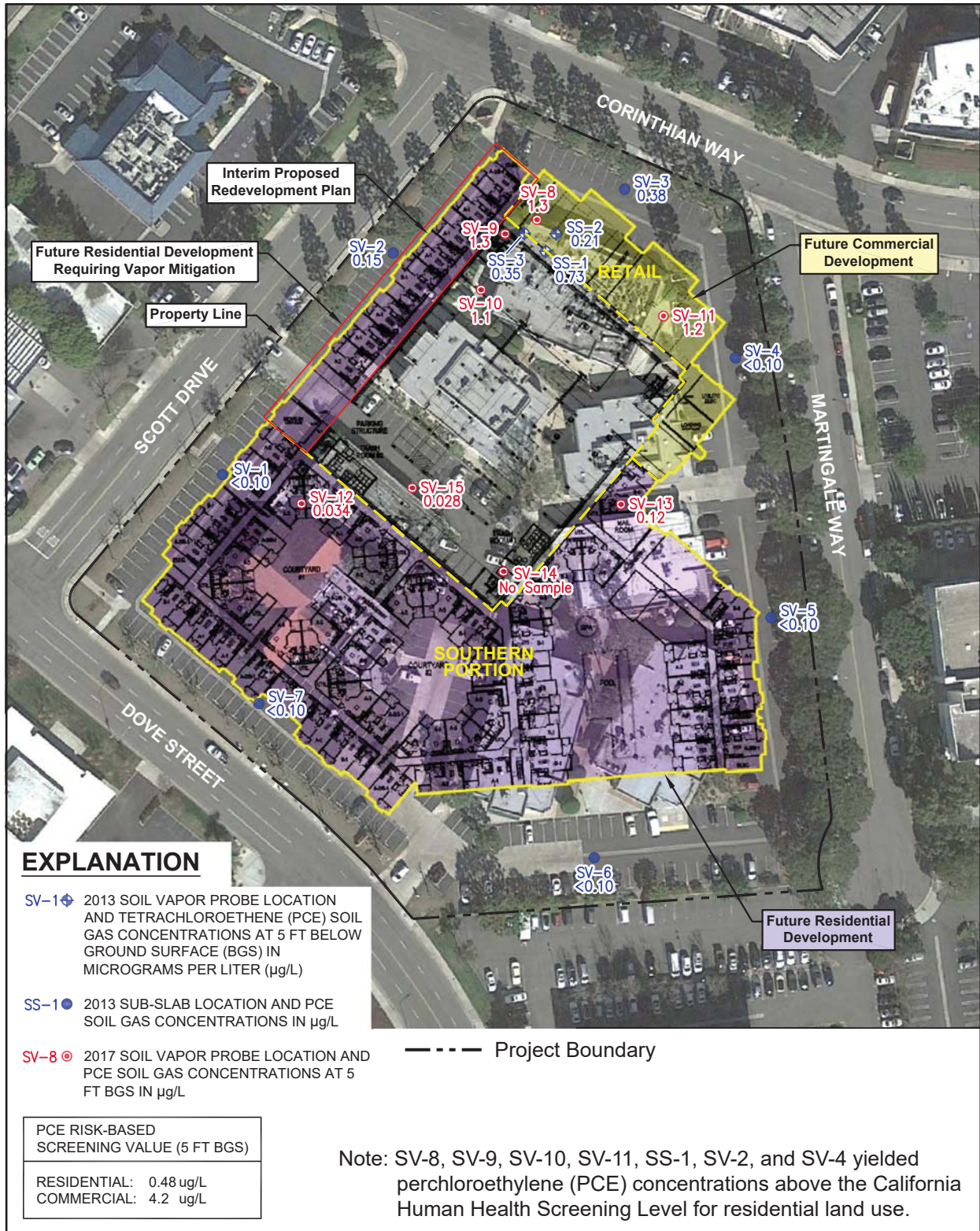
**Table 5.7-2 Offsite Hazardous Materials Sites Listings**

Site Address Distance and Direction from Project Site	Database Reason for Listing Regulatory Status
Sierracin Transmask Corp. 2952 Campus Drive 0.266 mile west	Superfund Enterprise Management System (SEMS) Archive Archived 1985
Accupath Diagnostic 2601 Campus Drive 0.525 mile ENE	RCRA (Resource Conservation and Recovery Act) CORRACTS (Hazardous waste handlers with Corrective Action activity)
Mallinckrodt Medical 18691 Jamboree Road 0.832 mile ENE	RCRA CORRACTS
Emerald Cleaners 4341 MacArthur Blvd NE opposite Corinthian Way	RCRA Small Quantity Generators of hazardous wastes (SQG)
Rockwell Semiconductor 4311 Jamboree Road 0.348 mile southeast	EnviroStor: Sites with known contamination or reason for further investigation. Inactive; needs evaluation
Orange County Airport 0.468 mile northwest	EnviroStor Military evaluation site; needs evaluation 2005.
Beacon Bay Auto Wash 4200 Birch Street West of site opposite Scott Pl	Leaking underground storage tank (LUST) Gasoline release affected groundwater other than drinking water Case closed 2014
	Permitted underground storage tanks (USTs)
Koll Co. 4400 MacArthur Blvd 675 feet east	LUST Diesel release affected soil Case closed 1993
Edler Industries Inc. 2101 Dove Street 700 feet southwest	LUST Release of waste oil affected soil Case closed 1991
Sheraton Hotel Newport 4545 MacArthur Blvd 725 feet north	UST

Source: BBG 2017.



Figure 5.7-1 - Soil and Soil Vapor Sampling Locations  
5. Environmental Analysis



## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

*This page intentionally left blank.*

## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

### Asbestos-Containing Materials

Asbestos is the name of a group of silicate minerals that are heat resistant, and thus were commonly used as insulation and fire retardant. Inhaling asbestos fibers has been shown to cause lung disease (asbestosis) and lung cancer (mesothelioma) (DTSC 2010). ACM is often classified as either friable (that is, can be crumbled by hand) or nonfriable, which can be crumbled or pulverized using power tools. When asbestos-containing materials are damaged or disturbed by repair, remodeling, or demolition activities, microscopic fibers become airborne and can be inhaled. Friable ACM is more likely to release fibers when disturbed or damaged than nonfriable ACM.

Beginning in the early 1970s, a series of bans on the use of certain ACMs in construction were established by the EPA and the Consumer Product Safety Commission. Most US manufacturers voluntarily discontinued the use of asbestos in certain building products during the 1980s. Requirements for limiting asbestos emissions from building demolition and renovation activities are specified in SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection and good working practice by workers exposed to lead and asbestos-containing materials (ACM).

A limited visual screening for ACM was conducted onsite in January 2017. The potential for the presence of ACM was evaluated based on the age of the improvements, dates of renovation, and other relevant information. Suspect materials observed during the screening include vinyl flooring, vinyl flooring mastic, textured coatings, lay-in ceiling panels, roofing materials, wallboard, and joint compound. The suspect materials were observed to be in conditions ranging from good to poor. Damaged materials were observed in various vacant tenant spaces. This limited visual screening is not an asbestos survey, during which all suspect ACM would have been identified and sampled. ACM other than those identified by the screening could be present onsite.

### Lead-Based Paint

Lead was formerly used as an ingredient in paint (before 1978) and as a gasoline additive; both uses have been banned. Lead is listed as a reproductive toxin and a cancer-causing substance; it also impairs the development of the nervous system and blood cells in children (DTSC 2010). Lead-based paint is defined in Code of Federal Regulations Title 40 Part 745 as paint or other surface coatings that contain lead equal to or more than 1.0 milligram per square centimeter or 0.5 percent by weight. Those demolishing pre-1978 structures may presume the buildings contain lead-based paint (LBP) without having an inspection for LBP. Lead must be contained during demolition activities (California Health & Safety Code sections 17920.10 and 105255). Title 29 Code of Federal Regulations (CFR) Part 1926 establishes standards for occupational health and environmental controls for lead exposure. The standard also includes requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation or monitoring.

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

Based on the pre-1979 date of construction of Phase 1 of MacArthur Square, it is possible LBP was used at the property. The possible presence of LBP onsite was identified as a “business environmental risk” by the ESA—that is, a risk that can have a material environmental or environmentally driven impact on current or future businesses onsite.

#### **Airport-Related Hazards**

The proposed project is in Safety Zone 6 designated in the Airport Environs Land Use Plan (AELUP) for John Wayne Airport (JWA) issued by the Orange County Airport Land Use Commission in 2008. Outdoor stadiums and similar uses with very high intensities are prohibited in Zone 6. Children’s schools, large day care centers, hospitals, and nursing homes should be avoided. Residential uses and most nonresidential uses are permitted (OCALUC 2008).

There are no heliports within one mile of the project site other than JWA (Airnav.com 2018).

The proposed project is also in an area surrounding JWA where structure heights are regulated under Federal Aviation Administration (FAA) Regulations Part 77 for preservation of navigable airspace. The maximum structure height permitted at the project site is 206 feet above mean sea level (amsl) (OCALUC 2008). The elevation onsite ranges from 48 feet amsl at the southwest corner of the site to 53 feet amsl at the northeast corner. Thus, based on the higher of those two elevations, the maximum structure height permitted on-site is about 153 feet above ground level.

#### **Emergency Response Planning**

The City of Newport Beach Emergency Operations Plan, approved by the City Council in 2011, specifies roles and responsibilities of various City agencies in each of the four phases of emergency management: mitigation, preparedness, response, and recovery; and contains assessments of numerous types of natural and man-made hazards.

### **5.7.2 Thresholds of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- H-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.



## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

- H-4 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard for people residing or working in the project area.
- H-6 For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- H-7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- H-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.

No impacts were identified related to thresholds H-7 and H-8; these thresholds are analyzed in Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR.

### 5.7.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address hazards and hazardous materials impacts follow.

#### 5.7.3.1 REGULATORY REQUIREMENTS

- RR HAZ-1 Any project-related hazardous materials and hazardous wastes will be transported to and/or from the project site in compliance with any applicable state and federal requirements, including the US Department of Transportation regulations listed in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); California Department of Transportation standards; and the California Occupational Safety and Health Administration standards.
- RR HAZ-2 Any project-related hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with the Subtitle C of the Resource Conservation and Recovery Act (Code of Federal Regulations, Title 40, Part 263), including the management of nonhazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The proposed project will be designed and constructed in accordance with the regulations of the Orange County Environmental Health Department, which serves as the designated Certified Unified Program Agency and which implements state and federal regulations for the following programs: (1) Hazardous Waste Generator Program, (2) Hazardous Materials Release Response Plans and Inventory Program, (3)

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

California Accidental Release Prevention, (4) Aboveground Storage Tank Program, and (5) Underground Storage Tank Program.

RR HAZ-3 Any project-related demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing materials or lead-based paint will be conducted in accordance with applicable regulations, including, but not limited to:

- South Coast Air Quality Management District's Rule 1403
- California Health and Safety Code (Section 39650 et seq.)
- California Code of Regulations (Title 8, Section 1529)
- California Occupational Safety and Health Administration regulations (California Code of Regulations, Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead])
- Code of Federal Regulations (Title 40, Part 61 [asbestos], Title 40, Part 763 [asbestos], and Title 29, Part 1926 [asbestos and lead])

RR HAZ-4 The removal of other hazardous materials, such as polychlorinated biphenyls (PCBs), mercury-containing light ballast, and mold, will be completed in accordance with applicable regulations pursuant to 40 CFR 761 (PCBs), 40 CFR 273 (mercury-containing light ballast), and 29 CFR 1926 (molds) by workers with the hazardous waste operations and emergency response (HAZWOPER) training, as outlined in 29 CFR 1910.120 and 8 CCR 5192.

RR HAZ-5 Any project-related new construction, excavations, and/or new utility lines within 10 feet or crossing existing high-pressure pipelines, natural gas/petroleum pipelines, or electrical lines greater than 60,000 volts will be designed and constructed in accordance with the California Code of Regulations (Title 8, Section 1541).

#### 5.7.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to hazards and hazardous materials that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

### 5.7.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Thresholds HAZ-7 and HAZ-8 have no impacts and will be included under Chapter 8.



## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

---

**Impact 5.7.1: Project construction [and/or] operations would involve the transport, use, and/or disposal of hazardous materials. Such transport, use, and/or disposal would not cause substantial hazards to the public or the environment. [Thresholds H-1, H-2, and H-3]**

---

### *Impact Analysis:*

#### **Project Operation**

Operation of the proposed residential, retail, and restaurant uses would involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, the proposed land uses are not associated with uses that use, generate, store, or transport large quantities of hazardous materials; such uses generally include manufacturing, industrial, medical (e.g., hospital), and other similar uses.

Additionally, the use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the US Environmental Protection Agency, US Department of Transportation, California Division of Occupational Safety and Health, and OC EHD.<sup>2</sup> Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts.

The proposed project would also be constructed and operated with strict adherence to all emergency response plan requirements set forth by OC EHD and the Newport Beach Fire Department. Furthermore, residents of Newport Beach (including those of the proposed project) have access to the City's Household Hazardous Waste Collection curbside service. Residents simply contact the City's household hazardous waste specialists (CR&R Disposal) to schedule the pickup of household hazardous waste (e.g., electronics, paint, cleaners, aerosol cans, motor oil, antifreeze, batteries, pesticides, fluorescent light bulbs).

Therefore, substantial hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during long-term operation of the proposed project would not occur. Impacts would be less than significant and no mitigation measures are necessary.

#### **Project Construction**

Project-related construction activities would involve the use of larger amounts of hazardous materials than would project operation. Construction activities would include the use of materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature and would cease upon completion of the construction phase. Project construction workers would also be trained in safe handling and hazardous materials use.

---

<sup>2</sup> OC EHD is the Certified Unified Program Agency (CUPA) for most of Orange County, including the City of Newport Beach; the Certified Unified Program coordinates and makes consistent enforcement of several state and federal regulations governing hazardous materials.

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

Additionally, as with project operation, the use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Furthermore, strict adherence to all emergency response plan requirements set forth by OC EHD would be required through the duration of the project construction phase. Therefore, hazards to the public or the environment arising from the routine use of hazardous materials during project construction would be less than significant and no mitigation measures are necessary.

#### Schools

There are no schools within 0.25 mile of the project site, and project development would not emit hazardous substances or handle hazardous materials within 0.25 mile of an existing or proposed school.

*Level of Significance before Mitigation:* With implementation of RR HAZ-1 through RR HAZ-5, Impact 5.7-1 would be less than significant.

---

#### **Impact 5.7-2: The project site is on a list of hazardous materials sites. [Threshold H-4]**

---

##### *Impact Analysis:*

#### **Onsite Soil and Soil Vapor Testing Results**

The 2017 Phase I ESA identified historical dry cleaners onsite and an existing dry cleaner across Corinthian Way from the northeast site boundary as a REC for the project site.

The 2017 soil vapor testing identified perchloroethylene concentrations above the CHHSL for residential land use (0.48 µg/L) from all four soil vapor probes in the north end of the project site; concentrations at 5 feet bgs ranged from 1.1 to 1.3 µg/L. PCE concentrations in soil vapor samples from 15 feet bgs ranged from 3.9 to 4.4 feet µg/L, suggesting that the PCE detected was likely associated with regional groundwater contamination. PCE is toxic and listed as a carcinogen under Proposition 65 (DTSC 2018). Groundwater was encountered under the site at about 30 feet bgs in borings made as part of a 2014 geotechnical investigation of the site (Geocon West 2014).

A human health risk assessment based on the 2017 soil vapor testing found that cancer risk estimated for the highest soil vapor concentration of each chemical from the entire project site is four in one million (0.000004), above the state standard of one in one million (0.000001) for residential land use. The corresponding cancer risk for the three soil vapor concentrations from the southern part of the project site

## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

was one in one million, considered acceptable for residential use. The noncancer hazard indices were well below 1.0, the level considered acceptable for residential use.

The 2017 soil and soil gas investigation technical memorandum recommended mitigation for soil vapor consisting of a passive vapor barrier with the following components:

- **Subslab Ventilation System:** A subslab collection and ventilation system should be installed under the five-story section of the residential building along Scott Drive. The system should consist of a series of PVC (polyvinyl chloride) gas collection pipes embedded in a permeable gravel layer. The collection pipes should be networked together and vented to the atmosphere. The purpose of the vent system will be to prevent the buildup or accumulation of VOCs in the underlying soil; the gases instead are passively diverted into the venting system and safely discharged to the atmosphere away from occupied areas and air intake vents.
- **Membrane Barrier:** A horizontal synthetic membrane or a sprayed-on liner should be placed over the granular collection layer. The membrane provides a barrier to the intrusion of subsurface gases.
- **Utility Trench Dams and Conduit Seals:** Gas barriers should be installed in the permeable backfill of utility trenches or the hollow spaces of electrical or cable conduit piping to prevent gases from migrating laterally into the soils beneath the building. The conduit seals can consist of polyurethane foam that is injected into the conduit piping at the point where the conduit enters the structure to prevent the infiltration of subsurface gases into interior space.

The 2017 Phase I ESA also stated that a vapor barrier would be needed below an underground parking structure.

The Phase II ESA completed on-site in 2013 found a concentration of 0.73 µg/L—exceeding the CHHSL for residential use, 0.48 µg/L—in one of three subslab soil vapor samples collected from beneath the site of two former dry-cleaning businesses in the north end of the project site. Concentrations above the CHHSL—1.5 and 1.4 µg/L, respectively—were also identified in two of seven soil vapor samples collected from the site perimeter. The historical uses of the property and adjoining properties are considered an REC.

Hazards from PCE contamination in soil vapor underneath the site would be a potentially significant impact unless mitigated.

### **Asbestos-Containing Materials and Lead-Based Paint**

The 2017 ESA included a limited visual screening for ACM onsite. Suspect ACM onsite included vinyl flooring, vinyl flooring mastic, textured coatings, lay-in ceiling panels, roofing materials, wallboard, and joint compound. An asbestos survey and abatement, containment, and disposal of ACM would be required under CFR Title 40 Section 61 Subpart M; SCAQMD Rule 1403; and 8 CCR Section 1529.

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

Lead-based paint could be present onsite. Lead must be contained during demolition activities pursuant to California Health and Safety Code Sections 17920.10 and 105255. Such work would also be subject to occupational exposure limits set forth in 8 CCR Section 1532.1.

#### Hazardous Materials Site Listings

MacArthur Square Cleaners, formerly at 1701-H Corinthian Way, was identified on the Emissions Inventory Data (EMI), Resource Conservation and Recovery Act Small-Quantity Generator (RCRA-SQG), Enforcement and Compliance History Online (ECHO), Facility Index System (FINDS), HAZNET, and EDR Historical Cleaner databases. MacArthur Cleaners was present by 1986 and through at least 2005.

Green Hanger Cleaners at 4250 Scott Drive, was identified on the EDR Historical Cleaner and DRYCLEANERS databases. Both former dry cleaners are considered RECs for the project site. The subslab soil vapor samples described above were taken from below the sites of these two former cleaners.

Bacons Airport Photo Inc., which formerly operated onsite at 4251-B Martingale Way, was identified on the RCRA-SQG database. This former business is not considered a REC (see Appendix F.1 for further discussion).

The Phase I ESA discussed 10 off-site hazardous materials sites within about 0.8 mile of the project site, listed in Table 5.7-1, above.

*Level of Significance before Mitigation:* Impact 5.7-2 would be potentially significant.

---

#### **Impact 5.7-3: Project development would not subject people on the ground to substantial airport-related hazards. [Thresholds H-5 and H-6]**

---

*Impact Analysis:* The project site is in Safety Zone 6 designated in the Airport Environs Land Use Plan for John Wayne Airport. Outdoor stadiums and similar uses with very high intensities are prohibited in Zone 6. Children's schools, large day care centers, hospitals, and nursing homes should be avoided. Residential uses and most nonresidential uses are permitted (OCALUC 2008). The proposed project does not propose any land uses prohibited or discouraged by the AELUP and would not subject people on the ground to substantial hazards from crashes of aircraft approaching or departing JWA.

The project site also in an area surrounding JWA where structure heights are regulated under FAA Regulations Part 77 for preservation of navigable airspace. The maximum structure height permitted at the project site is 206 feet amsl (OCALUC 2008). The elevation onsite ranges from 48 feet amsl at the southwest corner of the site to 53 feet amsl at the northeast corner. Thus, based on the higher of those two elevations, the maximum structure height permitted onsite is about 153 feet above ground level. The proposed buildings would be approximately 55 feet high for residential living spaces, with limited ancillary structures to 77 feet 9 inches for stair towers architectural features (including parapets), parking, roof decks, elevator shafts, and mechanical equipment. The proposed project would conform with structure heights permitted on-site under FAA regulations and would not adversely affect navigable airspace surrounding JWA.

## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

*Level of Significance before Mitigation:* Impact 5.7-3 would be less than significant.

### 5.7.5 Cumulative Impacts

The area considered for cumulative impacts is Orange County, the service area for OC EHD, the affected CUPA. The population of Orange County is forecast to increase from about 3.07 million in 2012 to 3.46 million in 2040, and employment in the County is forecast to increase from about 1.53 million to 1.90 million over the same period (SCAG 2016). Other projects would use, store, transport, and dispose of increased amounts of hazardous materials and thus could pose substantial risks to the public and the environment. The use, storage, transport, and disposal of hazardous materials by other projects would conform with regulations of multiple agencies as described in Section 5.7.1 above. Cumulative impacts would be less than significant after compliance with such regulations, and project impacts would not be cumulatively considerable.

### 5.7.6 Level of Significance Before Mitigation

With implementation of RR HAZ-1 through RR HAZ-2, the following impact would be less than significant:

- **Impact 5.7-1:** The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

With implementation of Federal Aviation Regulations Part 77 the following impact would be less than significant:

- **Impact 5.7-3:** The maximum structure height permitted onsite is about 153 feet above ground level. The proposed buildings would be approximately 55 feet high for residential living spaces, with ancillary structures to 77 feet 9 inches for stair towers architectural features (including parapets), parking, roof decks, elevator shafts, and mechanical equipment. The proposed project would conform with structure heights permitted onsite under FAA regulations, and would not adversely affect navigable airspace surrounding JWA.

Without mitigation, this impact would be **potentially significant**:

- **Impact 5.7-2:** Perchloroethylene (PCE), listed as a carcinogen under Proposition 65, was detected in soil vapor from under the site at concentrations above the California Human Health Screening Level for residential land use. Impact 5.7-2 would be potentially significant.

### 5.7.7 Mitigation Measures

#### Impact 5.7-2

MM HAZ-1 Before the City of Newport Beach issues a grading permit for the proposed project, the City of Newport Beach Chief Building Official or his/her designee shall verify that a passive

## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

ventilation system conforming to the following specifications has been included on project building plans. The City of Newport Beach Community Development Department shall verify that the ventilation system is built to such specifications during project construction.

- **Subslab Ventilation System:** A subslab collection and ventilation system shall be installed under the residential building. The system shall consist of a series of PVC (polyvinyl chloride) gas collection pipes embedded in a permeable gravel layer. The collection pipes shall be networked together and vented to the atmosphere. The purpose of the vent system will be to prevent the buildup or accumulation of VOCs in the underlying soil; the gases instead are passively diverted into the venting system and safely discharged to the atmosphere away from occupied areas and air intake vents.
- **Membrane Barrier:** A horizontal synthetic membrane or a sprayed-on liner shall be placed over the granular collection layer. The membrane provides a barrier to the intrusion of subsurface gases.
- **Utility Trench Dams and Conduit Seals:** Gas barriers shall be installed in the permeable backfill of utility trenches or the hollow spaces of electrical or cable conduit piping to prevent gases from migrating laterally into the soils beneath the building. The conduit seals can consist of polyurethane foam that is injected into the conduit piping at the point where the conduit enters the structure to prevent the infiltration of subsurface gases into interior space.

#### 5.7.8 Level of Significance After Mitigation

As provided in the 2017 soil and soil gas investigation technical memorandum, the mitigation measure would reduce potential impacts resulting from location of the project on a hazardous materials site to less than significant. No significant unavoidable adverse impacts related to hazards have been identified.

#### 5.7.9 References

Airnav.com. Airport Information. 2018, September 6. <http://www.airnav.com/airports/>.

Department of Toxic Substances Control (DTSC). 2018, February 5. Glossary of Environmental Terms. [http://www.dtsc.ca.gov/InformationResources/Glossary\\_of\\_Environmental\\_Terms.cfm](http://www.dtsc.ca.gov/InformationResources/Glossary_of_Environmental_Terms.cfm).

Geocon West. 2014, June 12. Proposed Mixed-Use Multi-Family Residential Development: 5.6 Acres Bounded by Dove Street, Scott Drive, Corinthian Way, and Martingale Way, Newport Beach, California.



## 5. Environmental Analysis

### 5.8 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed Newport Crossings Mixed Use project (proposed project) to hydrology and water quality conditions in the City of Newport Beach. Hydrology deals with the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface- and groundwater. Surface water includes lakes, rivers, streams, and creeks; groundwater is under the earth's surface. The analysis in this section is based in part on the following technical reports:

- *Hydrology Report, Newport Crossings*, Fuscoe Engineers, August 2018. A complete copy of this study is included as Appendix G.1 to this DEIR.
- *Water Quality Management Plan (WQMP), Newport Crossings*, Fuscoe Engineers, August 2018. A complete copy of this study is included as Appendix G.2 to this DEIR.
- *Updated Geotechnical Investigation, Proposed Multi-Family Residential Development Newport Crossings*, Geocon West, July 2017. A complete copy of this study is included as Appendix E to this DEIR.

#### 5.8.1 Environmental Setting

##### 5.8.1.1 REGULATORY BACKGROUND

Federal, state, and regional laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized in this section. They are designed to achieve regional water quality objectives and thereby protect the beneficial uses of the region's surface and groundwater.

##### **Federal**

##### *Clean Water Act*

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the waters of the United States<sup>1</sup> and gives the federal Environmental Protection Agency (EPA) the authority to implement pollution-control programs, such as setting wastewater standards for industry. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded

---

<sup>1</sup> Waters of the United States generally include surface waters—lakes, rivers streams, bays, the ocean, dry streambeds, wetlands, and storm sewers that are tributary to any surface water body.

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution. The following CWA Sections assist in ensuring water quality in surrounding water bodies.

- Section 208 of the CWA requires the use of best management practices (BMPs) to control discharge of pollutants in stormwater during construction.
- Section 303(d) requires creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies;<sup>2</sup> and preparation of plans to improve the quality of these water bodies. Water bodies on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution-control technology.
- Section 401 of the CWA requires any project that needs a federal permit (such as a Section 404 permit) to allow discharge to waters of the U.S. to also obtain state certification that the activity would not violate water quality standards.
- Section 402(p) establishes a framework to control water pollution by regulating point-source discharges under the National Pollutant Discharge Elimination System (NPDES) permit program. Point-source discharges are readily identifiable, discrete inputs where waste is discharged to the receiving waters from a pipe or drain. Nonpoint discharges occur over a wide area and are associated with particular land uses (such as urban runoff from streets and stormwater from construction sites).
- Section 404 authorizes the U.S. Army Corps of Engineers to require permits for projects that will discharge dredge or fill materials into waters of the United States, including wetlands.

#### *National Pollution Discharge Elimination System*

Under the NPDES program (under Section 402 of the CWA), all facilities that discharge pollutants from any point source into waters of the United States must have a NPDES permit. The term “pollutant” broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTWs), industrial facilities, and urban runoff. (The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation.) Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater

---

<sup>2</sup> Impaired water bodies, and water bodies that do not meet, or are not expected to meet, water quality standards.

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

Discharges, Non-Process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the EPA has recently focused on integrating the NPDES program further into watershed planning and permitting (USEPA 2012).

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 100,000 or more, as well as construction sites one acre or more in size, must file for and obtain a NPDES permit. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances (including roadways, catch basins, curbs, gutters, ditches, man-made channels and storm drains, designed or used for collecting and conveying stormwater) is the EPA's Storm Water Phase I Final Rule. The Phase I Final Rule requires an operator (such as a city) of a regulated municipal separate storm sewer system (MS4) to develop, implement, and enforce a program (e.g., BMPs, ordinances, or other regulatory mechanisms) to reduce pollutants in post-construction runoff to the City's storm drain system from new development and redevelopment projects that result in the land disturbance of greater than or equal to one acre.

### **State**

#### *Porter-Cologne Water Quality Act*

The Porter-Cologne Water Quality Act (Water Code sections 13000 et seq.) is the basic water quality control law for California. Under this act, the State Water Resources Control Board (SWRCB) has ultimate control over state water rights and water quality policy. In California, the EPA has delegated authority to issue NPDES permits to the SWRCB. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine Regional Water Quality Control Boards (RWQCBs) carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems.

#### *General Construction Permit*

Pursuant to the CWA, in 2001, the SWRCB issued a statewide general NPDES Permit for stormwater discharges from construction sites (NPDES No. CAS000002). Under this Statewide Construction Permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list BMPs implemented on the construction site to protect stormwater runoff. It must also contain a visual monitoring program, a chemical monitoring program for "nonvisible" pollutants to be implemented if there is a failure of BMPs, and a monitoring plan if the site discharges directly to a water body listed on the state's 303(d) list of impaired waters.

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

#### Santa Ana River Basin Water Quality Control Plan

The City of Newport Beach is in the Santa Ana River Basin in the Upper Santa Ana Watershed. The Water Quality Control Plan for the Santa Ana River Basin (Region 8) was updated in 2016. This Basin Plan gives direction on the beneficial uses of the state waters in Region 8; describes the water quality that must be maintained to support such uses; and provides programs, projects, and other actions necessary to achieve the standards established in the Basin Plan.

#### Orange County MS4 Permit

Whereas the General Industrial Permit and General Construction Permit (GCP) are issued statewide, MS4 permits are issued by local RWQCBs in order to provide the permits with the means to address stormwater quality issues specific to the local watershed or region. As a result, MS4 permits are a more prescriptive level of regulation, requiring permittees to develop and implement a stormwater management program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). The MEP standard is a more stringent performance standard than the performance standards established for both the General Industrial Permit and GCP. The stormwater management program or drainage area management plan, as it is referred to in the Orange County MS4 Permit, must specify BMPs approved by the Santa Ana RWQCB.

The proposed project and its facilities would discharge into the MS4 within the jurisdiction of the City of Newport Beach. Pursuant to the Orange County MS4 Permit, the City is responsible for controlling or limiting urban pollutants generated by construction and postconstruction activities from reaching their MS4s. The proposed project is, therefore, subject to the requirements of the Orange County MS4 Permit (Santa Ana Region) as it is applied by the permittee and its co-permittees.

#### 5.8.1.2 EXISTING CONDITIONS

##### Regional Drainage

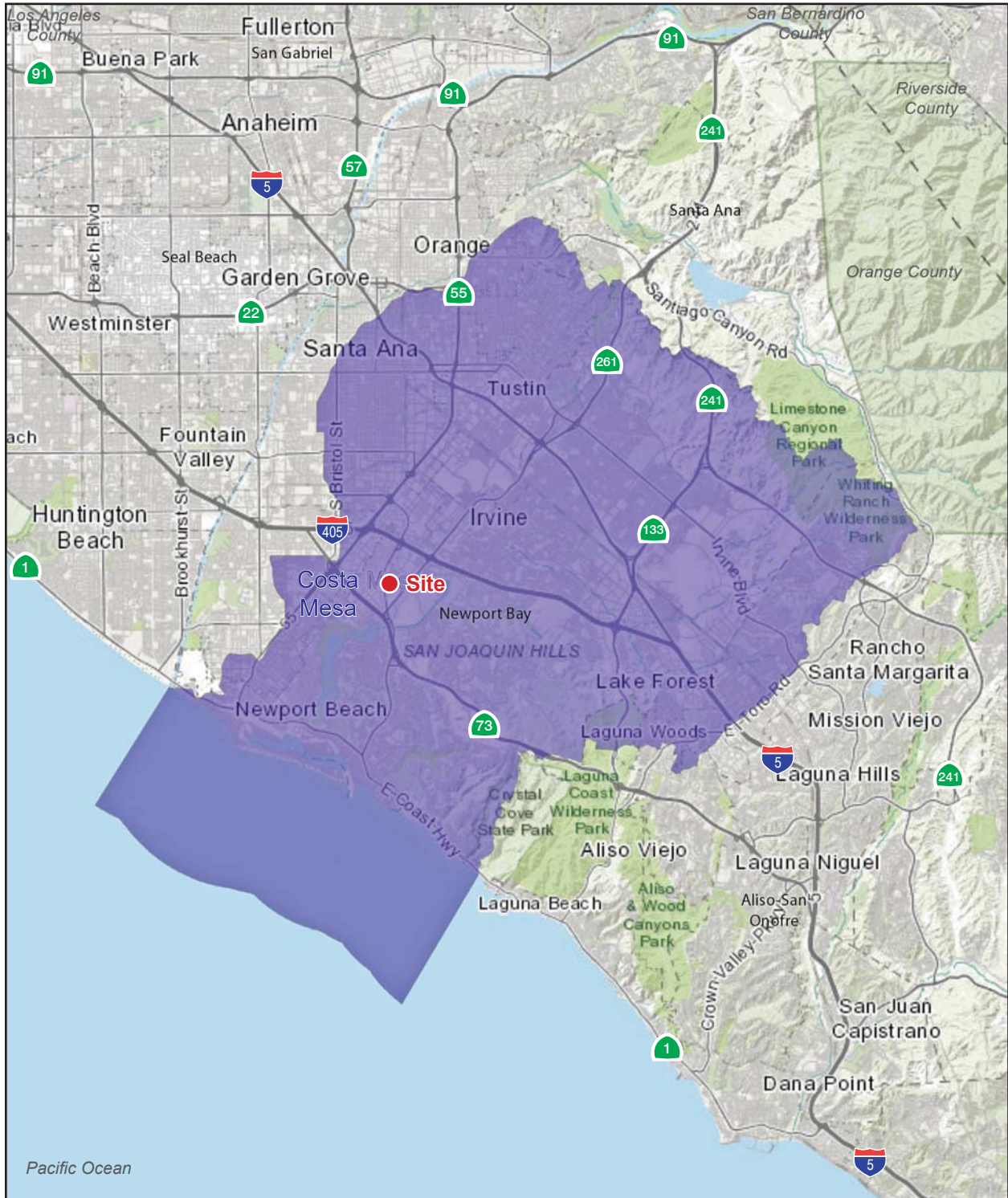
The project site is in the Newport Bay Watershed that encompasses about 194 square miles of central and south-central Orange County (see Figure 5.8-1, *Newport Bay Watershed*). The primary stream in the watershed, San Diego Creek, passes about one mile south of the project site and discharges into Upper Newport Bay.

Generally, the City of Newport Beach provides storm drain service to the entire city. The Orange County Resources and Development Management Department maintains the regional drainage facilities in the City, including the Santa Ana River and San Diego Creek.

The existing storm drain system owned and operated by the City consists of pipelines, catch basins, manholes, tide valves, open channels, and retention basins located throughout the system. Pipelines range from 3 to 120 inches in diameter and are constructed of materials such as reinforced concrete, corrugated metal, plastic, ductile iron, steel, clay, and asbestos cement. Some segments of the system are over 50 years old, and other segments have been recently constructed (Newport Beach 2000). Overall, urban street flooding is rarely considered a problem in Newport Beach (Newport Beach 2003).



Figure 5.8-1 - Newport Bay Watershed  
5. Environmental Analysis



 Newport Bay Watershed



Source: USGS, 2017

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

*This page intentionally left blank.*



## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

The City's storm drain system also includes retarding basins. These include the Koll Center retarding basin north of State Route 73 (SR-73); the Farallon/El Paseo retarding basin between Avocado Street and MacArthur Boulevard, near Fashion Island; and the Harbor View retarding basin between Corona del Mar and San Joaquin Hills Road. The purpose of these retarding basins is to reduce the flow rate within the respective downstream storm drain systems so that older, possibly undersized, downstream facilities will be able to carry the discharge from new development areas upstream (Newport Beach 2000).

### Surface-Water Sources

Newport Beach has over 30 miles of bay and ocean waterfront. Over 63 percent of the city is in the coastal zone. Surface-water resources include freshwater wetlands, estuaries, tideland and submerged lands, reservoirs, and waterways. Upper Newport Bay extends south of SR-73 to the Pacific Ocean, virtually dividing the city into east and west sides. This bay area makes up many of the tidelands and submerged lands in the city and connects with the estuary waters south of it, including Newport Dunes, Lido Channel, and Newport Channel. An additional estuary is in the northern portion of the city, east of Upper Newport Bay and south of SR-73. Small amounts of freshwater wetlands are scattered throughout the central portion of the city east of Upper Newport Bay and North Star Beach (Newport Beach 2006).

The city has two aboveground reservoirs, Big Canyon and San Joaquin Reservoirs, which are located in the eastern part of the city. Big Canyon Reservoir is about 0.25 mile north of San Joaquin Hills Road, and San Joaquin Reservoir is approximately 0.75 mile northeast of Big Canyon Reservoir. The main tributaries in the city are the Santa Ana River, San Diego Creek, and Big Canyon Wash.

### Local Drainage

Site drainage is via two concrete valley gutters (i.e., shallow V-shaped concrete drains) in drive aisles near the site perimeter. The gutters begin in the northeast part of the project site. One gutter extends near the west perimeter, and the other near the east perimeter. Drainage then converges and leaves the site at the southeast driveway on Dove Street at the Westerly Place intersection. (see Figure 5.8-2, *Existing Site Drainage*). From the driveway on Dove Street, the drainage is conveyed to the public right of way within the curb and gutter and enters the underground drainage system through a curb inlet at Westerly Place. The curb inlet conveys drainage through an 18" RCP lateral and into the 54" RCP pipe main sloping south along Dove Street. Drainage continues southeast in storm drains connecting into the San Diego Creek Channel, which discharges into Upper Newport Bay.

The project hydrology study also analyzed three offsite areas that drain into the same curb inlet in Westerly Place. One area is in the roadways bounding the project site from the Martingale Way cul-de-sac counterclockwise to the inlet in Dove Street at Westerly Place; the second is in Dove Street and part of Dolphin Striker Way southeast and south of the site, respectively; and the third is east of Martingale Way opposite the northern half of the site (see Figure 5.8-2). The three areas total about 3.72 acres.

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

### *Existing Stormwater Flows*

Existing peak stormwater flows from a 25-year storm, from the project site plus the offsite areas, are listed below in Table 5.8-1.

**Table 5.8-1 Existing Peak Drainage Flow Rates from a 25-Year Storm**

Area	Acres	Peak Drainage Flow Rate, 25-Year Storm (Q <sub>25</sub> ), cubic feet per second
Project site	5.69	19.66
Project site plus offsite tributary areas	9.41	27.50

Source: Fuscoe 2017 (see Appendix G.1).

### Surface Water Quality

Pollutants for which receiving waters for the project site (San Diego Creek, Upper Newport Bay, and Lower Newport Bay) are listed on the CWA Section 303(d) List of Water Quality Limited Segments are identified in Table 5.8-2.

**Table 5.8-2 Pollutants on CWA Section 303(d) List of Water Quality Limited Segments for Receiving Waters for Project Site**

Water Body	Pollutant	Total Maximum Daily Load (TMDL) Status
San Diego Creek Reach 1	Fecal Coliform bacteria	Estimated completion 2019
	Nutrients	Approved 1999
	Pesticides	Approved 2004
	Sedimentation/Siltation	Approved 1999
	Selenium	Estimated completion 2007
	Toxaphene (an organochlorine insecticide)	Estimated completion 2019
Upper Newport Bay	Chlordane (an organochlorine insecticide)	Estimated completion 2019
	Copper	Estimated completion 2007
	DDT (Dichlorodiphenyltrichloroethane, an organochlorine insecticide)	Estimated completion 2019
	Indicator bacteria	Approved 2000
	Metals	Estimated completion 2019
	Nutrients	Approved 1999
	PCBs (polychlorinated biphenyls)	Estimated completion 2019
	Pesticides	Approved 2004
	Sediment Toxicity	Estimated completion 2019
	Sedimentation/Siltation	Approved 1999

5. Environmental Analysis  
HYDROLOGY AND WATER QUALITY

**Table 5.8-2 Pollutants on CWA Section 303(d) List of Water Quality Limited Segments for Receiving Waters for Project Site**

Water Body	Pollutant	Total Maximum Daily Load (TMDL) Status
Lower Newport Bay	Chlordane	Estimated completion 2019
	Copper	Estimated completion 2007
	DDT	Estimated completion 2019
	Indicator bacteria	Approved 2000
	Nutrients	Approved 1999
	PCBs (polychlorinated biphenyls)	Estimated completion 2019
	Pesticides	Approved 2004
	Sediment Toxicity	Estimated completion 2019

Source: SWRCB 2018.

**Groundwater**

The project site is over the Main Orange County Groundwater Basin (Basin), which spans about 350 square miles in western and central Orange County (see Figure 5.8-3, *Main Orange County Groundwater Basin*). The Orange County Water District (OCWD) manages the amount and quality of groundwater in the Basin.

Shallow groundwater levels (less than 50 feet from the ground surface) are known to occur along the coast, around Newport Bay, and along the major drainages in the Newport Beach area. Shallow groundwater perched on bedrock may also be present seasonally in the canyons draining the San Joaquin Hills. Upper, middle, and lower aquifer systems are recognized in the Basin. Well yields range from 500 to 4,500 gallons per minute (gpm), but are generally 2,000 to 3,000 gpm. The total capacity of the Basin is approximately 38 million acre-feet (Newport Beach 2006).

Recharge to the Basin is derived from percolation of Santa Ana River flow, infiltration of precipitation, and injection into wells. The Santa Ana River flow contains natural flow, reclaimed water, and imported water that is spread in the Basin forebay, which is the upper region of the Basin. Infiltration primarily occurs in this area; the City of Newport Beach is in the pressure area of the Basin, an area that is not used for recharge (OCWD 2006). There are no designated recharge areas in the City.

The Groundwater Replenishment System, a joint venture by OCWD and the Orange County Sanitation District, will help reduce Orange County and Newport Beach’s reliance on imported surface water by taking treated wastewater and returning it into the Basin via injection or passive settling. Sewer water will be purified using a state-of-the-art, three-step process—microfiltration, reverse osmosis, and ultraviolet light with hydrogen peroxide disinfection. (OCWD 2006).

**Groundwater Quality**

Groundwater quality concerns in the project region include salinity, nitrates, and amber-colored water. Salinity refers to all dissolved minerals in groundwater, including nitrates, not just sodium chloride (table salt). Groundwater becomes saline by dissolving minerals in the aquifer, by natural salinity of stormwater before it percolates into the aquifer, from seawater intrusion into the aquifer, and from imported water. Several

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

systems manage salinity in the Basin, including desalters in the cities of Tustin and Irvine; two seawater intrusion barriers that pump imported water and recycled water to form underground freshwater barriers to reduce seawater intrusion; and a Groundwater Replenishment System that recharges the basin with recycled water. The recycled water has far lower salinity than imported water that would otherwise be used to recharge the basin.

Nitrates are some of the most common and widespread contaminants in groundwater supplies, originating from fertilizer use, animal feedlots, wastewater disposal systems, and other sources. The maximum contaminant level for nitrate in drinking water is 10 mg/L. OCWD regularly monitors nitrate levels in groundwater and works with producers to treat wells that have exceeded safe levels of nitrate concentrations. OCWD manages the nitrate concentration of water recharged by its facilities to reduce nitrate concentrations in groundwater.

Amber-colored water has an amber tint and a sulfur odor from the remains of ancient buried plant material. The water is safe but requires treatment for color and odor before use as drinking water. Amber-colored water has been observed in the east and southeast parts of the project area. Two treatment facilities, the Mesa Water Reliability Facility in Costa Mesa and the Deep Aquifer Treatment System in Santa Ana, treat amber-colored water for color and odor (Newport Beach 2016).

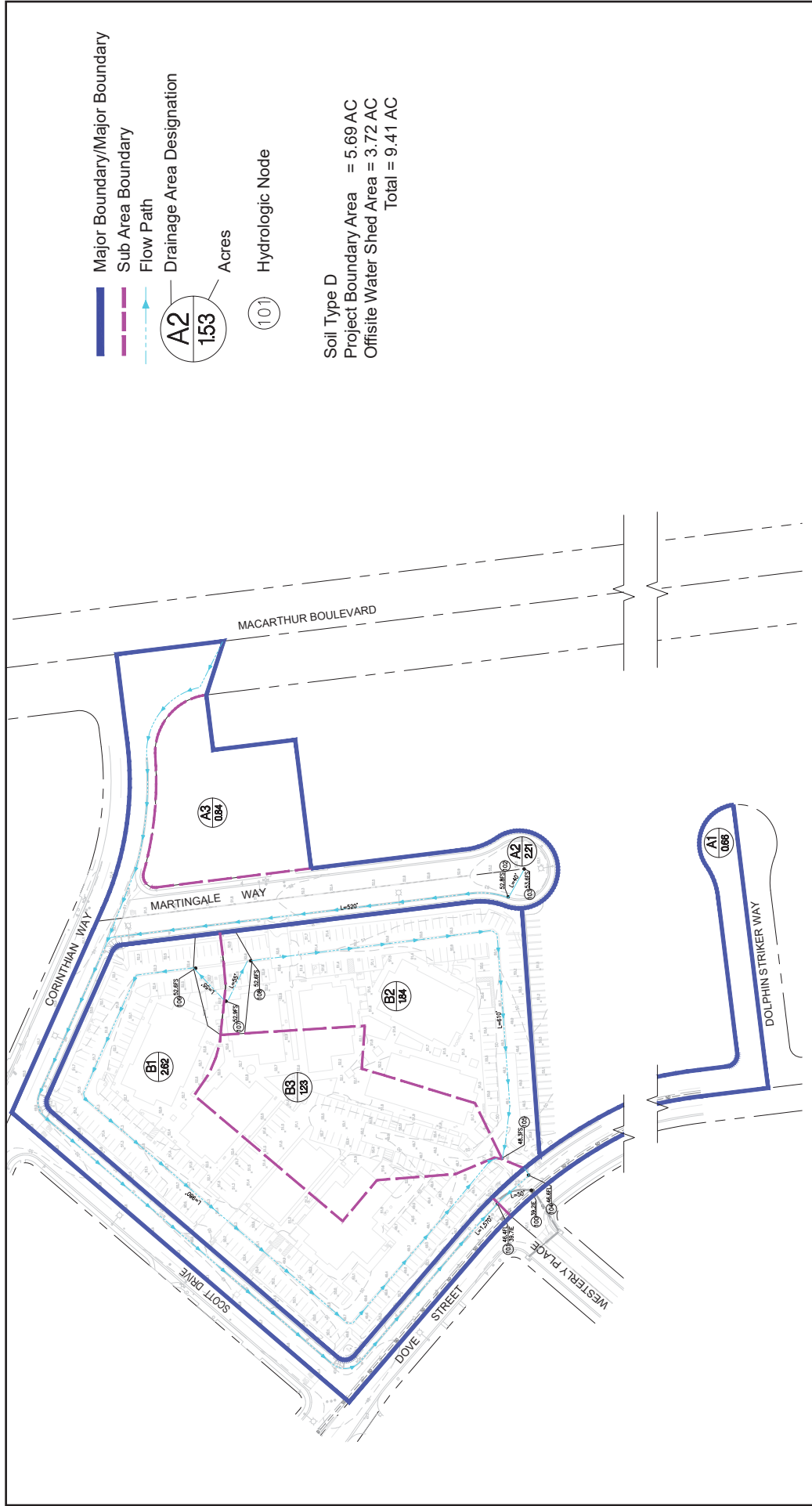
One cleanup program site and one military evaluation site—both within 0.5 mile of the project site and for which the Department of Toxic Substances Control (DTSC) has open cases—are listed on DTSC's EnviroStor database—Rockwell Semiconductor at 4311 Jamboree Road and John Wayne Airport.

#### 5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- HYD-1 Violate any water quality standards or waste discharge requirements.
- HYD-2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.
- HYD-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Figure 5.8-2 - Existing Site Drainage  
5. Environmental Analysis



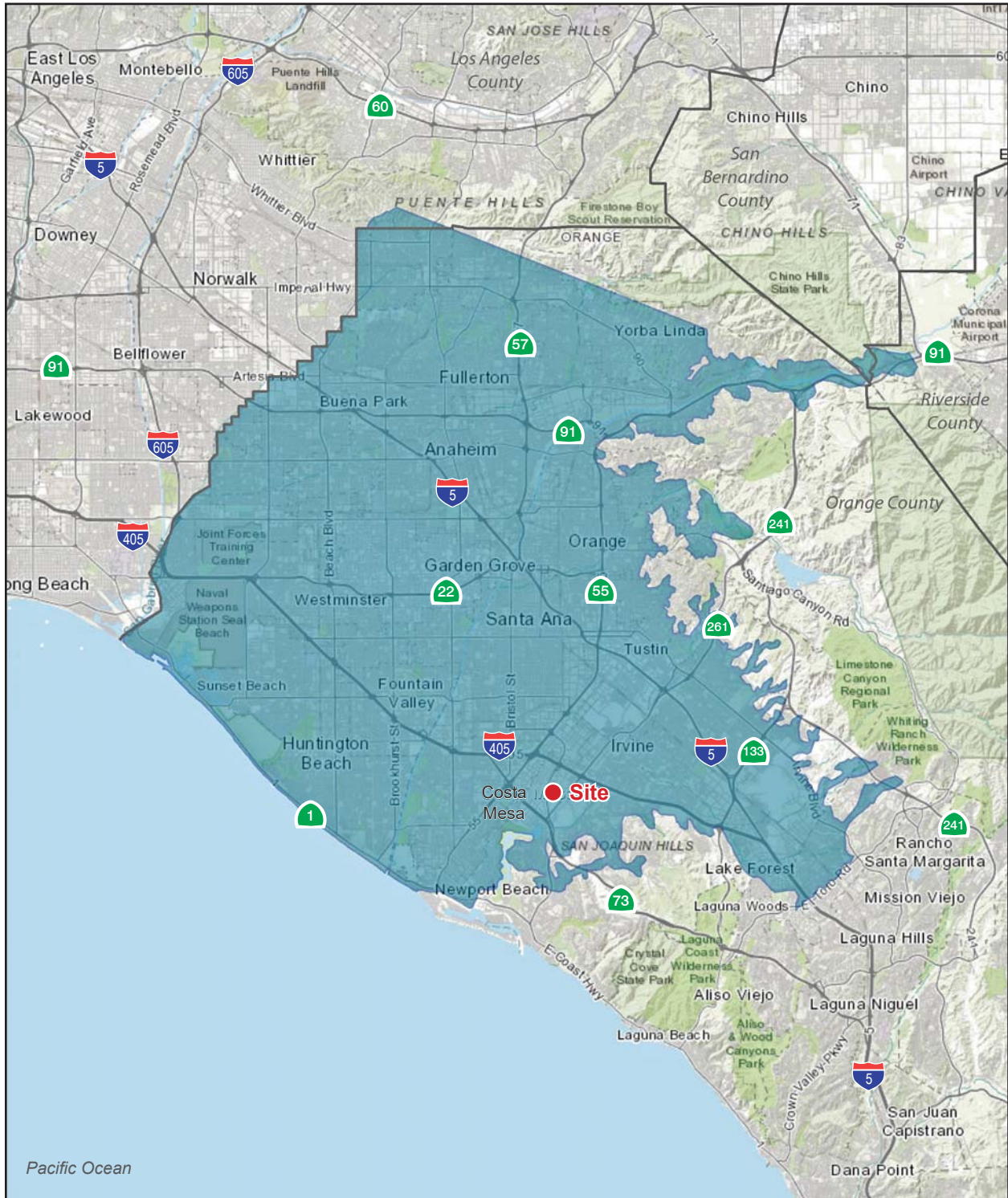
## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

*This page intentionally left blank.*



Figure 5.8-3 - Main Orange County Groundwater Basin  
5. Environmental Analysis



Main Orange County Groundwater Basin



Source: DWR, 2018

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

*This page intentionally left blank.*

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

- HYD-5 Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- HYD-6 Otherwise substantially degrade water quality.
- HYD-7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- HYD-8 Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- HYD-9 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- HYD-10 Be subject to inundation by seiche, tsunami, or mudflow.

No impacts were identified related to thresholds HYD-7, HYD-8, HYD-9 and HYD-10; these thresholds are analyzed in Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR.

### 5.8.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address hydrology and water quality impacts follow.

#### 5.8.3.1 REGULATORY REQUIREMENTS

- RR-HYD-1 **Pollutant Discharge Elimination System (NPDES):** General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities, NPDES No. CAS000002. Compliance requires filing a Notice of Intent (NOI), a Risk Assessment, a Site Map, a Storm Water Pollution Prevention Plan (SWPPP) and associated best management practices (BMPs), an annual fee, and a signed certification statement. Also, the County requires preparation of an erosion and sediment control plan for projects that disturb more than one acre of land and implementation of BMPs to control erosion, debris, and construction-related pollutants.
- RR HYD-2 **Orange County MS4 Permit (Order No. R8-2002-0010, NPDES No. CAS618030, as amended by R8-2009-00300):** The MS4 Permit requires new development and redevelopment projects to:
- Control contaminants into storm drain systems
  - Educate the public about stormwater impacts
  - Detect and eliminate illicit discharges
  - Control runoff from construction sites

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

- Implement BMPs and site-specific runoff controls and treatments for new development and redevelopment

#### 5.8.3.2 STANDARD CONDITIONS

SC HYD-1 Prior to issuance of precise grading permits, the Applicant shall prepare and submit a Water Quality Management Plan (WQMP) for the project, subject to the approval of the Community Development Department, Building Division and Code and Water Quality Enforcement Division. The WQMP shall include appropriate BMPs to ensure project runoff is adequately treated.

SC HYD-2 During construction, if groundwater is unexpectedly encountered, the Applicant would apply for dewatering coverage and adhere to the monitoring and reporting program under the Santa Ana Regional Water Quality Control Board National Pollutant Discharge Elimination System (NPDES) Order No. R8-2009-0003.

#### 5.8.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.8-1: The proposed project would not violate water quality standards or waste discharge requirements or otherwise degrade water quality. [Thresholds HYD-1 and HYD-6]**

---

*Impact Analysis:* Urban runoff resulting from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, soil, and animal waste. This runoff can flow directly into local streams or lakes or into storm drains and continue through pipes until it is released untreated into a local waterway and eventually the ocean. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats. Additionally, increased runoff from urban surfaces can increase the intensity of flooding and erosion in receiving waters.

The construction and operational phases of the proposed project could have the potential to impact water quality. Construction activities associated with the proposed project may impact water quality due to sheet flow causing erosion of exposed soils. The operational phase would alter the existing land uses of the project site and would, consequently, alter the anticipated and potential pollutant sources generated at the site. The following is a discussion of the potential impacts that the construction and operational phases of the proposed project could have on water resources and quality.

#### Expected Pollutants

Project construction is expected to generate sediment, nutrients, metals, trash and debris, oxygen-demanding substances, and oil and grease. Oxygen-demanding substances are mostly biodegradable organic compounds

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

that consume dissolved oxygen in water and reduce the oxygen available to aquatic animals. Nutrients include nitrogen and phosphorus. Project operation is expected to generate the same types of pollutants that construction would, although with a reduced possibility of sediment pollution, in addition to bacteria, viruses and pesticides.

### Pollutants of Concern

Pollutants of concern are those which could be generated by project construction and/or operation and for which receiving waters are also listed on the CWA Section 303(d) List. Pollutants of concern for the project site are nutrients, bacteria, pesticides, metals, and sedimentation/siltation.

### Construction

A SWPPP would be prepared for the proposed project specifying BMPs to be implemented to minimize construction stormwater pollution impacts. Categories of BMPs included in SWPPPs are described in Table 5.8-3.

**Table 5.8-3 Construction Best Management Practices**

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping
Tracking Controls	Minimize the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Non-Storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Source: CASQA 2003.

### Postconstruction

#### *Low-Impact Development BMPs*

Low-impact development (LID) is an approach to land development (or redevelopment) that works with nature to manage and treat stormwater as close to its source as possible. LID employs principles such as



## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions (USEPA 2016).

The water quality management plan (WQMP) (Fuscoe 2017) for the proposed project includes three proposed modular wetland systems (MWS) near the southwest site boundary (see Figure 5.8-4, *Water Quality Management Plan*):

- Two MWSs treating stormwater from the apartment building area, with total treatment capacity of 1.15 cubic feet per second (cfs).
- One MWS treating stormwater from the public park, with treatment capacity of 0.115 cfs.

The MWSs use multistage treatment processes, including screening media filtration, settling, and biofiltration. The pretreatment chamber contains the first three stages of treatment and includes a catch basin inlet filter to capture trash, debris, gross solids, and sediments; a settling chamber for separating out larger solids; and a media filter cartridge for capturing fine sediment, metals, nutrients, and bacteria. Runoff then flows through the wetland chamber. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, biodegraded, and sequestered by the soil and plants. The discharge chamber at the end of the unit collects treated flows and discharges back into the storm drain system.

Modular wetland systems are highly effective at removing sediments, oil and grease, and trash and debris, and moderately to highly effective at removing nutrients and pathogens/bacteria.

#### *Site Design BMPs*

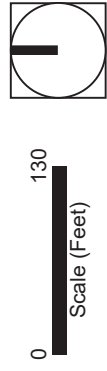
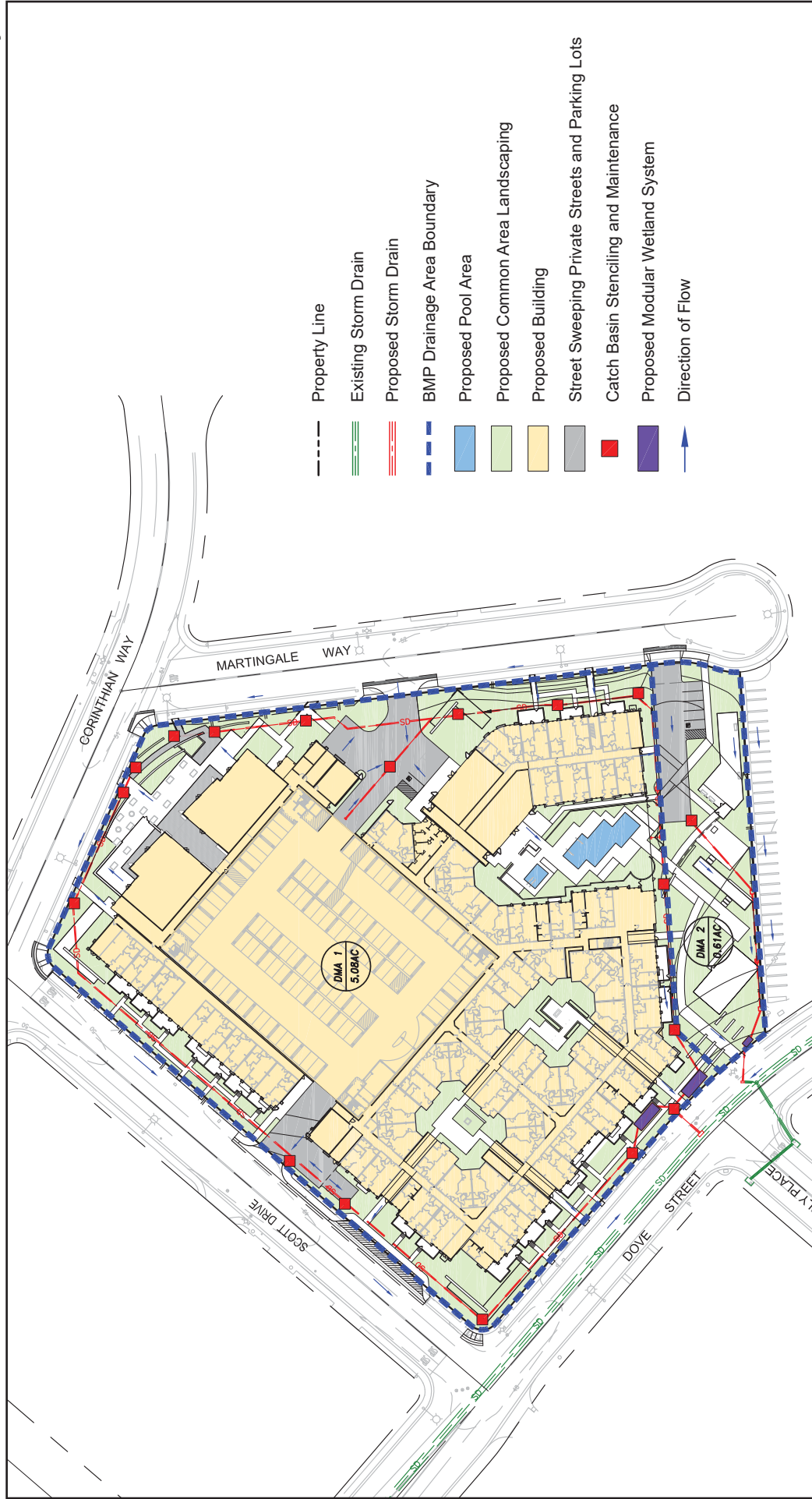
Site design BMPs reduce or eliminate postproject runoff, for instance, by minimizing impervious areas and infiltration and/or detention/retention basins.

The WQMP specifies the following site design BMPs for the proposed project:

- **Minimize Impervious Areas and Disconnect Impervious Areas.** Impervious surfaces have been minimized by incorporating landscaped areas throughout the site surrounding the proposed building. The proposed project decreases impervious areas as compared to existing conditions.
- **Preserve Existing Drainage Patterns.** Runoff from the site will continue to flow similar to existing conditions. Low-flow and first-flush runoff will drain to MWSs for water quality treatment via biofiltration.



Figure 5.8-4 - Water Quality Management Plan  
5. Environmental Analysis



## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

*This page intentionally left blank.*

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

### *Source Control BMPs*

Source control BMPs reduce the potential for pollutants to enter runoff.

### *Structural Source Control BMPs*

Structural source control BMPs are used in a project's design to both minimize runoff and to keep pollutants from entering runoff.

The project WQMP prescribes the following structural source control BMPs:

- **Stormdrain system stenciling and signage.** “NO DUMPING! DRAINS TO OCEAN” or an equally effective phrase approved by the City will be stenciled on all major storm drain inlets within the project site.
- **Outdoor material storage areas design.** All trash and waste shall be stored in containers that have lids or tarps to minimize direct precipitation into the containers. Several trash enclosures will be located throughout the property. The trash storage areas will be designed to City standards and will be walled and roofed and have gates and proper drainage per City standards.
- **Efficient irrigation systems.** Irrigation system efficiency measures shall include smart timers, rain sensors, programmable irrigation cycles, and moisture shut-off valves.
- **Wash-water control for food preparation areas.** Food preparation facilities shall meet all regulatory requirements, including installation of a grease interceptor where required. Sinks shall be contained with sanitary sewer connections for disposal of wash waters containing kitchen and food wastes.

### *Nonstructural Source Control BMPs*

Nonstructural source control BMPs are restrictions on activities onsite to reduce the potential for pollutants to contaminate runoff. The WQMP specifies the following BMPs for use in the proposed project:

- Education for Property Owners, Tenants and Occupants. Educational materials—such as tips for pet care, household tips, and proper household hazardous waste disposal—will be provided to tenants, including brochures and restrictions to reduce pollutants from reaching the storm drain system.
- Activity Restrictions. The HOA shall develop ongoing activity restrictions, including handling and disposal of contaminants, fertilizer and pesticide application restrictions, and litter control.
- Common Area Landscape Management.
- BMP Maintenance.
- Common Area Litter Control.

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

- Employee Training. All employees of the HOA and any contractors will require training, including spill cleanup procedures, proper waste disposal, and housekeeping practices.
- Common Area Catch Basin Inspection.
- Street Sweeping Private Streets and Parking Lots.

Postproject water quality impacts would be less than significant after construction, operation, and maintenance of the BMPs specified in the WQMP.

*Level of Significance before Mitigation:* With implementation of RR HYD-1, RR HYD-2, and SC HYD-1, Impact 5.8-1 would be less than significant.

---

**Impact 5.8-2: The proposed project would not substantially deplete groundwater supplies, interfere substantially with groundwater recharge, or result in a significant impact to groundwater quality. [Threshold HYD-2]**

---

#### *Impact Analysis:*

#### **Short-Term Construction Impact**

Although the project site is currently fully developed and paved, reconstruction activities would involve grading and excavation, which have the potential to intersect groundwater and require construction dewatering. However, soil borings conducted on the project site and adjacent properties indicate groundwater depths between 30 and 34 feet below ground surface (bgs). Grading for the site will be within a few feet of existing grades, with the maximum anticipated depth of cut of about five feet for removal of existing soils on most of the site and up to eight feet for utility trenches in certain areas of the site. Therefore, groundwater is not likely to be encountered during construction activities, and there would be no impact on groundwater supplies or groundwater recharge from these activities.

Because groundwater beneath the project site is typically between 30 and 34 feet bgs, groundwater is unlikely to be encountered during construction activities. Construction pollutants at the project site could percolate into the ground. However, implementation of construction BMPs in the SWPPP would reduce pollutants in stormwater and reduce their potential to impact underlying groundwater resources.

Construction activities are temporary in nature and would not result in a substantial depletion of groundwater supplies that could result in a lowering of the groundwater table. Therefore, impacts to groundwater supplies or recharge and quality during construction would be less than significant.

#### **Long-Term Operational Impact**

Implementation of the proposed project would lead to an increased demand in water, and therefore would lead to an increase in groundwater pumping. According to the City of Newport Beach 2016 Urban Water Management Plan (UWMP), local groundwater provides approximately 70 percent of the city's total supply. The UWMP indicates that the Newport Beach water service area will have sufficient water supplies to meet

## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

demands in single-dry-years and multiple-dry-years (that is, three consecutive dry years) over the period of 2020-2040 (Newport Beach 2016). The proposed project lies within the Newport Beach water service area and will not have an impact on future water supply (refer to Section 5.16.2.3).

Project development would decrease the amount of impervious surfaces onsite, allowing infiltration of more stormwater than currently possible. Currently drainage from the site is discharged into the municipal storm drain system and is not infiltrated into soil onsite. Infiltration of stormwater into site soil has been determined infeasible by the geotechnical consultant due to impermeable soil underlying the project site. In proposed conditions, drainage from the site would be discharged into storm drain mains. Project development would not reduce groundwater recharge or quality, and impacts would be less than significant.

**Level of Significance before Mitigation:** With implementation of RR HYD-1, RR HYD-2, SC HYD-1, and SC HYD-2, Impact 5.8-3 would be less than significant.

---

**Impact 5.8-3: Development of the proposed project would not substantially alter the existing drainage pattern to result in adverse flooding impacts, or create or contribute to runoff water that would exceed the capacity of existing or planned stormwater systems. [Thresholds HYD-4 and HYD-5]**

---

### *Impact Analysis:*

#### **Proposed Drainage**

Project development would involve development of two 18-inch RCP storm drain laterals onsite. One lateral draining the proposed condominiums would consist of two major branches—one extending around the west and north sides of the proposed buildings to near the intersection of Martingale Way and Corinthian Way, and the other extending around the south and east sides of the buildings to near the same intersection. This lateral would discharge to an existing 48-inch RCP main in Dove Street in the north end of its intersection with Westerly Place. The second lateral would drain the proposed park in the south end of the project site, discharging into the existing 54-inch RCP main in Dove Street in the south end of its intersection with Westerly Place (see Figure 5.8-5, *Proposed Site Drainage*). Although the type of drainage conveyance onsite would change, the direction of drainage would remain similar to existing conditions. Accordingly, the project would not alter drainage patterns in a manner that results in flooding.

#### **Impervious Areas and Drainage Flow Rates**

Project development would decrease impervious areas onsite from 5.12 acres (90 percent of the site) currently to 4.38 acres (77 percent of the site), a net increase of 0.74 acre of pervious area. Proposed pervious areas would include 34,600 square feet of common area landscaping, including the proposed park, and 21,459 square feet of private area landscaping. Landscaping would be provided between sidewalks and the buildings (see Figure 3-5, *Conceptual Landscape Plan*).

Drainage from the offsite tributary areas described above, totaling about 3.72 acres, would continue to flow in curb and gutter to the same curb inlet in Westerly Place that drainage flows into now.

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

The onsite comparison of the peak drainage flow rate from a 25-year storm for the proposed project is 0.26 cfs more than existing conditions. However, for the total peak drainage flow rate (confluence with street runoff) entering the public storm drain system, the peak flow rate for the developed conditions is 0.2 cfs less than existing (see Table 5.8-4).

**Table 5.8-4 Proposed Peak Drainage Flow Rates from a 25-Year Storm**

Area (Node at Discharge into Existing Storm Drain Main)	Acres	Peak Drainage Flow Rate, 25-Year Storm ( $Q_{25}$ ), cubic feet per second		
		Proposed Conditions	Existing Conditions	Net Change, Proposed less Existing
Entire Project Site [200 + 300]	5.69	15.35	15.09	0.26
Project Site plus Offsite Tributary Areas [200 + 300 + 100]	9.41	23.53	23.73	-0.2

Source: Fuscoe 2018 (see Appendix G.1).

As demonstrated in the table, the proposed project would not exceed the capacity of the existing storm drain system because the storm drain currently has adequate capacity, and the total stormwater peak flow rates would decrease under the proposed conditions. Therefore, impacts to the storm drain system and the potential for flooding would be less than significant.

**Level of Significance before Mitigation:** With implementation of RR HYD-2 and SC HYD-1, Impact 5.8-2 would be less than significant.

---

**Impact 5.8-4: Development of the proposed project would not substantially alter the existing drainage pattern to result in potentially significant erosion or siltation impacts. [Threshold HYD-3]**

---

**Impact Analysis:** Increased runoff from urban surfaces can increase the intensity of flooding and erosion. The following is a discussion of the potential erosion, siltation, and flooding impacts that could occur as a result of the project development.

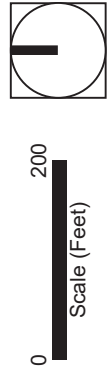
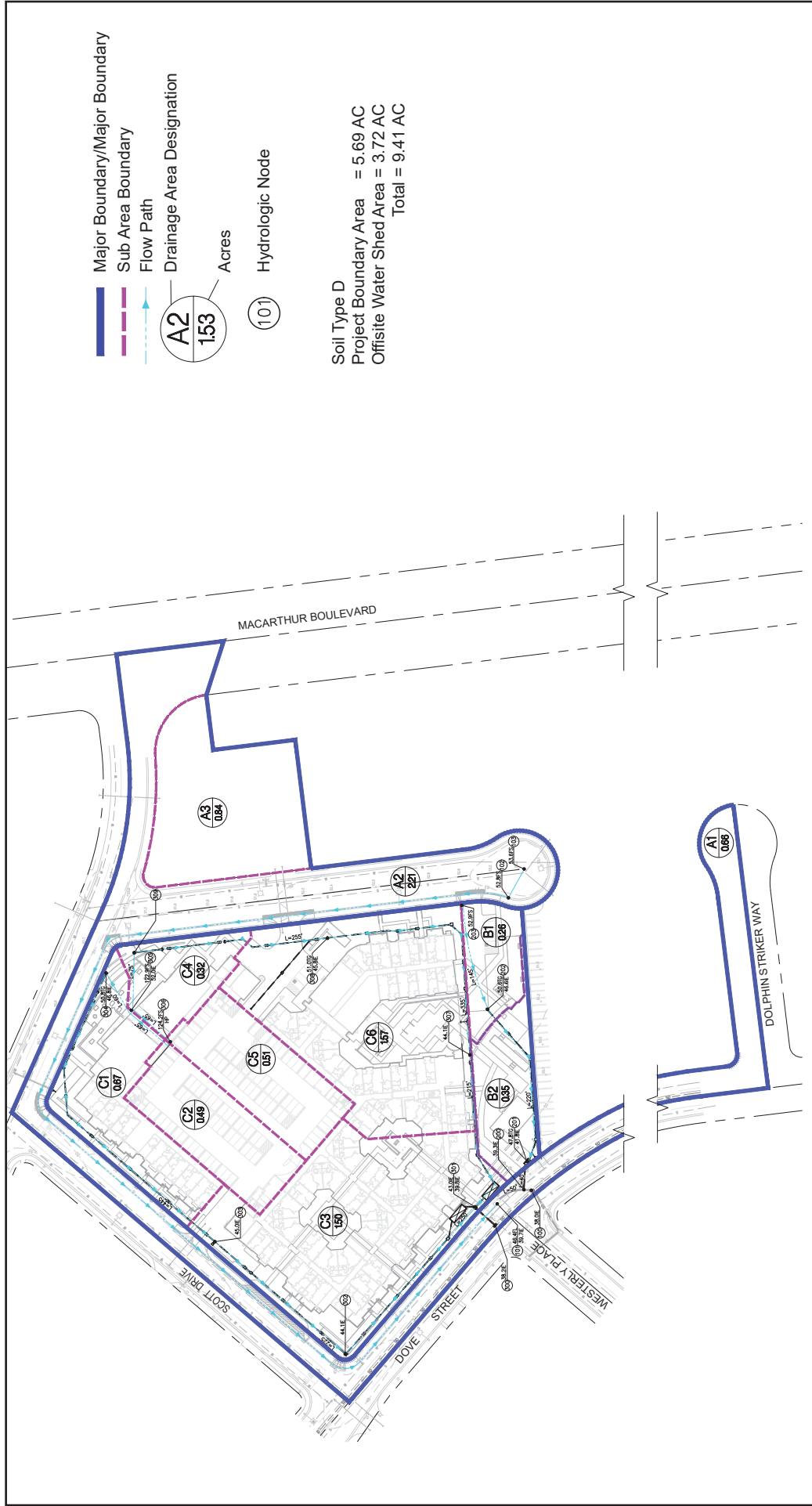
#### Erosion and Siltation

The majority of the potential erosion and siltation impacts would occur during the construction phase (e.g., grading, clearing, and excavating) of the proposed project. During construction, the project site would be cleared of vegetation and existing facilities and structures in preparation for grading, which would expose loose soil to potential wind and water erosion. If not controlled, the transport of these materials to local waterways would temporarily increase suspended sediment concentrations and release pollutants attached to sediment particles into local waterways. The project proponent is required to submit an NOI and SWPPP prior to the commencement of construction activities (see Impact 5.8-1, above). The SWPPP would describe the BMPs to be implemented during the project's construction activities.

The operational phase of the proposed project would include landscaping, impervious surface coverage, and the project-related water quality design features (see *Postconstruction* under Impact 5.8-1).



Figure 5.8-5 - Proposed Site Drainage  
5. Environmental Analysis



## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

*This page intentionally left blank.*

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

Collectively, implementation of the BMPs outlined in the SWPPP and the project's proposed water quality design (LID) features would address the anticipated and expected erosion and siltation impacts during the construction and operational phases of the proposed project.

**Level of Significance before Mitigation:** With implementation of RR HYD-1, RR HYD-2, and SC HYD-1 Impact 5.8-4 would be less than significant.

#### 5.8.5 Cumulative Impacts

The area considered for cumulative hydrology, drainage, and flood hazard impacts is the Newport Bay Watershed. The area considered for cumulative water quality impacts is the part of Orange County in the Santa Ana River Basin and thus subject to the MS4 Permit covering the project site. Other projects in the region would increase impervious areas and thus increase runoff. Other projects meeting certain criteria would be required to implement LID BMPs requiring that specified amounts of runoff be infiltrated, evapotranspired, harvested and reused, or treated. Implementation of such BMPs would reduce the amount of runoff entering public storm drain systems. Some other projects may be proposed in 100-year flood zones. Local jurisdictions regulate development in such zones (for example, City of Newport Beach Municipal Code Chapter 15.50) both for public safety and to prevent changes to flood flows.

Other projects would generate increased pollutants that could contaminate stormwater. Implementation of BMPs such as those described above would reduce stormwater quality impacts. Cumulative impacts to hydrology and water quality would be less than significant, and the project's contribution to cumulative impacts would not be cumulatively considerable.

#### 5.8.6 Level of Significance Before Mitigation

With implementation of RR HYD-1, RR HYD-2, and SC HYD-1 the following impacts would be less than significant:

- **Impact 5.8-1:** The proposed project would not violate water quality standards or waste discharge requirements, otherwise degrade water quality, or have a significant impact on water quality due to site discharges.
- **Impact 5.8-4:** Development of the proposed project would not substantially alter the existing drainage pattern to result in potentially significant erosion or siltation impacts.

With the implementation of RR HYD-1, RR HYD-2, SC HYD-1 and SC HYD-2 the following impact would be less than significant:

- **Impact 5.8-3:** The proposed project would not substantially deplete groundwater supplies, interfere substantially with groundwater recharge, or result in a significant impact to groundwater quality.

With implementation of RR HYD-2 and SC HYD-1, the following impact would be less than significant:

## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

- **Impact 5.8-2:** Development of the proposed project would not substantially alter the existing drainage pattern to result in adverse flooding impacts, and create or contribute runoff water that would exceed the capacity of existing or planned stormwater systems

#### 5.8.7 Mitigation Measures

No mitigation measures are required.

#### 5.8.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.8.9 References

California Department of Water Resources (CDWR). 2003. California's Groundwater: Bulletin 118.

California Stormwater Quality Association (CASQA). 2003. Construction BMP Handbook.

Newport Beach, City of. 2000. Storm Drain Master Plan.

———. 2002, April 23. Council Policy L-18: Protection of Water Quality: Drainage, Public Rights-of-Way.  
<http://www.city.newport-beach.ca.us/councilpolicies/L-18.pdf>.

———. 2003. Hazards Assessment Study.

———. 2006. City of Newport Beach General Plan Update EIR.

———. 2016, June. 2015 Urban Water Management Plan.  
<http://www.newportbeachca.gov/home/showdocument?id=35677>

Orange County Water District (OCWD). 2006. Groundwater Replenishment System.  
<http://www.gwrsystem.com>.

State Water Resources Control Board (SWRCB). 2018, February 5. Impaired Water Bodies.  
[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2012.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml).

US Environmental Protection Agency (USEPA). 2012, September 26. Water Permitting 101.  
<http://www.epa.gov/npdes/pubs/101pape.pdf>.

———. 2016, December 14. Urban Runoff: Low Impact Development. <https://www.epa.gov/nps/urban-runoff-low-impact-development>.

## 5. Environmental Analysis

### 5.9 LAND USE AND PLANNING

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed Newport Crossings Mixed Use project (proposed project) to land use in the City of Newport Beach.

Land use impacts can be either direct or indirect. Direct impacts are those that result in land use incompatibilities, division of neighborhoods or communities, or interference with other land use plans, including habitat or wildlife conservation plans. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. This section focuses on direct land use impacts. Indirect impacts are addressed in other sections of this DEIR.

#### 5.9.1 Environmental Setting

##### 5.9.1.1 REGULATORY BACKGROUND

Regional and local laws, regulations, plans, or guidelines potentially applicable to the proposed project are summarized below.

##### **Regional**

##### *Southern California Association of Governments*

SCAG is a regional council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties, which encompass over 38,000 square miles. SCAG is the federally recognized metropolitan planning organization for this region and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's metropolitan planning organization, SCAG cooperates with the South Coast Air Quality Management District, the California Department of Transportation, and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives, as discussed below.

On April 7, 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS), a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The 2016–2040 RTP/SCS is a living, evolving blueprint for the region's future (SCAG 2016).

## 5. Environmental Analysis

### LAND USE AND PLANNING

The proposed project is not considered a project of “regionwide significance” pursuant to the criteria in SCAG’s *Intergovernmental Review Procedures Handbook* (November 1995) and Section 15206 of the CEQA Guidelines. Therefore, this section does not address the proposed project’s consistency with SCAG’s regional planning guidelines and policies.

#### Local

##### *City of Newport Beach General Plan*

Development of all land in the City of Newport Beach is guided by the City’s General Plan. The 2006 Newport Beach General Plan was approved by the City Council on July 25, 2006. Increased housing opportunities and a citywide reduction in allowed nonresidential building intensity were approved by voters in accordance with City Charter Section 423 on November 7, 2006. City Charter Section 423 requires voter approval for amendments that exceed specific development thresholds.

The 2006 General Plan consists of a series of state-mandated and optional elements to direct the city’s physical, social, and economic growth. Elements in the City of Newport Beach General Plan include land use, harbor and bay, housing, historical resources, circulation, recreation, arts and cultural, natural resources, safety, and noise. Policies in each of the elements that are relevant to the proposed project are listed in Table 5.9-1, *General Plan Consistency Analysis* (see Impact 5.9-2). The proposed project’s consistency with applicable policies of these elements is analyzed in Table 5.9-1.

**Land Use Element.** The land use element provides guidance regarding the ultimate pattern of development and provides development allocations for land uses throughout the City. It is based on and correlates the policies from all elements into a set of coherent development policies that serve as the central organizing foundation for the City’s General Plan as a whole. Cumulatively, the land use element’s policies directly affect the establishment and maintenance of the neighborhoods, districts, corridors, and open spaces that distinguish and contribute to Newport Beach’s livability, vitality, and image. Policies related to urban form are also in the land use element.

**Harbor and Bay Element.** The goals and policies pertaining to harbor issues guide the content of regulations related to development and activities on the water. Additional goals and policies recognize the important component of land use decisions related to waterfront property around Newport Harbor. The aim of harbor and bay goals and policies is to preserve the diversity and charm of existing uses without unduly restricting the rights of the waterfront property owner. Goals and policies in this element have been organized to address both water- and land-related issues, provision of public access, water quality and environmental issues, visual characteristics, and the administration of the harbor and bay. Section 5.8, *Hydrology and Water Quality*, of this DEIR contains additional information about water quality in Newport Beach.

**Housing Element.** Development of housing in the City of Newport Beach is guided by the goals, objectives, and policies of the housing element. The 2013–2021 housing element is an update and revision of the 2008 element and consists of new technical data, revised goals, updated policies, and a series of programs and implementing measures. The housing element is designed to facilitate attainment of the City’s regional housing needs allocation



## 5. Environmental Analysis LAND USE AND PLANNING

and to foster the availability of housing affordable to all income levels to the extent possible, given Newport Beach's constraints. The housing element includes policies aimed at ensuring that adequate housing is provided in the City of Newport Beach. In October 2013, the California Department of Housing and Community Development found that the 2013–2021 housing element was consistent with state housing element law. Section 5.11, *Population and Housing*, of this DEIR contains additional information about population and housing.

**Historical Resources Element.** This element addresses the protection and sustainability of Newport Beach's historical and paleontological resources. Goals and policies in this element are intended to recognize, maintain, and protect the community's unique historical, cultural, and archeological sites and structures. Sections 5.4, *Cultural Resources*, and 5.15, *Tribal Cultural Resources*, of this DEIR contain additional information about historic and cultural resources.

**Circulation Element.** The circulation element governs the City's long-term circulation system and overall mobility in the City. The goals and policies in this element are closely correlated with the land use element and are intended to provide the best possible balance between the City's future growth and land use development, roadway size, traffic service levels, and community character. The circulation element also contains policies related to water transportation services, bicyclists, and pedestrians. Section 5.14, *Transportation and Traffic*, of this DEIR contains additional information about existing circulation system and transportation facilities.

**Recreation Element.** The primary purpose of the recreation element is to ensure that the provision of parks and recreation facilities are appropriate for the residential and business population of Newport Beach. Specific recreational issues and policies in the recreation element include parks and recreation facilities; recreation programs; shared facilities; coastal recreation and support facilities; marine recreation; and public access. The recreation element also contains policies that encourage the provision and maintenance of marine-recreation-related facilities that enhance the enjoyment of the City's natural resources and the provision and maintenance of public access to coastal resources for recreational purposes. Section 5.13, *Recreation*, of this DEIR contains additional information about parks and recreation facilities.

**Arts and Cultural Element.** The goals and policies of the arts and cultural element are a guide for meeting the future cultural needs of the community. Maximizing the community's cultural arts potential requires coordinating various community groups, businesses, agencies, citizens, and the City to create active and cohesive cultural and arts programs. The goals and policies in this element are intended to serve as a mechanism for integrating these resources to provide improved and expanded arts and cultural facilities and programs to the community. None of the policies outlined in the arts and cultural element are applicable to the proposed project and are therefore not listed or analyzed in Table 5.9-1, *General Plan Consistency Analysis*.

**Natural Resources Element.** The primary objective of the natural resources element is to provide direction regarding the conservation, development, and utilization of natural resources. It identifies Newport Beach's natural resources and policies for their preservation, development, and wise use. This element addresses water supply (as a resource) and water quality (includes bay and ocean quality and potable drinking water), air quality, terrestrial and marine biological resources, open space, archaeological and paleontological resources, mineral resources, visual resources, and energy.

## 5. Environmental Analysis

### LAND USE AND PLANNING

The various resource management issues in this element are analyzed in detail in their respective sections of this DEIR: Section 5.1, *Aesthetics*; Section 5.2, *Air Quality*; Section 5.3, *Biological Resources*, Section 5.4, *Cultural Resources*; Section 5.6, *Greenhouse Gas Emissions*; Section 5.8, *Hydrology and Water Quality*; Section 5.13, *Recreation*; and Section 5.16, *Utilities and Service Systems*.

**Safety Element.** The primary goal of the safety element is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human-induced hazards. The element specifically addresses coastal hazards, geologic hazards, seismic hazards, flood hazards, wildland and urban fire hazards, hazardous materials, aviation hazards, and disaster planning. The element includes policies and programs that minimize potential impacts from hazards. Sections 5.7, *Hazards and Hazardous Materials*, and 5.8, *Hydrology and Water Quality*, of this DEIR contain further information about these various hazards.

**Noise Element.** The noise element is a tool for including noise control in the planning process to ensure land uses that generate various noise levels are sited near compatible uses. This noise element identifies noise-sensitive land uses and noise sources, defines areas of noise impact, and develops policies to ensure that Newport Beach residents will be protected from excessive noise. The major noise sources in the project area include vehicular traffic along MacArthur Boulevard, Birch Street, Dove Street, Corinthian Way, Martingale Way, Campus Drive, and Jamboree Road. Section 5.10, *Noise*, of this DEIR contains further information about the existing and future noise environment in the project area.

#### *Airport Area Planning Subarea*

As shown in Figure 5.9-1, *Airport Area Planning Designations*, the project site is in the City's "Airport Area" planning subarea, which is bounded by Campus Drive to the north and west, SR-73 to the south, and Jamboree Road to the east. This boundary also coincides with statistical area "L4" in the City's General Plan. The project site is in a Mixed-Use District and the site is designated MU-H2, Mixed-Use District Horizontal-2. This designation applies to properties located in the Airport Area and provides for a horizontal intermixing of uses that may include regional commercial office, multifamily residential, vertical mixed-use buildings, industrial, hotel rooms, and ancillary neighborhood uses. The maximum density is 50 units per acre. A total of 2,200 residential units are permitted within the MU-H2 designated properties, of which 1,650 units may be developed as replacement of existing office, retail, and/or industrial uses. The remaining 550 units are classified as additive units meaning they are not required to replace other units and they may be constructed as "in-fill" units to existing commercial or office development. Any eligible density bonus allowed by Government Code Section 65915 and Chapter 20.32 (Density Bonus) of the City's Municipal Code are not included in the 2,200-unit allowance or the 50 dwelling units per acre standard.

General Plan Land Use Policies for the mixed-use districts are included as policies LU 6.15.4 through 6.15-23. A key land use policy (LU 6.15.7) for the district requires residential units to be developed at a minimum density of 30 units and a maximum of 50 units per net acre (prior to any affordable housing density bonus) as averaged by the total area of the residential village.

Figure 5.9-1 - Airport Area Planning Designations  
5. Environmental Analysis



## 5. Environmental Analysis

### LAND USE AND PLANNING

*This page intentionally left blank.*

## 5. Environmental Analysis LAND USE AND PLANNING

### *Newport Place Planned Community Development Plan*

The Newport Place Planned Community District (PC-11) and planned community development plan (PCDP) were adopted by the City of Newport Beach in December 1970. Since then, the plan been amended multiple times; the most recent occurring in July 2012. PC-11 encompasses approximately 134.6 acres and is bounded by Birch Street, MacArthur Boulevard, Jamboree Road, and Bristol Street.

In 1970, the intent of PC-11 was to provide an area for commercial and light industrial use primarily because of its central location, proximity to four freeways, ideal topography, and relation to John Wayne Airport (JWA). The PC-11 area was also identified in the 2006 General Plan as a key area for future housing opportunities. Permitted uses in PC-11 include industrial (e.g., light industrial, industrial services and support facilities), business and professional offices, and commercial uses (e.g., support retail, general commercial, restaurants, hotel/motels, car wash, automobile dealership). A portion of PC-11 also has a Residential Overlay that permits multifamily residential units, of which 30 percent are required to be affordable to lower-income households.

More specifically, the project site is identified as General Commercial Site 6 with a Residential Overlay. The Residential Overlay implements General Plan Housing Element Program 3.2.2, which creates an exception to the 10-acre site requirement for residential development projects in the Airport Area that include a minimum of 30 percent of the units affordable to lower income households.

The residential overlay provides for the opportunity to develop affordable residential projects. Affordable residential projects that qualify for the residential overlay would be permitted subject to a Site Development Review. A Site Development Review provides a process to ensure consistency with General Plan policies related to the preservation of established community character, and expectations for high quality development and to ensure proper integration of the project with the area. To qualify for the residential overlay projects must provide the following:

- A density 30 to 50 dwelling units per acre.
- A minimum of 30 percent of the units must be affordable to lower-income households for a minimum of 30 years.
- Must meet the basic site development standards of the residential overlay.
- Residential dwellings shall be permitted only as replacement of existing nonresidential uses pursuant to General Plan Policy LU 6.15.5. The number of peak hour trips generated by new development could not exceed the number of trips that result from the existing nonresidential uses.

Residential developments that qualify for the residential overlay are subsequently exempt from General Plan Land Use Policy LU 6.15.6 and have no minimum site area requirement. In addition to the site size exception and affordable housing requirements, the Residential Overlay details additional residential development regulations addressing setbacks, building height, parking requirements, landscaping, signs, utilities requirements, and amenities and neighborhood integration.

## 5. Environmental Analysis

### LAND USE AND PLANNING

#### *Airport Environs Land Use Plan for John Wayne Airport*

In 1975, the Airport Land Use Commission (ALUC) of Orange County adopted an Airport Environs Land Use Plan (AELUP, amended April 17, 2008) for JWA. The AELUP is a land use compatibility plan that is intended to protect the public from adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable air space. The AELUP identifies standards for development in the airport's planning area based on noise contours, accident potential zones, and building heights. An ALUC is an agency authorized under state law to assist local agencies in ensuring compatible land uses in the vicinity of airports. Primary areas of concern for ALUCs are noise, safety hazards, and airport operational integrity. ALUCs are not implementing agencies in the manner of local governments, nor do they issue permits for a project such as those required by local governments. However, pursuant to California Public Utilities Code Section 21676, local governments are required to submit all general plan amendments and zone changes that occur in the ALUC planning areas for consistency review by the ALUC. If such an amendment or change is deemed inconsistent with the AELUP, a local government may override the ALUC decision by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670(a)(2) of the Public Utilities Code: "to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards in areas around public airports to the extent that these areas are not already devoted to incompatible uses."

The majority of the city's northern portion, including the project site, is in the Federal Aviation Regulation Part 77 Notification Area of JWA, which is regulated by the Federal Aviation Administration (FAA). The project site is also within the 60 dBA community noise equivalent level (CNEL) noise contour and within Safety Zone 6 (Traffic Pattern Zone) of JWA (ALUC 2008).

#### **5.9.1.2 EXISTING CONDITIONS**

##### **Onsite Uses**

The project site is currently improved with the 58,277-square-foot MacArthur Square shopping center built in the 1970s and 1980s, which consists of eight retail/commercial buildings, surface parking (462 parking spaces), and ornamental trees. An approximately 14-foot-wide landscaped perimeter strip is adjacent to the public sidewalks and surrounds the shopping center.

##### **Surrounding Uses**

The MacArthur Square shopping center is surrounded by low- and midrise office buildings, shopping centers, restaurants, a car wash, and a hotel. A seven- to ten-story Radisson Hotel and a Staples office supply store are to the north across Corinthian Way; a Benihana restaurant and a car wash are to the west across Scott Drive; and two- to four-story office buildings are to the east and west of the site across Martingale Way and Dove Street, respectively.



## 5. Environmental Analysis LAND USE AND PLANNING

### Existing General Plan Land Use Designation and Zoning

#### *General Plan*

The City of Newport Beach General Plan (2006) land use designation for the site is Mixed Use Horizontal 2 (MU-H2), which is intended for a horizontal intermixing of uses that may include regional commercial office, multifamily residential, vertical mixed-use buildings, industrial, hotel rooms, and ancillary neighborhood commercial uses (Newport Beach 2006).

#### *Zoning*

According to the City's zoning map, the project site is zoned Newport Place Planned Community (PC-11). The Newport Place Planned Community encompasses approximately 134.6 acres and is intended for a combination of industrial and commercial uses with a Residential Overlay over a portion of the area.

### 5.9.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- LU-1 Physically divide an established community.
- LU-2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- LU-3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

### 5.9.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address land use and planning impacts follow.

#### 5.9.3.1 REGULATORY REQUIREMENTS

- RR LU-1 The proposed project will be designed and constructed in accordance with the applicable provisions of Title 20 (Planning and Zoning) of the City of Newport Beach Municipal Code (also known as the Zoning Code, including those of Chapter 20.30 (Property Development Standards).
- RR LU-2 The proposed project will be designed and constructed in accordance with development standards established by the Newport Place Planned Community (NPPC) Development Standards except where deviations are allowed by the City's density bonus ordinance. These outline the standards by which development project within the NPPC must adhere to,

## 5. Environmental Analysis

### LAND USE AND PLANNING

including those related to building height, affordability requirements, setbacks, parking, landscaping, residential densities, amenities, and neighborhood integration.

#### 5.9.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to land use and planning that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.9.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.9-1: Project implementation would not divide an established community. [Threshold LU-1]**

---

**Impact Analysis:** As shown in Figure 3-3b, *Aerial Photograph: Project Site*, the project site is developed with the existing MacArthur Square shopping center. The proposed project would consist of redeveloping the site with 350 multifamily units, 7,500 square feet of commercial/retail space, and a 0.5-acre public community park. Adjacent roadways (i.e., Dove Street, Scott Drive, Corinthian Way, and Martingale Way) and public sidewalks would not be significantly altered.

The proposed mixed-use development would also be consistent with the site's general plan land use designation of MU-H2, which allows regional commercial office, multifamily residential, vertical mixed-use buildings, industrial, hotel, and ancillary neighborhood commercial uses.

Further, the existing shopping center is largely surrounded by commercial and office uses. The closest residential communities to the project site are apartment communities approximately 0.4 mile to the northeast in Irvine (i.e., The Metropolitan and Carlyle Apartments); apartment communities 0.7 mile to the east in Irvine (e.g., The Plaza, Toscana Apartments, Villa Siena Apartments, and Watermarke); and single-family residences approximately 0.7 mile to the southwest across State Route 73 in Santa Ana Heights of Newport Beach.<sup>1</sup> Given the distance and physical separation (e.g., roads and freeways) of these residential communities from the project site, development of the proposed project would not divide an established residential community. The project also would not divide the existing commercial community. Even though the project would introduce residences to the area, the project would not alter the area's existing roadway or pedestrian connections or otherwise impede existing commercial connections in the area.

**Level of Significance before Mitigation:** No impacts would occur.

---

<sup>1</sup> Two development projects with residential components are closer but are still under construction—Uptown Newport in Newport Beach at 4311 Jamboree Road and the Elements apartment project at 2601 Campus Drive in Irvine.

## 5. Environmental Analysis LAND USE AND PLANNING

---

**Impact 5.9-2: Implementation of the proposed project would not conflict with Newport Beach General Plan policies, Newport Place Planned Community zoning, or the Airport Environs Land Use Plan for John Wayne Airport. [Threshold LU-2]**

---

**Impact Analysis:** As discussed in Chapter 3 of this DEIR, implementation of the proposed project involves redevelopment of an existing approximately 5.69-acre, single-story shopping center into a mixed-use development that would include 350 apartment units, 2,000 square feet of restaurant space, 5,500 square feet of retail space, and a 0.5-acre public park.

In general, the proposed project would be consistent with land use patterns in the project vicinity, which mostly feature nonresidential development (i.e., office complexes, business parks, hotels, restaurants, retail uses, and airport-related uses) but increasingly include residential uses. The area surrounding JWA (including portions of the cities of Costa Mesa, Irvine, Newport Beach, and Santa Ana) functions as one of Orange County's urban cores, and accordingly, features a varied and mixed-use urban environment. The proposed project's mixed uses would not be inconsistent with this land use pattern. However, numerous plans, policies, and regulations apply to project site. The following analysis evaluates the proposed project's consistency with these plans, policies, and regulations with a focus on those that have been adopted for the purpose of avoiding or mitigating an environmental effect.

### General Plan Consistency

The project site is designated MU-H2 under the City's general plan land use plan. The MU-H2 designation is specific to the Airport Area and allows for horizontal intermixing of regional commercial office, multifamily residential, vertical mixed-use buildings, industrial, hotel rooms, and ancillary neighborhood commercial uses. Residential development of up to 2,200 units (i.e., 1,650 "replacement" units and 550 "infill" units) is allowed at a maximum density of 50 dwelling units per acre (du/ac). Any eligible density bonus allowed by Government Code Section 65915 and Chapter 20.32 (Density Bonus) of the Municipal Code are not included in the 2,200-unit allowance or the 50 dwelling units per acre standard.

Section 3.3.1.3, *Affordable Housing and Development Incentives*, of Chapter 3 describes how the City calculates the housing density of the proposed project. Of the project's 350 apartment units, 259 are considered "base" unit and 91 are "density bonus" units. Based on the maximum permitted residential density of 50 du/ac (which is calculated using "base" units), the proposed project's residential density would be 49.9 du/ac (based on a net site acreage of 5.19, after dedication of the 0.5-acre public park to the City). Accordingly, the proposed project is consistent with the land uses and maximum density permitted under the MU-H2 designation. The project would not require a general plan amendment.

The Newport Beach GPU EIR thoroughly evaluated the potential for new, high-density residential development to impact the existing environment in the Airport Area. It concluded, based upon the specific policies related to design and development within the General Plan, that future development of residential uses consistent with the MU-H2 designation would not degrade the existing environment. Therefore, visual impacts related to potential degradation of the aesthetic environment were determined to be less than significant. The project complies with applicable development standards, including density and square footage, and would not introduce a development inconsistent with the General Plan designation (or zoning).

## 5. Environmental Analysis

### LAND USE AND PLANNING

Additionally, a detailed analysis of the proposed project’s consistency with the applicable goals and policies of the City’s General Plan is provided in Table 5.9-1, *Newport Beach General Plan Consistency Analysis*.

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<b>Goal H 2: Encourage preservation of existing and provision of new housing affordable to extremely low-, very low-, low-, and moderate-income households.</b>	
<p><b>H 2.1.</b> Encourage preservation of existing and provision of new housing affordable to extremely low-, very low-, low-, and moderate-income households.</p>	<p><b>Consistent.</b> The proposed project includes 78 new housing units that would be affordable to lower-income residents. Exact rent prices have not been determined at this time.</p>
<p><b>Housing Program 2.2.1.</b> All required affordable units shall have restrictions to maintain their affordability for a minimum of 30 years.</p>	<p><b>Consistent.</b> The proposed 78 affordable units will be made available to low income households for a minimum period of 30 years.</p>
<p><b>Housing Program 2.2.8.</b> Implement Chapter 20.32 (Density Bonus) of the Zoning Code and educate interested developers about the benefits of density bonuses and related incentives for the development of housing that is affordable to very low-, low-, and moderate-income households and senior citizens.</p>	<p><b>Consistent.</b> The project utilizes a density bonus and requests incentives/waivers consistent with City’s zoning code and Government Code Section 65915.</p>
<p><b>H 2.2.</b> Encourage the housing development industry to respond to existing and future housing needs of the community and to the demand for housing as perceived by the industry.</p>	<p><b>Consistent.</b> The proposed project capitalizes on existing housing needs in Newport Beach and Orange County, which are jobs-rich and currently experiencing a housing shortage.</p>
<p><b>H 2.3.</b> Approve, wherever feasible and appropriate, mixed residential and commercial use developments that improve the balance between housing and jobs.</p>	<p><b>Consistent.</b> The proposed project is a mixed use project with both residential and commercial uses. As discussed in Section 5.11, <i>Population and Housing</i>, of this DEIR, the housing component of the proposed project will improve the Airport Area and City’s jobs-housing balance<sup>1</sup>.</p>
<b>Goal H 3: Housing opportunities for as many renter- and owner-occupied households as possible in response to the demand for housing in the City.</b>	
<p><b>H 3.1.</b> Mitigate potential governmental constraints to housing production and affordability by increasing the City of Newport Beach role in facilitating construction of affordable housing for all income groups.</p>	<p><b>Consistent.</b> This policy addresses City strategy and not individual development projects.</p>
<p><b>Housing Program 3.1.2.</b> When a residential developer agrees to construct housing for persons and families of very low-, low-, and moderate-income above mandated requirements, the City shall (1) grant a density bonus as required by state law and/or (2) provide additional incentives of equivalent financial value.</p>	<p><b>Consistent.</b> The project utilizes a density bonus and requests incentives/waivers consistent with City’s zoning code and Government Code Section 65915.</p>
<p><b>H 3.2.</b> Enable construction of new housing units sufficient to meet City quantified goals by identifying adequate sites for their construction. Development of new housing will not be allowed within the John Wayne Airport (JWA) 65 dB CNEL contour, no larger than shown on the 1985 JWA Master Plan.</p>	<p><b>Consistent.</b> The proposed project aids the City in its goal to provide new housing opportunities by including 350 housing units. As discussed in Section 5.10, <i>Noise</i>, of this DEIR, the project site is within the airport’s 60 dB CNEL contour but outside the 65 dB CNEL contour.</p>
<p><b>Housing Program 3.2.2.</b> Recognizing that General Plan Policy LU6.15.6 may result in a potential constraint to the development of affordable housing in the Airport Area, the City shall maintain an exception to the minimum 10-acre site requirement for projects that include a minimum of 30 percent of the units affordable to lower-income households. It is recognized that allowing a smaller scale development within an established commercial and industrial area may result in land use compatibility problems and result in a residential development that does not provide sufficient amenities (i.e. parks) and/or necessary improvements (i.e. pedestrian walkways). Therefore, it</p>	<p><b>Consistent.</b> The Residential Overlay of the Newport Place Planned Community implements General Plan Housing Element Program 3.2.2, which creates an exception to the 10-acre site requirement for residential development projects in the Airport Area that include a minimum of 30 percent of the units affordable to lower income households. Residential developments that qualify for the residential overlay are subsequently exempt from General Plan Land Use Policy LU 6.15.6 and have no minimum site area requirement. In addition to the site size exception and affordable housing requirements, the Residential Overlay details additional residential development regulations addressing setbacks, building height, parking</p>

5. Environmental Analysis  
LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
is imperative that the exception includes provisions for adequate amenities, design considerations for the future integration into a larger residential village, and a requirement to ensure collaboration with future developers in the area.	requirements, landscaping, signs, utilities requirements, and amenities and neighborhood integration.
<b>Goal H 4: Preservation and increased affordability of the City's housing stock for extremely low-, very low-, low-, and moderate-income households.</b>	
<b>H 4.1.</b> Continue or undertake the following programs to mitigate potential loss of "at risk" units due to conversion to market-rate units. These efforts utilize existing City and local resources. They include efforts to secure additional resources from public and private sectors should they become available.	<b>Consistent.</b> The housing programs listed under Policy H 4.1 in the Housing Element are identified as being the responsibility of the City. However, the project applicant will comply will all requirements enforced by the City including restrictions regarding maintenance of units as affordable.
<b>H 4.2.</b> Improve energy efficiency of all housing unit types (including mobile homes).	<b>Consistent.</b> As discussed in Section 5.6, <i>Greenhouse Gas Emissions</i> , of this DEIR and identified in RR GHG-1, the proposed project would be constructed to adhere to the California Building Energy and Efficiency Standards (Title 24, Part 6) and the California Green Building Standards Code (CALGreen). The 2016 Building Energy Efficiency Standards and CALGreen are effective starting on January 1, 2017, and the 2019 standards are effective starting January 1, 2020. These standards achieve higher energy efficiency that most existing housing units.
<b>Goal LU 1: A unique residential community with diverse coastal and upland neighborhoods, which values its colorful past, high quality of life, and community bonds, and balances the needs of residents, businesses, and visitors through the recognition that Newport Beach is primarily a residential community.</b>	
<b>LU 1.1. Unique Environment.</b> Maintain and enhance the beneficial and unique character of the different neighborhoods, business districts, and harbor that together identify Newport Beach. Locate and design development to reflect Newport Beach's topography, architectural diversity, and view sheds.	<b>Consistent.</b> The project site is not in or near any of the City's areas featuring the harbor, unique topography, or view sheds. However, the proposed project is a mixed-use project in a mixed-use business district, so it maintains the urbanized character of the JWA area, consistent with Policy LU 1.1.
<b>LU 1.3. Natural Resources.</b> Protect the natural setting that contributes to the character and identify of Newport Beach and the sense of place it provides for its residents and visitors. Preserve open space resources, beaches, harbor, parks, bluffs, preserves, and estuaries as visual, recreational and habitat resources.	<b>Not Applicable.</b> The project site and its surrounding context are heavily urbanized under existing conditions. No natural settings, (including open space resources, beaches, harbor, parks, bluffs, preserves, or estuaries) would be affected by implementation of the proposed project.
<b>LU 1.5. Economic Health.</b> Encourage a local economy that provides adequate commercial, office, industrial, and marine-oriented opportunities that provide employment and revenue to support high-quality community services.	<b>Consistent.</b> By replacing an underperforming commercial center with a mix of residential and commercial uses, the proposed project represents an investment in the economic health of the City, including by adding residents to a mixed-use area that will help support other nearby commercial uses.
<b>Goal LU 2: A living, active, and diverse environment that complements all lifestyles and enhances neighborhoods, without compromising the valued resources that make Newport Beach unique. It contains a diversity of uses that support the needs of residents, sustain and enhance the economy, provide job opportunities, serve visitors that enjoy the City's diverse recreational amenities, and protect its important environmental setting, resources, and quality of life.</b>	
<b>LU 2.1. Resident-Serving Land Uses.</b> Accommodate uses that support the needs of Newport Beach's residents including housing, retail, services, employment, recreation, education, culture, entertainment, civic engagement, and social and spiritual activity that are in balance with community natural resources and open spaces.	<b>Consistent.</b> Consistent with housing needs demonstrated in the City's housing element, the proposed project includes housing opportunities in the form of 350 apartments, including 78 units reserved for lower-income households (see Section 3.3.3.1 in Chapter 3 of this DEIR).  The project also would provide retail space and a 0.5-acre park dedicated for public use. The park would serve the project and existing offices and business in the surrounding vicinity as a recreation and activity area and respite from the daily work environment. A small off-street parking lot for park users is proposed on the eastern end of the

## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 2.2. Sustainable and Complete Community.</b> Emphasize the development of uses that enable Newport Beach to continue as a self-sustaining community and minimize the need for residents to travel outside of the community for retail, goods and services, and employment.</p>	<p>park.</p> <p><b>Consistent.</b> The project introduces 350 new residential units to an existing major employment center (the Airport Area, Irvine Business Complex, and surrounding areas), providing new opportunities for those working in the area to live near work. The project also provides park space and retail and restaurant space that will help to meet the needs of residents and employees.</p> <p>In addition, pedestrian connectivity between the proposed residential development and surrounding commercial and professional developments would also be provided via sidewalks and paths created by the proposed project. The introduction and subsequent integration of a mixed-use development into a well-established neighborhood of primarily commercial, retail, and office uses would provide a greater balance between housing, employment, and retail opportunities within the Airport Area. Potential employment opportunities for future residents of the proposed project that may arise in the surrounding area would be within walking/bicycle riding distance of the proposed homes. In addition, those who are currently employed in the area would be afforded a rental housing opportunity within walking/bicycle riding distance of their place of employment. Lastly, the proposed neighborhood-serving retail floor area would serve not only the proposed project's residents but also nearby businesses and employment centers.</p>
<p><b>LU 2.3. Range of Residential Choices.</b> Provide opportunities for the development of residential units that respond to community and regional needs in terms of density, size, location, and cost. Implement goals, policies, programs, and objectives identified within the City's Housing Element.</p>	<p><b>Consistent.</b> See response to Policy LU 2.1.</p>
<p><b>LU 2.4. Economic Development.</b> Accommodate uses that maintain or enhance Newport Beach's fiscal health and account for market demands, while maintaining and improving the quality of life for current and future residents.</p>	<p><b>Consistent.</b> See response to Policy LU 1.5. The project would pay the City's development impact fees, which are designed to ensure that new development does not have a negative fiscal impact on the City, and the School District's development impact fee. The project also adds a public park to the area, which will improve the quality of life for existing and future residents and employees.</p>
<p><b>LU 2.8. Adequate Infrastructure.</b> Accommodate the types, densities, and mix of land uses that can be adequately supported by transportation and utility infrastructure (water, sewer, storm drainage, energy, and so on) and public services (schools, parks, libraries, seniors, youth, police, fire, and so on).</p>	<p><b>Consistent.</b> Because the proposed project involves redevelopment of existing urbanized parcels instead of developing on a greenfield (undeveloped) site, it would benefit from the efficiency of connecting to existing utility infrastructure and the existing street network. For more information about the provision of public services and utilities to the proposed land uses, see Sections 5.12, <i>Public Services</i>, and 5.16, <i>Utilities and Service Systems</i>, of this DEIR. Infrastructure upgrades are included in the project and are listed in Section 3.3.1.9 of Chapter 3 of this DEIR.</p>
<p><b>Goal LU 3: A development pattern that retains and complements the City's residential neighborhoods, commercial and industrial districts, open spaces, and natural environment.</b></p>	
<p><b>LU 3.1. Neighborhoods, Districts, Corridors, and Open Spaces.</b> Maintain Newport Beach's pattern of residential neighborhoods, business and employment districts, commercial centers, corridors, and harbor and ocean districts.</p>	<p><b>Consistent.</b> The proposed project is a mixed use (residential and commercial) project that would be built in a mixed-use context of commercial, light industrial, and hospitality uses. Furthermore, consistent with long-range planning efforts implemented by the cities of Newport Beach and Irvine designed to change the areas around JWA to have increasing home to residential uses, the project provides 350 residential units. Therefore, the proposed project would maintain</p>



## 5. Environmental Analysis LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 3.2. Growth and Change.</b> Enhance existing neighborhoods, districts, and corridors, allowing for re-use and infill with uses that are complementary in type, form, scale, and character. Changes in use and/or density/intensity should be considered only in those areas that are economically underperforming, are necessary to accommodate Newport Beach’s share of projected regional population growth, improve the relationship and reduce commuting distance between home and jobs, or enhance the values that distinguish Newport Beach as a special place to live for its residents. The scale of growth and new development shall be coordinated with the provision of adequate infrastructure and public services, including standards for acceptable traffic level of service.</p>	<p>the overall land use pattern of the Airport Area.</p> <p><b>Consistent.</b> As described in Chapter 3 of this DEIR, the existing commercial center on the project site (MacArthur Square) is an aging, underutilized, and underperforming shopping center. The proposed project would represent a substantial investment in an existing district (the JWA Airport Area) that is important to the City’s economic health. As described above under Policy LU 3.2, the proposed housing units would contribute toward Newport Beach accommodating its share of projected regional population growth. The proposed housing also could reduce commuting distances and traffic by providing residences in an employment-rich area. For more information about the provision of public services and infrastructure to the project site, see Sections 5.12, <i>Public Services</i>, 5.15, <i>Transportation and Traffic</i>, and 5.16, <i>Utilities and Service Systems</i>, of this DEIR.</p>
<p><b>LU 3.3. Opportunities for Change.</b> Provide opportunities for improved development and enhanced environments for residents in the following districts and corridors, as specified in Polices 6.3.1 through 6.22.7:</p> <p><b>John Wayne Airport Area:</b> re-use of underperforming industrial and office properties and development of cohesive residential neighborhoods in proximity to jobs and services.</p>	<p><b>Consistent.</b> The premise of the proposed project is exactly that articulated by this policy—the project would redevelop and reuse a site featuring underperforming commercial uses and would develop residential uses in a cohesive design near existing jobs and services.</p>
<p><b>LU 3.8. Project Entitlement Review with Airport Land Use Commission.</b> Refer the adoption or amendment of the General Plan, Zoning Code, specific plans, and Planned Community development plans for land within the John Wayne Airport planning area, as established in the JWA Airport Environs Land Use Plan (AELUP), to the Airport Land Use Commission (ALUC) for Orange County for review, as required by Section 21676 of the California Public Utilities Code. In addition, refer all development projects that include buildings with a height greater than 200 feet above ground level to the ALUC for review.</p>	<p><b>Not Applicable.</b> This policy generally applies to larger, planning-scale efforts, projects requiring amendments to most of the General Plan, Zoning Code, and other legislative documents, and buildings with a proposed height of more than 200 feet above ground level. The project does not require a General Plan amendment, rezoning, specific plan, or Planned Community Development permit.</p> <p>In addition, Newport Place Planned Community Development Plan Amendment No. PD2011-005, which created and incorporated the Residential Overlay into the Newport Place Planned Community. Residential Overlay, was reviewed by ALUC on June 21, 2012 and found consistent with the AELUP for John Wayne Airport.</p>
<p><b>Goal LU 4: Management of growth and change to protect and enhance the livability of neighborhoods and achieve distinct and economically vital business and employment districts, which are correlated with supporting infrastructure and public services and sustain Newport Beach’s natural setting.</b></p>	
<p><b>LU 4.1. Land Use Diagram.</b> Accommodate land use development consistent with the Land Use Plan. Figure LU1 depicts the general distribution of uses throughout the City and Figure LU2 through Figure LU15 depict specific use categories for each parcel within defined Statistical Areas. Table LU1 (Land Use Plan Categories) specifies the primary land use categories, types of uses, and, for certain categories, the densities/intensities to be permitted. See page 3-11 of the City’s General Plan for the full policy.</p>	<p><b>Consistent.</b> Figure LU1 in the land use element shows that the Airport Area is primarily intended for commercial and mixed uses. Figures LU11 and LU22 show that the project site and adjacent parcels are designated MU-H2. As discussed above, the proposed project is consistent with the MU-H2 designation.</p>
<p><b>LU 4.2. Prohibition of New Residential Subdivisions.</b> Prohibit new residential subdivisions that would result in additional dwelling units unless authorized by an amendment of the General Plan (GPA). Lots that have been legally merged through the Subdivision Map Act and City Subdivision Code approvals are exempt from the GPA requirements and may be re-</p>	<p><b>Not Applicable.</b> The proposed project is designed as MU-H2 and does not involve residential subdivisions.</p>

## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
subdivided to the original underlying legal lots. This policy is applicable to all Single Unit, Two Unit, and Multiple Unit Residential land use categories.	
<b>Goal LU 5.1: Residential neighborhoods that are well-planned and designed contribute to the livability and quality of life of residents, respect the natural environmental setting, and sustain the qualities of place that differentiate Newport Beach as a special place in the Southern California region.</b>	
<b>LU 5.1.1. Compatible but Diverse Development.</b> Establish property development regulations for residential projects to create compatible and high-quality development that contributes to neighborhood character.	<b>Consistent.</b> This is not a project-level policy as it relates to the establishment of regulations. However, the proposed project is a mixed use project with ground-floor commercial uses that would be adjacent to other commercial uses. The project includes additional design features that would help it to integrate into the existing community, including enhanced landscaped setbacks, pedestrian paths, and park space.
<b>LU 5.1.2. Compatible Interfaces.</b> Require that the height of development in nonresidential and higher-density residential areas transition as it nears lower-density residential areas to minimize conflicts at the interface between the different types of development.	<b>Not Applicable.</b> There are no lower-density residential areas surrounding the project site.
<b>Goal LU 5.3: Districts where residents and businesses are intermixed that are designed and planned to ensure compatibility among the uses, that they are highly livable for residents, and are of high quality design reflecting the traditions of Newport Beach.</b>	
<b>LU 5.3.1 Mixed-Use Buildings.</b> Require that mixed-use buildings be designed to convey a high level of architectural and landscape quality and ensure compatibility among their uses in consideration of the following principles: <ul style="list-style-type: none"> <li>– Design and incorporation of building materials and features to avoid conflicts among uses, such as noise, vibration, lighting, odors, and similar impacts</li> <li>– Visual and physical integration of residential and nonresidential uses</li> <li>– Architectural treatment of building elevations and modulation of their massing</li> <li>– Separate and well-defined entries for residential units and nonresidential businesses</li> <li>– Design of parking areas and facilities for architectural consistency and integration among uses</li> <li>– Incorporation of extensive landscape appropriate to its location; urbanized streetscapes, for example, would require less landscape along the street frontage but integrate landscape into interior courtyards and common open spaces.</li> </ul>	<b>Consistent.</b> Conceptual renderings of the proposed project are shown in Figures 3-5 through 3-7. The proposed buildings, landscaping, and other built elements have been designed to exhibit high quality design and complement the surrounding urban context. As illustrated in the renderings, the project would have the retail and restaurant space in one area, to minimize potential conflicts with the residential uses, but integrates the commercial uses with the residential uses through a common design vocabulary such that all portions of the project form a cohesive whole. The façade of the building is articulated through the use of windows, changes in planes, color, and changes in massing. The project provides separate entrances for residential and non-residential uses, with the commercial entrances articulated by a white frame and store-front windows. The parking facilities are completely integrated into the design and hidden from view by the residential units and commercial portion of the building. Extensive landscaping is incorporated along street frontages, in interior courtyards, on the roof terrace, and in the public park. For an additional evaluation of visual and aesthetic impacts generated by the proposed project, see Section 5.1, <i>Aesthetics</i> , of this DEIR.
<b>LU 5.3.3 Parcels Integrating Residential and Nonresidential Uses.</b> Require that properties developed with a mix of residential and nonresidential uses be designed to achieve high levels of architectural quality in accordance with policies LU 5.1.9 and LU 5.2.1 and planned to ensure compatibility among the uses and provide adequate circulation and parking. Residential uses should be seamlessly integrated with nonresidential uses through architecture, pedestrian walkways, and landscape. They should not be completely isolated by walls or other design elements.	<b>Consistent.</b> As shown in Figures 3-5 through 3-7, the retail component is seamlessly integrated into residential uses. The proposed parking structure (see Figure 3-4) would serve both residents and users of the proposed retail space. The residential uses are seamlessly integrated with the nonresidential uses through the use of a common architectural vocabulary for both, and as shown in Figure 3-4, Conceptual Site and Landscape Plan, through pedestrian paths and landscaping. See additional description of vehicular access and parking in Section 3.3.1.8 of Chapter 3.

## 5. Environmental Analysis LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 5.3.4. Districts Integrating Residential and Nonresidential Uses.</b> Require that sufficient acreage be developed for an individual use located in a district containing a mix of residential and nonresidential uses to prevent fragmentation and ensure each use's viability, quality, and compatibility with adjoining uses.</p>	<p><b>Consistent.</b> As described above under Policy LU 3.1, the Airport Area is increasingly home to residential uses that are intermingled with nonresidential uses. The project would develop sufficient acreage (approximately 5.69 acres) for mainly residential uses and a supporting park to prevent fragmentation and ensure the viability of the residential uses. In addition, the project proposes some commercial uses that provide a connection to surrounding commercial areas. The addition of residential uses in the area will help ensure the viability of the remaining, existing retail uses in the vicinity. Furthermore, the project site is bordered by streets on four sides, avoiding adjacency of incompatible uses and preventing fragmentation.</p>
<p><b>LU 5.3.6. Parking Adequacy and Location.</b> Require that adequate parking be provided and is conveniently located to serve tenants and customers. Set open parking lots back from public streets and pedestrian ways and screen with buildings, architectural walls, or dense landscaping.</p>	<p><b>Consistent.</b> As shown in Figure 3-4 and described in Chapter 3 of this DEIR, the proposed parking structure provides more parking than required and would be screened from public view by being located at the center of the project site behind residential and retail uses. Only a few surface parking spaces adjacent to the leasing plaza and public park would be visible from the public right-of-way. See Section 3.3.1.8 for more information about access, circulation, and parking proposed by the proposed project.</p>
<p><b>Goal LU 5.6: Neighborhoods, districts, and corridors containing a diversity of uses and buildings that are mutually compatible and enhance the quality of the City's environment.</b></p>	
<p><b>LU 5.6.1. Compatible Development.</b> Require that buildings and properties be designed to ensure compatibility within and as interfaces between neighborhoods, districts, and corridors.</p>	<p><b>Consistent.</b> The vicinity surrounding the project site contains a variety of nonresidential land uses at a variety of building intensities and scales. Although the height and bulk of the proposed building is greater than some of the surrounding commercial and office buildings, the Airport Area is a district in transition with new projects—like the proposed project—introducing more street-facing urban building typologies. The design and scale of the proposed project will contribute to the evolving urban neighborhood that is gradually developing in the Airport Area. It includes features such as landscaped setbacks, street trees, public park space, outdoor retail-adjacent dining and lounging space, articulated facades with balconies and windows, and varying colors and material. These outward-facing features will add visual interest and integrate the project site with neighborhood activity on surrounding streets and buildings.</p>
<p><b>LU 5.6.2. Form and Environment.</b> Require that new and renovated buildings be designed to avoid the use of styles, colors, and materials that unusually impact the design character and quality of their location such as abrupt changes in scale, building form, architectural style, and the use of surface materials that raise local temperatures, result in glare and excessive illumination of adjoining properties and open spaces, or adversely modify wind patterns.</p>	<p><b>Consistent.</b> The project's design is typical for multi-family and mixed-use projects in the City and nearby jurisdictions and would not unusually impact the design character or quality of the area. The project's proposed material and color palette, which consists mainly of stucco walls in shades of gray and white, would not raise local temperatures or result in glare. See response to Policy LU 5.6-1. See additional analysis in Section 5.1 of this DEIR, which analyzes the proposed project's potential impacts related to aesthetics, light, and glare.</p>
<p><b>LU 5.6.3. Ambient Lighting.</b> Require that outdoor lighting be located and designed to prevent spillover onto adjoining properties or significantly increase the overall ambient illumination of their location.</p>	<p><b>Consistent.</b> All project-related exterior lighting would be designed, arranged, directed, or shielded in such a manner as to contain direct illumination onsite, in accordance with the provisions of Subsection 20.30.070.A (General Outdoor Lighting Standards) of the City's Zoning Code, thereby preventing excess illumination and light spillover onto adjoining land uses and/or roadways. For additional analysis, see Impact 5.1-3 in Section 5.1 of this DEIR.</p>

## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 5.6.4. Conformance with the Natural Environmental Setting.</b> Require that sites be planned and buildings designed in consideration of the property’s topography, landforms, drainage patterns, natural vegetation, and relationship to the Bay and coastline, maintaining the environmental character that distinguishes Newport Beach.</p>	<p><b>Not applicable.</b> The project site is in a heavily urbanized context and does not feature natural topography, landforms, drainage patterns, or vegetation.</p>
<p><b>Goal LU 6.2: Residential neighborhoods that contain a diversity of housing types and supporting uses to meet the needs of Newport Beach’s residents and are designed to sustain livability and a high quality of life.</b></p>	
<p><b>LU 6.2.1. Residential Supply.</b> Accommodate a diversity of residential units that meets the needs of Newport Beach’s population and fair share of regional needs in accordance with the Land Use Plan’s designations, applicable density standards, design and development policies, and the adopted Housing Element.</p>	<p><b>Consistent.</b> See response to Policy LU 2.1.</p>
<p><b>LU 6.2.3. Residential Affordability.</b> Encourage the development of residential units that are affordable for those employed in the City.</p>	<p><b>Consistent.</b> As described in Section 3.3.3.1 of Chapter 3 of this DEIR and above under Policy LU 2.1, the proposed project would feature 78 units (30 percent of total base units) that are reserved for lower-income households. This would be consistent with the City’s housing element and Residential Overlay of the Newport Place Planned Community. In addition, the project seeks approval of density bonus consistent with State law and encouraged by Housing Program 2.2.8. To illustrate compliance with the Residential Overlay affordable housing requirements and density bonus allowances of the City zoning code and state law, the proposed project includes preparation of an Affordable Housing Implementation Plan. he</p>
<p><b>LU 6.2.5. Neighborhood Supporting Uses.</b> Allow for the integration of uses within residential neighborhoods that support and are complementary to their primary function as a living environment such as schools, parks, community meeting facilities, religious facilities, and comparable uses. These uses shall be designed to ensure compatibility with adjoining residential addressing such issues as noise, lighting, and parking.</p>	<p><b>Consistent.</b> The proposed project includes a number of onsite amenities for future residents, including a pool and spa, courtyards with outdoor space, a rooftop terrace, view deck, and fitness facility. As described in Chapter 3, the project also includes dedication of a 0.5-acre public park on the project site, which is located on the southern end of the project site. The park site has been designed to ensure compatibility with adjacent residential uses, including through its location adjacent to private recreational facilities (the pool court), use of landscape buffers, inclusion of off-street park parking, and use of lights designed not to project beyond the park boundary.</p>
<p><b>Goal LU 6.15: A mixed-use community that provides jobs, residential, and supporting services in close proximity, with pedestrian-oriented amenities that facilitate walking and enhance livability.</b></p>	
<p><b>LU 6.15.1. Land Use Districts and Neighborhoods.</b> Provide for the development of distinct business park, commercial, and airport-serving districts and residential neighborhoods that are integrated to ensure a quality environment and compatible land uses.</p>	<p><b>Not Applicable.</b> This is a programmatic policy and is not implementable at a project level. Nevertheless, the project would add a residential community with some commercial uses and a public park that is integrated into the surroundings through its architectural design and as envisioned by the General Plan.</p>
<p><b>LU 6.15.2. Underperforming Land Uses.</b> Promote the redevelopment of sites with underperforming retail uses located on parcels at the interior of large blocks for other uses, with retail clustered along major arterials (e.g., Bristol, Campus, MacArthur, and Jamboree), except where intended to serve and be integrated with new residential development.</p>	<p><b>Consistent.</b> The proposed project would replace an underperforming commercial center on an interior-block site with a mixed-use redevelopment project. The project site does not front along MacArthur Boulevard to the east. However, the proposed project’s retail uses would front on Corinthian Way, which connects directly to MacArthur Boulevard. This would create a link between the residential uses proposed for the project site and commercial uses along MacArthur Boulevard.</p>

5. Environmental Analysis  
LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 6.15.3. Airport Compatibility.</b> Require that all development be constructed in conformance with the height restrictions set forth by Federal Aviation Administration (FAA), Federal Aviation Regulations (FAR) Part 77, and Caltrans Division of Aeronautics, and that residential development be located outside of the 65 dBA CNEL noise contour specified by the 1985 JWA Master Plan.</p>	<p><b>Consistent.</b> Building heights and their relationship with aircraft-related safety risks are discussed in Section 5.7, <i>Hazards and Hazardous Materials</i>, of this DEIR. Aircraft-related noise is discussed in Section 5.10, <i>Noise</i>. As discussed in Chapter 5.10, the project site is within the 60 dB CNEL noise contour but outside the 65 dB CNEL contour. Based on the City's Land Use Noise Compatibility Matrix (Table 1 in the noise element), residential (mixed use) and commercial development are "clearly compatible" within the 60 to 65 dBA CNEL noise range. The project would be constructed in conformance with the FAA's height restrictions.</p>
<p><b>LU 6.15.5 Residential and Supporting Uses.</b> Accommodate the development of a maximum of 2,200 multi-family residential units, including work force housing, and mixed-use buildings that integrate residential with ground level office or retail uses, along with supporting retail, grocery stores, and parklands. Residential units may be developed only as the replacement of underlying permitted nonresidential uses. When a development phase includes a mix of residential and nonresidential uses or replaces existing industrial uses, the number of peak hour trips generated by cumulative development of the site shall not exceed the number of trips that would result from development of the underlying permitted nonresidential uses. However, a maximum of 550 units may be developed as infill on surface parking lots or areas not used as occupiable buildings on properties within the Conceptual Development Plan Area depicted on Figure LU22 provided that the parking is replaced on site.</p>	<p><b>Consistent.</b> The proposed project is a mixed-use building that includes 350 apartments (including 78 units affordable to lower-income residents), 7,500 square feet of ground-floor retail and restaurant uses, and a public park. As described in Chapter 3 of this DEIR, the proposed project's residential uses would replace the underlying permitted nonresidential uses. A maximum of 2,200 multifamily residential units could be built in the Airport Area with a cap of 1,650 residential units that can be developed on a conversion basis (replacing existing office, retail, and/or industrial uses) in addition to 550 units allowed as infill development.</p> <p>Under the proposed project, and 259 residential units would be developed as replacement units and 91 density bonus units in accordance with Chapter 20.32 (Density Bonus) of the Newport Beach Municipal Code and State law. The residential units developed within the proposed project would contribute to the residential units envisioned and approved for the Airport Area. The only other approved project within the Airport Area at the time of this application would be the Uptown Newport project which was approved for 632 replacement units, 290 additive units, and with a density bonus of 322 units for a total of 1,244 residential units.</p> <p>As determined by the City's traffic engineer, the number of peak hour trips generated by the redevelopment of the project site would not exceed the number of trips attributable to the existing permitted non-residential uses. The City's General Plan has provided a conversion of the existing land uses in the Airport Area to residential uses on a traffic neutral basis. The City applies conversion factors to determine consistency with the trip neutral requirement of this policy. The existing project site is currently developed with 58,277 square feet of commercial square footage. With 7,500 square feet of commercial square footage to remain within the project, the remaining net floor area available for conversion is 50,727 square feet. When applying the City's conversion methodology to the existing net floor area, a total of 273 residential units would be allowed to be developed as replacement units. However, the maximum number of units (exclusive of the density bonus units permissible under the City's Municipal Code) allowed due to the maximum density of 50 units per acre would be 259 units (exclusive of additional units allowable under the bonus density provision).</p>



## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 6.15.6. Size of Residential Villages.</b> Allow development of mixed-use residential villages, each containing a minimum of 10 acres and centered on a neighborhood park and other amenities (as conceptually illustrated in Figure LU23). The first phase of residential development in each village shall encompass at least 5 gross acres of land, exclusive of existing rights-of-way. This acreage may include multiple parcels provided that they are contiguous or face one another across an existing street. At the discretion of the City, this acreage may also include part of a contiguous property in a different land use category, if the City finds that a sufficient portion of the contiguous property is used to provide functionally proximate parking, open space, or other amenity. The “Conceptual Development Plan” area shown on Figure LU22 shall be exempt from the 5-acre minimum, but a conceptual development plan described in Policy LU 6.15.11 shall be required.</p>	<p><b>Consistent.</b> During review of the 2008–2014 Housing Element, the California Department of Housing and Community Development (HCD) identified two constraints to the development of affordable housing within the Airport Area that needed to be addressed prior to their finding that the Housing Element meets state law requirements.</p> <p>The first constraint recognized by HCD is General Plan Policy LU 6.15.6 that requires residential neighborhoods in the Airport Area to contain a minimum of ten (10) contiguous acres centered on a neighborhood park and other amenities. To address this constraint, Housing Element Program HP 3.2.2 was adopted waiving the minimum 10-acre site requirement for affordable housing projects.</p> <p>The second constraint identified by HCD relates to the zoning of the sites within the Airport Area. Although the General Plan permits residential development on sites designated mixed-use within the Airport Area, the sites remain zoned only for commercial and industrial land uses. To address this issue, Newport Place Planned Community Development Plan Amendment No. PD2011-005 was adopted creating the Residential Overlay, which permitted residential developments less than 10-acre in size, subject to Site Development Review, provided they include: 1) a minimum of 30 percent of the units affordable to lower-income households; and 2) include densities between 30 du/acre and 50 du/acre consistent with the General Plan land use designation and policies for the Airport Area.</p> <p>The project meets the affordability criteria. Of the 259 base residential units, 78 units (30 percent) would be reserved for lower-income households for a minimum period of 30 years, in lieu of the 10-acre minimum project site requirement.</p>
<p><b>LU 6.15.7. Overall Density and Housing Types.</b> Require that residential units be developed at a minimum density of 30 units and maximum of 50 units per net acre averaged over the total area of each residential village. Net acreage shall be exclusive of existing and new rights-of-way, public pedestrian ways, and neighborhood parks. Within these densities, provide for the development of a mix of building types ranging from townhomes to high-rises to accommodate a variety of household types and incomes and to promote a diversity of building masses and scales.</p>	<p><b>Consistent.</b> Section 3.3.1.3, <i>Affordable Housing and Development Incentives</i>, of Chapter 3 describes how the City calculates the housing density of the proposed project. Of the project’s 350 apartment units, 259 are considered “base” unit and 91 are “density bonus” units. Based on the maximum permitted residential density of 50 du/ac (which is calculated using “base” units), the proposed project’s residential density would be 49.9 du/ac (based on a net site acreage of 5.19 after dedication of the 0.5-acre public park to the City). The project would be a mix of studio, one-, and two-bedroom units, with 78 affordable units, and thus would be able to accommodate a variety of household types and incomes.</p>
<p><b>LU 6.15.8. First Phase Development Density.</b> Require a residential density of 45 to 50 units per net acre, averaged over the first phase for each residential village. This shall be applied to 100 percent of properties in the first phase development area whether developed exclusively for residential or integrating service commercial horizontally on the site or vertically within a mixed-use building. On individual sites, housing development may exceed or be below this density to encourage a mix of housing types, provided that the average density for the area encompassed by the first phase is achieved</p>	<p><b>Consistent.</b> The proposed project will be developed within one phase and has a density of 50 dwelling units/acre.</p>



5. Environmental Analysis  
LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>LU 6.15.10. Regulatory Plans.</b> Require the development of a regulatory plan for each residential village, which shall contain a minimum of 10 acres, to coordinate the location of new parks, streets, and pedestrian ways; set forth a strategy to accommodate neighborhood-serving commercial uses and other amenities; establish pedestrian and vehicular connections with adjoining land uses; and ensure compatibility with office, industrial, and other nonresidential uses</p>	<p><b>Consistent.</b> A regulatory plan would not be required because the development is located within the Newport Place Planned Community, where mixed-use residential development is allowed within a Residential Overlay designation in conjunction with affordable housing.</p>
<p><b>LU 6.15.12. Development Agreements.</b> A Development Agreement shall be required for all projects that include infill residential units. The Development Agreement shall define the improvements and public benefits to be provided by the developer in exchange for the City's commitment for the number, density, and location of the housing units.</p>	<p><b>Consistent.</b> The proposed project is only comprised of replacement units and density bonus units and does not include additive infill residential units. As a result, the proposed project applicant would not be required to enter into any development agreement.</p>
<p><b>LU 6.15.13. Neighborhood Parks Standards.</b> To provide a focus and identity for the entire neighborhood and to serve the daily recreational and commercial needs of the community within easy walking distance of homes, require dedication and improvement of at least 8 percent of the gross land area (exclusive of existing rights-of-way) of the first phase development in each neighborhood, or ½ acre, whichever is greater, as a neighborhood park. This requirement may be waived by the City where it can be demonstrated that the development parcels are too small to feasibly accommodate the park or inappropriately located to serve the needs of local residents, and when an in-lieu fee is paid to the City for the acquisition and improvement of other properties as parklands to serve the Airport Area. In every case, the neighborhood park shall be at least 8 percent of the total Residential Village Area or one acre in area, whichever is greater, and shall have a minimum dimension of 150 feet. Park acreage shall be exclusive of existing or new rights-of-way, development sites, or setback areas. A neighborhood park shall satisfy some or all of the requirements of the Park Dedication Ordinance, as prescribed by the Recreation Element of the General Plan.</p>	<p><b>Consistent.</b> As described above under Policy LU 2.1, the proposed project would involve dedication of a 0.5-acre public park. However, the project is only a portion of a future residential village as identified in General Plan Figure LU 23. This project will be developed in one phase and will contribute the minimum 0.5-acre park.</p>
<p><b>LU 6.15.14. Neighborhood Parks Location.</b> Require that each neighborhood park is clearly public in character and is accessible to all residents of the neighborhood. Each park shall be surrounded by public streets on at least two sides (preferably with on-street parking to serve the park), and shall be linked to residential uses in its respective neighborhood by streets or pedestrian ways.</p>	<p><b>Consistent.</b> The proposed public park space would be at the southern edge of the project site where it would be clearly public due to the lack of perimeter fencing and signage and would be easily accessible to residents and the neighboring community through pedestrian connections. The park would be bordered by streets on two sides, would include a parking area, and would be visible (and accessible) from Dove Street and Martingale Way.</p>
<p><b>LU 6.15.15. Aircraft Notification.</b> Require that all neighborhood parks be posted with a notification to users regarding proximity to John Wayne Airport and aircraft overflight and noise.</p>	<p><b>Consistent.</b> The proposed project would comply with notification requirements related to aircraft overflight and noise.</p>
<p><b>LU 6.15.16. On-Site Recreation and Open Space Standards.</b> Require developers of multi-family residential developments on parcels 8 acres or larger to provide on-site recreational amenities. For these developments, 44 square feet of on-site recreational amenities shall be provided for each dwelling unit in addition to the requirements under the City's Park Dedication Ordinance and in accordance with the Parks and Recreation</p>	<p><b>Not Applicable.</b> The project is smaller than 8 acres. However, the proposed project would include a number of recreational amenities listed in Policy 6.15.16, including courtyards with eating and barbecue totaling 22,696 square feet. These areas, and a pool, and a rooftop terrace (see Section 3.3.1.6 in this DEIR for a full list of proposed amenities). The on-site recreational amenities exceed the 15,400 square feet (44 square feet x 350 dwelling units) required. Furthermore,</p>

## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p>Element of the General Plan. On-site recreational amenities can consist of public urban plazas or squares where there is the capability for recreation and outdoor activity. These recreational amenities may also include swimming pools, exercise facilities, tennis courts, and basketball courts. Where there is insufficient land to provide on-site recreational amenities, the developer shall be required to pay cash in-lieu that would be used to develop or upgrade nearby recreation facilities to offset user demand as defined in the City's Park Dedication Fee Ordinance.</p> <p>The acreage of on-site open space developed with residential projects may be credited against the parkland dedication requirements where it is accessible to the public during daylight hours, visible from public rights-of-way, and is of sufficient size to accommodate recreational use by the public. However, the credit for the provision of on-site open space shall not exceed 30 percent of the parkland dedication requirements.</p>	<p>the proposed project includes dedication of a 0.5-acre public park.</p>
<p><b>LU 6.15.18. Walkable Streets.</b> Retain the curb-to-curb dimension of existing streets, but widen sidewalks to provide park strips and generous sidewalks by means of dedications or easements. Except where traffic loads preclude fewer lanes, add parallel parking to calm traffic, buffer pedestrians, and provide short-term parking for visitors and shop customers.</p>	<p><b>Consistent.</b> As a part of the proposed project, the existing public sidewalks along Dove Street, Scott Drive, Corinthian Way, and Martingale Way would be demolished and reconstructed to City standards. Additionally, new ADA-compliant curb access ramps would be constructed at the Dove Street/Scott Drive, Scott Drive/Corinthian Way, and Corinthian Way/Martingale Way intersections in accordance with City standards. As under existing conditions, Martingale Way would have parallel parking on both sides of the street.</p>
<p><b>LU 6.15.22. Building Massing.</b> Require that high-rise structures be surrounded with low- and mid-rise structures fronting public streets and pedestrian ways or other means to promote a more pedestrian scale</p>	<p><b>Not Applicable.</b> A majority of the proposed building is 4 or 5 stories and therefore is not a high-rise. However, the proposed retail spaces do "step down" to one-story building massing along the public interface facing Corinthian Way, creating a more a pedestrian-scaled facade (see Figure 3-7).</p>
<p><b>LU 6.15.23. Sustainable Development Practices.</b> Require that development achieves a high level of environmental sustainability that reduces pollution and consumption of energy, water, and natural resources. This may be accomplished through the mix and density of uses, building location and design, transportation modes, and other techniques. Among the strategies that should be considered are the integration of residential with jobs-generating uses, use of alternative transportation modes, maximized walkability, use of recycled materials, capture and re-use of storm water on-site, water conserving fixtures and landscapes, and architectural elements that reduce heat gain and loss.</p>	<p><b>Consistent.</b> The proposed project is a mixed-use development that, because of compliance with modern state regulations related to energy efficiency and climate change, would be more energy efficient than the project site's existing commercial uses. For more information about this topic see Section 5.6, <i>Greenhouse Gas Emissions</i>, of this DEIR.</p>
<p><b>Goal NR 1. Minimized water consumption through conservation methods and other techniques.</b></p>	
<p><b>NR 1.1. Water Conservation in New Development.</b> Enforce water conservation measures that limit water usage, prohibit activities that waste water or cause runoff, and require the use of water-efficient landscaping and irrigation in conjunction with new construction projects.</p>	<p><b>Consistent.</b> Section 5.16, <i>Utilities and Service Systems</i>, of this DEIR discusses the numerous water conservation requirements applicable to the proposed project, including those found in the Newport Beach Municipal Code (see Standard Condition USS-1 in Section 5.16). The proposed project would comply with these regulations.</p>
<p><b>NR 1.6. Services for Lower Income Households.</b> New developments which provide housing for lower income households that help meet regional needs shall have priority for the provision of available and future resources or services, including water and sewer supply and services.</p>	<p><b>Consistent.</b> The proposed project would contain 78 units affordable to lower-income households. Furthermore, because the project is located in an existing developed urban area, it is already well served by water, sewer, and other services.</p>

5. Environmental Analysis  
LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<b>Goal NR 3: Enhancement and protection of water quality of all natural water bodies, including coastal waters, creeks, bays, harbors, and wetlands.</b>	
<b>NR 3.9. Water Quality Management Plan.</b> Require new development applications to include a Water Quality Management Plan (WQMP) to minimize runoff from rainfall events during construction and post-construction.	<b>Consistent.</b> The WQMP for the proposed project is included in this DEIR as Appendix G.2. See Section 5.8, <i>Hydrology and Water Quality</i> , of this DEIR for a discussion of the WQMP's contents.
<b>NR 3.11. Site Design and Source Control.</b> Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the National Pollutant Discharge Elimination System (NPDES), structural treatment BMPs will be implemented along with site design and source control measures.	<b>Consistent.</b> Section 5.8 of this DEIR includes analysis of the proposed project's drainage and stormwater runoff impacts. The proposed project would involve implementation of low-impact development best management practices (BMPs), site design BMPs, and structural and non-structural source control BMPs that would reduce the amount of runoff generated onsite and discharged offsite, as well as reduce the potential for pollutants to contaminate runoff.
<b>NR 3.13. Natural Wetlands.</b> Promote the use of natural wetlands to improve water quality.	<b>Not Applicable.</b> The project site is an infill site in a highly urbanized location; it does not feature natural wetlands nor is it large enough to accommodate the construction of artificial wetlands.
<b>NR 3.14. Runoff Reduction on Private Property.</b> Retain runoff on private property to prevent the transport of pollutants into natural water bodies, to the maximum extent practicable.	<b>Consistent.</b> See response to Policy NR 3.11, above. As discussed in Section 5.8, the peak drainage flow rate entering the public storm drain system would be 0.2 cubic feet per second less than under existing conditions.
<b>NR 3.19. Natural Drainage Systems.</b> Require incorporation of natural drainage systems and stormwater detention facilities into new developments, where appropriate and feasible, to retain stormwater in order to increase groundwater recharge.	<b>Not Applicable.</b> The project site is an infill site in a highly urbanized location; it is not large enough to accommodate detention facilities. However, as discussed in Section 5.8 of this DEIR, BMPs related to site drainage and stormwater runoff have been incorporated into the project to extent feasible.
<b>NR 3.20. Impervious Surfaces.</b> Require new development and public improvements to minimize the creation of and increases in impervious surfaces, especially directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible.	<b>Consistent.</b> Although the proposed project would be an urban-scaled building that would cover most of the project site, the proposed project's site design BMPs would minimize impervious surfaces wherever possible. Furthermore, as discussed under Impact 5.8-2 in Section 5.8, the proposed project would decrease the amount of impervious surfaces onsite, allowing infiltration of more stormwater than under existing conditions.
<b>Goal NR 6: Reduced mobile source emissions.</b>	
<b>NR 6.1. Walkable Neighborhoods.</b> Provide for walkable neighborhoods to reduce vehicle trips by siting amenities such as services, parks, and schools in close proximity to residential areas.	<b>Consistent.</b> The proposed project's context is Newport Beach's Airport Area, which features a variety of amenities (including restaurants, medical offices, and professional services) within walking distance of the project site. The 0.5 acre publicly-accessible park and other onsite amenities (e.g., pool and spa, courtyards with outdoor space, a rooftop terrace, view deck, and fitness facility) provided by the proposed project would also reduce vehicle trips by providing outdoor recreation opportunities that don't require driving offsite.
<b>NR 6.2. Mixed-Use Development.</b> Support mixed-use development consisting of commercial or office with residential uses in accordance with the Land Use Element that increases the opportunity for residents to live in proximity to jobs, services, and entertainment.	<b>Consistent.</b> As discussed throughout this section, the proposed project is mixed use (e.g., residential, commercial, and park) project that would add housing units in an employment-rich area.

## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>NR 6.3. Vehicle-Trip Reduction Measures.</b> Support measures to reduce vehicle-trip generation such as at-work day care facilities, and on-site automated banking machines.</p>	<p><b>Consistent.</b> The proposed project’s introduction of residential uses in a largely nonresidential area with numerous services and amenities nearby would reduce the need for offsite vehicle trips. See the response to Policy NR 6.1 for additional information. Because the project is largely residential and doesn’t feature a large number of employees, it is not appropriate for the project to feature at-work daycare facilities.</p>
<p><b>Goal NR 18: Protection and preservation of important paleontological and archaeological resources.</b></p>	
<p><b>NR 18.1. New Development.</b> Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.</p>	<p><b>Consistent.</b> This topic is discussed in Section 5.4, <i>Cultural Resources</i>, of this DEIR. As discussed in Section 5.4, the proposed project would be required to comply with Mitigation Measures 5.4-1 and 5.4-2, which detail procedures for monitoring and discovery of paleontological and archaeological resources, and would reduce potential impacts to less than significant.</p>
<p><b>NR 18.3. Potential for Development to Impact Resources.</b> Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow qualified representatives of such groups to monitor grading and/or excavation of development sites.</p>	<p><b>Consistent.</b> This topic is discussed in Section 5.15, <i>Tribal Cultural Resources</i>, of this DEIR. As part of the City’s processing of entitlements associated with the proposed project, the City notified local tribal representatives consistent with Assembly Bill 52.</p>
<p><b>Goal R 1. Provision of Facilities: Provision of adequate park and recreation facilities that meet the recreational needs of existing and new residents of the community</b></p>	
<p><b>R 1.1. New Residential Subdivisions.</b> Require developers of new residential subdivisions to provide parklands at five acres per 1,000 persons, as stated in the City’s Park Dedication Fee Ordinance, or to contribute in-lieu fees for the development of public recreation facilities meeting demands generated by the development’s resident population, as required in the City’s Park Dedications Fees Ordinance.</p>	<p><b>Consistent.</b> Although the proposed project is largely residential, it does not involve subdivision of property because it is a for-lease apartment development and does not result in the creation of any new lots. As discussed in Section 5.13, <i>Recreation</i>, of this DEIR, the City’s Park Dedication Fee Ordinance therefore do not apply to the proposed project.</p>
<p><b>R 1.2. High-Density Residential Developments.</b> Require developers of new high-density residential developments on parcels eight acres or larger, to provide on-site recreational amenities. For these developments, 44 square feet of on-site recreational amenities shall be provided for each dwelling unit in addition to the requirements under the City’s Park Dedications and Fees Ordinance. On-site recreational amenities can consist of public urban plazas or squares where there is the capability for recreation and outdoor activity. These recreational amenities can also include swimming pools, exercise facilities, tennis courts, and basketball courts. Where there is insufficient land to provide on-site recreational amenities, the developer shall be required to pay the City of Newport Beach cash in-lieu that would be used to develop or upgrade nearby recreation facilities to offset user demand as defined in the City’s Park Dedications and Fees Ordinance. The acreage of on-site open space developed with residential projects may be credited against the parkland dedication requirements where it is, for example, accessible to the public during daylight hours, visible from public rights-of-way, and of sufficient size to accommodate recreational use by the public.</p>	<p><b>Consistent.</b> Although this policy is not directly applicable to the proposed project because the project site is less than eight acres, the project more than exceeds this requirement. The project provides 22,696 square feet of onsite recreational facilities and 350 dwelling units, amounting to 65 square feet of onsite recreational facilities per dwelling unit. Additional information regarding proposed onsite amenities is provided in Section 3 of this DEIR.</p>

5. Environmental Analysis  
LAND USE AND PLANNING

**Table 5.9-1 Newport Beach General Plan Consistency Analysis**

Applicable Goals and Policies	Project Consistency
<p><b>R 1.4. Density Bonuses.</b> Consider development of incentives such as density bonuses for private commercial, office, and other developments to provide usable open space such as rooftop courts, pocket parks, public plazas, jogging trails, and pedestrian trails.</p>	<p><b>Consistent.</b> The proposed project utilizes the City's density bonus incentives, as discussed in this table.</p>
<p><b>R 1.12. Aircraft Overflight and Noise.</b> Require that all public parks located within the noise impact zones as defined in the 1985 JWA Master Plan for John Wayne Airport be posted with a notification to users regarding aircraft overflight and noise.</p>	<p><b>Consistent.</b> The proposed park will be posted with the required notification to park users. This will be ensured through the City's development review and plan check process.</p>
<p>1. The net decrease of 78 jobs and addition of 350 dwelling units would "decrease" the anticipated jobs-housing balance of Newport Beach from 1.90 to 1.88 in 2040 (see Section 5.11) but this is considered more balanced from a planning perspective.</p>	

The analysis in Table 5.9-1 demonstrates that the proposed project would be consistent with applicable goals and policies of the City's General Plan. While the General Plan includes numerous other policies related to land use and minimization/avoidance of environmental impacts, these are often related to specific environmental resources in Newport Beach far from the project site. These include Newport Bay, wetlands, oil and gas deposits, ridges, canyons, and designated public views. Therefore, implementation of the proposed project would not result in significant land use impacts related to relevant Newport Beach General Plan goals and policies.

**Zoning Code Consistency**

As stated above, the project site is zoned Newport Place Planned Community (PC-11). PC-11 allows for residential development, with a minimum of 30 du/ac and a maximum of 50 du/ac, consistent with the MU-H2 land use designation. More specifically, the project site within PC-11 is designated General Commercial Site 6. The General Commercial designation allows retail commercial, office, and professional and business uses. The site also has a residential overlay option given its general plan designation of MU-H2.

The proposed retail, restaurant, and residential uses under the proposed project are allowed under the existing zoning, and no zone change is required or proposed. Thus, the proposed project would be consistent with the existing zoning on-site, and impacts would be less than significant. See also RR LU-1 and RR LU-2.

**Newport Place Community Development Standards**

Development standards for utilization of the NPPC's residential overlay are found on Page 46 of the PCDP. Table 5.9-2 demonstrates the proposed project's consistency with those development standards.



## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.9-2 NPPC Consistency Analysis**

Development Standard	Required	Project Consistency
Minimum Site Area	None	N/A
Density (base units) <sup>1</sup>	30–50 units/acre	50 units/acre
Minimum Percent Affordable	30 percent	30 percent
Maximum Building Height	55 feet (exceptions allowed)	77 feet, 9 inches (livable space would be 55 feet max)
Minimum Street Setback	30 feet	30 feet
Minimum Interior Setback	10 feet	10 feet (to park)
Parking	See Chapter 3	See Chapter 3

<sup>1</sup> Density bonus units are allowed to increase a project's gross density to be higher than that required for the project's "base" units.

### AELUP Consistency

As discussed above under 5.9.1.1, *Regulatory Background*, the project site is in the airport planning area for JWA. The project site is within the 60 dB CNEL noise contour but outside the 65 dB CNEL contour. Based on Table 1 in the AELUP for JWA, residential uses are “conditionally consistent” in this area, meaning that projects must use sound attenuation as required by California Noise Insulation Standards, Title 25, California Code of Regulations (ALUC 2008). For more analysis related to noise attenuation, see Section 5.10, *Noise*, of this DEIR, including regulatory requirements RR N-1 and RR N-2.

As discussed in Section 5.7, *Hazards and Hazardous Materials*, of this DEIR, the project site is in Safety Zone 6 designated in the AELUP. Outdoor stadiums and similar uses with very high intensities are prohibited in Zone 6. Children’s schools, large day care centers, hospitals, and nursing homes should be avoided. Residential uses and most nonresidential uses are permitted (ALUC 2008). The proposed project does not propose any land uses prohibited or discouraged by the AELUP and would not subject people on the ground to substantial hazards from crashes of aircraft approaching or departing JWA.

The project site is in an area surrounding JWA where structure heights are regulated under FAA Regulations Part 77 for preservation of navigable airspace. The maximum structure height permitted at the project site is 206 feet above mean sea level (amsl) (ALUC 2008). The elevation onsite ranges from 48 feet amsl at the southwest corner of the site to 53 feet amsl at the northeast corner. Thus, based on the higher of those two elevations, the maximum structure height permitted on-site is about 153 feet above ground level. The maximum height of the proposed buildings would be approximately 77 feet 9 inches. The proposed project would conform with structure heights permitted on-site under FAA regulations and would not adversely affect navigable airspace surrounding JWA. For this and the additional reasons above, the proposed project would be consistent with the AELUP for JWA and impacts would be less than significant.

**Level of Significance before Mitigation:** With implementation of RR LU-1 and RR LU-2, Impact 5.9-2 would be less than significant.



## 5. Environmental Analysis LAND USE AND PLANNING

---

**Impact 5.9-3: The proposed project would not conflict with an adopted habitat conservation plan.  
[Threshold LU-3]**

---

*Impact Analysis:* The project site is not in an area designated as a preserve under the Orange County Central-Coastal Natural Community Conservation Plan and is not in the plan area of any other habitat conservation plan (CDFW 2017). Therefore, development of the proposed project would have no conflict with any adopted habitat conservation plans.

*Level of Significance before Mitigation:* No impact would occur.

### 5.9.5 Cumulative Impacts

Implementation of the proposed project is consistent with the applicable goals and policies of the Newport Beach General Plan and the AELUP for JWA, as detailed above under Impact 5.9-2. As with the proposed project, cumulative projects would be subject to compliance with the regional and local plans reviewed in this section. It is reasonable to assume that the cumulative projects would implement and support local and regional planning goals and policies. Cumulative projects would be subject to the applicable permit approval process for the City of Newport Beach and would incorporate any mitigation measures necessary to reduce potential land use impacts.

Furthermore, the area containing the project site (the Airport Area) is an area in transition from strictly nonresidential uses (e.g., commercial, light industrial, and office uses) to a wider range of mixed uses, including residential. While additional residential and mixed-use projects—when combined with the proposed project—will alter the land use pattern of the Airport Area, this transition is anticipated by the Newport Beach General Plan and would not represent a cumulative adverse land use impact. The transition is creating rather than dividing a community and is consistent with City and other applicable planning documents. Therefore, upon implementation of cumulative development discussed in Section 4 of this DEIR, cumulative adverse land use impacts would be less than significant.

### 5.9.6 Level of Significance Before Mitigation

The following impacts would have no impact: Impact 5.9-1 and Impact 5.9-3.

With implementation of RR LU-1 and RR LU-2, the following impact would be less than significant: Impact 5.9-2.

### 5.9.7 Mitigation Measures

No significant impacts would occur and no mitigation measures are required.

### 5.9.8 Level of Significance After Mitigation

Impacts would be less than significant.

## 5. Environmental Analysis

### LAND USE AND PLANNING

#### 5.9.9 References

- Airport Land Use Commission (ALUC). 2008, April 17. Airport Environs Land Use Plan for John Wayne Airport. [http://www.ocair.com/commissions/aluc/docs/JWA\\_AELUP-April-17-2008.pdf](http://www.ocair.com/commissions/aluc/docs/JWA_AELUP-April-17-2008.pdf).
- California Department of Fish and Wildlife (CDFW). 2017, October. California Regional Conservation Plans. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.
- Emkay Development Company, Inc. 1970, December 21 (as amended). Planned Community Development Standards, Newport Place. [https://www.newportbeachca.gov/PLN/MAP\\_DOCUMENTS/PC\\_TEXT/PC\\_11\\_Newport\\_Place.pdf](https://www.newportbeachca.gov/PLN/MAP_DOCUMENTS/PC_TEXT/PC_11_Newport_Place.pdf)
- Newport Beach, City of. 2006, July 25. City of Newport Beach General Plan. <http://www.newportbeachca.gov/government/departments/community-development/planning-division/general-plan-codes-and-regulations/general-plan>.
- Southern California Association of Governments (SCAG). 2016. 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy. <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>.

## 5. Environmental Analysis

### 5.10 NOISE

This section of the Draft Environmental Impact Report (DEIR) evaluates the fundamentals of sound; examines state and local noise guidelines, policies, and standards; identifies noise levels for existing conditions; and evaluates the potential noise and vibration impacts associated with buildout of the Newport Crossings Mixed Use project (proposed project). The noise modeling data are included in Appendix H of this Draft EIR.

#### 5.10.1 Environmental Setting

##### Noise Descriptors

Noise is most often defined as unwanted sound; whether it is loud, unpleasant, unexpected, or otherwise undesirable. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.”

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound, expressed on a logarithmic scale and with respect to a defined reference sound pressure. The standard reference pressure is 20 micropascals (20  $\mu$ Pa).
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level ( $L_{eq}$ ); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the  $L_{eq}$  metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level ( $L_n$ ).** The sound level that is exceeded “n” percent of time during a given sample period. For example, the  $L_{50}$  level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the “median sound level.” The  $L_{10}$  level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the “intrusive sound level.” The  $L_{90}$  is the sound level

## 5. Environmental Analysis

### NOISE

exceeded 90 percent of the time and is often considered the “effective background level” or “residual noise level.”

- **Day-Night Sound Level ( $L_{dn}$  or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 PM to 10:00 PM and 10 dB from 10:00 PM to 7:00 AM. NOTE: For general community/environmental noise, CNEL and  $L_{dn}$  values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive – that is, higher than the  $L_{dn}$  value). As a matter of practice,  $L_{dn}$  and CNEL values are interchangeable and are treated as equivalent in this assessment.
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.
- **Peak Particle Velocity (PPV).** The maximum instantaneous peak of a vibration signal

### Characteristics of Sound

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves. Sound is described in terms of amplitude or loudness, frequency or pitch, and time variations or duration.

#### *Amplitude*

The range of pressure that causes airborne vibrations (i.e., sound) is quite large and would be cumbersome to measure linearly. Therefore, noise is measured on a logarithmic scale, which has a more manageable range of numbers, and a decibel (dB) is the standard unit for measuring sound pressure amplitude.

On a logarithmic scale, an increase of 10 dB is 10 times more intense than 0 dB, 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable by human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment, and a 10-dB change is perceived as a doubling (or halving) of the sound.

When describing sound and its effect on a human population, A-weighted decibels (dBA) are typically used to approximate the response of the human ear. Since most people do not routinely work with decibels or A-

## 5. Environmental Analysis NOISE

weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experiences, Table 5.10-1 illustrates typical noise levels from familiar noise sources.

**Table 5.10-1 Typical Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three 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		
	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 Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 2013.

Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event

## 5. Environmental Analysis

### NOISE

- Number of events and their repetitiveness
- Time of day

#### *Propagation*

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as “spreading loss.” For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or construction activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a “hard” reflective surface such as concrete or asphalt. Line source noise across a “soft” vegetative ground decreases by 4.5 dB for each doubling of distance.

#### **Psychological and Physiological Effects**

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA would result in permanent cell damage, which is the main driver for employee hearing protection regulations in the workplace. When the noise level reaches 120 dBA, an unpleasant “tickling” sensation occurs in the human ear; even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. Elevated noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance, or cause physiological damage such as temporary or permanent hearing loss.

In most cases, environmental noise produces effects in the first two categories (annoyance or activity interference). However, unprotected workers in some industrial work settings may experience hearing loss effects.

#### **Vibration Fundamentals**

Vibration is an oscillatory motion through a solid medium, such as the ground or a building. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers.

#### *Amplitude*

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal, and RMS is the square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating



## 5. Environmental Analysis

### NOISE

potential building damage. The units for PPV are normally inches per second (in/sec). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration.

The way in which vibration is transmitted through the earth is called propagation. As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 5.10-2 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

**Table 5.10-2 Human Reaction to Typical Vibration Levels**

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of “architectural” (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to “architectural” damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: Caltrans 2013.

### Noise- and Vibration-Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residential, schools, libraries, churches, nursing homes, hospitals, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Commercial and industrial uses are generally not considered noise- and vibration-sensitive uses, unless noise and vibration would interfere with their normal operations and business activities. Project-specific sensitive land uses in the City of Newport Beach are discussed in more detail in subsequent portions of this section.

#### 5.10.1.1 REGULATORY FRAMEWORK

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the State of California and the City of Newport Beach have established standards and ordinances to control noise. The following discuss the noise standards applicable to the proposed project.

## 5. Environmental Analysis

### NOISE

#### State

The state's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code. These noise standards are applied to new construction in the state for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For multifamily residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL in any habitable room.

#### *CALGreen*

The California Green Building Standards Code (CALGreen) has requirements for insulation that affect exterior-interior noise transmission for non-residential structures.<sup>1</sup> Pursuant to CALGreen Section 5.507.4.1, Exterior Noise Transmission, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite sound transmission class (STC) rating of at least 50 or a composite outdoor-indoor transmission class (OITC) rating of no less than 40 with exterior windows of a minimum STC of 40 or OITC of 30 within a 65 dBA CNEL or  $L_{dn}$  noise contour of an airport, freeway or expressway, railroad, industrial source or fixed-guideway source. Where noise contours are not readily available, buildings exposed to a noise level of 65 dBA  $L_{eq}$  during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum of STC 40 (or OITC 30).

#### Local

#### *City of Newport Beach General Plan Noise Element*

The City of Newport Beach General Plan Noise Element discusses the effects of noise exposure on the population and sets goals designed to protect residents and businesses from excessive and persistent noise intrusions. The noise element contains noise thresholds for developments located adjacent to mobile or transportation noise sources and thresholds for stationary noise sources. The City applies the state's community noise and land use compatibility standards, summarized in Table N2 of the noise element, to assess the compatibility of new development with ambient noise. Table 5.10-3, *Land Use Noise Compatibility Matrix*, shows the City of Newport Beach's allowable noise levels by land use category.

---

<sup>1</sup> Multifamily residential buildings greater than three stories are considered under the nonresidential standards in Title 24.

## 5. Environmental Analysis NOISE

**Table 5.10-3 Land Use Noise Compatibility Matrix**

Land Use Categories		Community Noise Equivalent Level (CNEL)						
Categories	Uses	<55	55-60	60-65	65-70	70-75	75-80	80<
Residential	Single Family, Two Family, Multiple Family	A	A	B	C	C	D	D
Residential	Mixed Use	A	A	A	C	C	C	D
Residential	Mobile Home	A	A	B	C	C	D	D
Commercial <i>Regional, District</i>	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial <i>Regional, Village District, Special</i>	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial <i>Recreational</i> Institutional <i>Civic Center</i>	Amphitheatre, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial <i>Recreation</i>	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial <i>General Special</i> Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional	Hospital, Church, Library, Schools' Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

Source: Newport Beach 2006.

**Zone A:** Clearly Compatible—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

**Zone B:** Normally Compatible—New construction or development should be undertaken only after detailed analysis of the noise reduction requirements and are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditions, will normally suffice.

**Zone C:** Normally Incompatible—New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

**Zone D:** Clearly incompatible—New construction or development should generally not be undertaken.

The land use noise compatibility matrix of the noise element identifies clearly compatible, normally compatible, normally incompatible, and clearly incompatible noise levels for various land uses. A normally compatible designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. A clearly compatible designation indicates that standard construction can occur with no special noise reduction requirements.

In no case would it be desirable for any land use to have noise exceeding the highest normally compatible noise level. For the purpose of residential uses, the highest exterior noise level is 65 dBA CNEL. It should be noted that California requires that interior noise levels in multifamily residential uses not exceed 45

## 5. Environmental Analysis

### NOISE

CNEL/ $L_{dn}$ ; this is commonly used as an interior standard for all residential uses, but is not required under the California Administrative Code, Title 24, Part 2 for residential uses other than multifamily.

In addition to the noise and land use compatibility guidelines in the noise element, the City of Newport Beach has adopted community noise control policies and standards as part of its municipal code in order to limit unnecessary, excessive, and annoying noise in the city. These noise standards are discussed below and displayed in Table 5.10-4.

**Table 5.10-4 City of Newport Beach Exterior Noise Standards**

Noise Zone	Time Interval	Maximum Daytime Noise Levels (dBA)	
		$L_{eq}$	$L_{max}$
Zone I – Single-, two-, or multiple-family residential	7 AM to 10 PM	55	75
	10 PM to 7 AM	50	70
Zone II – Commercial	7 AM to 10 PM	65	85
	10 PM to 7 AM	60	80
Zone III – Residential portions of mixed use properties	7 AM to 10 PM	60	80
	10 PM to 7 AM	50	70
Zone IV – Industrial or manufacturing	7 AM to 10 PM	70	90
	10 PM to 7 AM	70	90
Institutional	7 AM to 10 PM	55	75
	10 PM to 7 AM	50	70

Source: Section 10.26.025, Exterior Noise Standards, of the City of Newport Beach Municipal Code and Table N3, Noise Standards, of the City of Newport Beach General Plan Noise Element.

Notes: These noise standards do not apply to residential heating ventilation and air conditioning (HVAC) systems or construction pursuant to Section 10.26.035 of the Municipal Code.

In the event the ambient noise level exceeds the noise standard, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

The Noise Zone III standard shall apply to that portion of residential property falling within 100 feet of a commercial property, if the intruding noise originates from that commercial property.

If the measurement location is on boundary between two different noise zones, the lower noise level standard applicable to the noise zone shall apply.

The following discussion provides a summary of the City of Newport Beach Noise Element goals and policies that are related to the proposed project:

**Goal N1, Noise Compatibility,** Minimized land use conflicts between various noise sources and other human activities.

- **Policy N 1.1, Noise Compatibility of New Development:** Require that all proposed projects are compatible with the noise environment through use of Table N2 (presented here as Table 5.10-3), and enforce the interior and exterior noise standards shown in Table N3 (see Table 5.10-4).
- **Policy N 1.2, Noise Exposure Verification for New Development:** Applicants for proposed projects that require environmental review and are located in areas projected to be exposed to a CNEL of 60 dBA and higher, as shown on Figure N4, Figure N5, and Figure N6 of the Noise Element, may conduct a field survey, noise measurements or other modeling in a manner acceptable to the City to provide evidence that the depicted noise contours do not adequately account for local noise exposure

## 5. Environmental Analysis NOISE

circumstances due to such factors as topography, variation in traffic speeds, and other applicable conditions. These findings shall be used to determine the level of exterior or interior noise attenuation needed to attain an acceptable noise exposure level and the feasibility of such mitigation when other planning considerations are taken into account.

- **Policy N 1.4, New Developments in Urban Areas:** Require that applicants of residential portions of mixed-use projects and high density residential developments in urban areas (such as the Airport Area and Newport Center) demonstrate that the design of the structure will adequately isolate noise between adjacent uses and units (common floor/ceilings) in accordance with the California Building Code.
- **Policy N 1.6, Mixed-Use Developments:** Encourage new mixed-use developments to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from the residential portion of the development.
- **Policy N 1.8, Significant Noise Impacts:** Require the employment of noise mitigation measures for existing sensitive uses when a significant noise impact is identified for new development impacting existing sensitive uses, as presented in Table 5.10-5.

**Table 5.10-5 City of Newport Beach Incremental Noise Impact Criteria for Noise-Sensitive Uses (dBA CNEL)**

Existing Noise Exposure	Allowable Combined Noise Exposure	Allowable Noise Exposure Increment
55	58	3
60	62	2
65	66	1
70	71	1
75	75	0

Source: City of Newport Beach General Plan and General Plan EIR. Adopted November 2006.

**Goal N2,** Minimized motor vehicle traffic and boat noise impacts on sensitive noise receptors.

- **Policy N 2.1, New Development:** Require that proposed noise-sensitive uses in areas of 60 dBA and greater, as determined the analyses stipulated by Policy N1.1, demonstrate that they meet interior and exterior noise levels.
- **Policy N 2.3, Limiting Hours of Truck Deliveries:** Limit the hours of truck deliveries to commercial uses abutting residential uses and other noise sensitive land uses to minimize excessive noise unless there is no feasible alternative. Any exemption shall require compliance with nighttime (10:00 PM to 7:00 AM) noise standards.

**Goal N3,** Protection of Newport Beach residents from the adverse noise impacts of commercial air carrier operations at John Wayne Airport as provided in the City Council Airport Policy.

## 5. Environmental Analysis

### NOISE

- **Policy N 3.1, New Development:** Ensure new development is compatible with the noise environment by using airport noise contours no larger than those contained in the 1985 JWA Master Plan as guides to future planning and development decisions.
- **Policy N 3.2, Residential Development:** Require that residential development in the Airport Area be located outside of the 65 dBA CNEL noise contour no larger than shown in the 1985 JWA Master Plan, and require residential developers to notify prospective purchasers or tenants of aircraft overflight and noise.

**Goal N4,** Minimization of non-transportation-related noise on sensitive noise receptors.

- **Policy N 4.1, Stationary Noise Sources:** Enforce interior and exterior noise standards outlined in Table N3 (Table 5.10-4), and in the City’s municipal code to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources, such as heating, ventilation, and air conditioning equipment.
- **Policy N 4.4, Limiting Hours of Recreational Activities:** Limit hours when recreational activities in parks and harbor can take place.
- **Policy N 4.6, Maintenance or Construction Activities:** Require the enforcement of the noise ordinance noise limits and limit hours of maintenance or construction activity in or adjacent to residential areas, including noise that results from in-home hobby or work-related activities.

**Goal N5,** Minimized excessive construction-related noise.

- **Policy N 5.1, Limiting Hours of Activity:** Enforce the limits on hours of construction activity.

#### *Municipal Code*

The City’s noise ordinance (Newport Beach Municipal Code Chapter 10.26) is designed to protect people from objectionable nontransportation noise sources such as music, machinery, pumps, and air conditioners. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a source property, as measured at the receiving property. The details on noise level measurement locations are given in code Section 10.26.055.<sup>2</sup>

#### *Stationary (Nontransportation) Noise*

The City applies the noise ordinance standards (Section 10.26.025, Exterior Noise Standards) to nontransportation, stationary noise sources. These standards were summarized in Table 5.10-4 (and are included as the exterior noise standards in Table N3, Noise Standards, of the general plan noise element).

---

<sup>2</sup> The measurement of potentially offending noise in a “residential area” (at the receptor property) can include any part of a private yard, patio, deck or balcony normally used for human activity and identified by the owner of the affected property as suspected of exceeding the noise level standard.



## 5. Environmental Analysis NOISE

These standards are not applicable to mobile noise sources (such as heavy trucks) that are traveling on public roadways. Control of the mobile noise sources on public roads is preempted by federal and state laws.

Equipment sound ratings of new HVAC equipment installed in Newport Beach are reviewed during plan check and tested in the field after installation. According to Section 10.26.045 of the municipal code, new permits for HVAC equipment in or adjacent to residential areas shall be issued only where the sound rating of the proposed equipment does not exceed 55 dBA and it is installed with a timing device that will deactivate the equipment during the hours of 10 PM to 7 AM.

### *Construction Noise*

The City realizes that the control of construction noise is difficult and therefore provides exemption for this type of noise. According to the municipal code Section 10.26.035, Exemptions, noise sources associated with construction, repair, remodeling, demolition, or grading of any real property are exempt from the noise level limits shown in Table 5.10-4. Such activities are instead subject to the provisions of Section 10.28.040, Construction Activity–Noise Regulations. According to this chapter, construction is permitted on weekdays between the hours of 7:00 AM and 6:30 PM and Saturdays between the hours of 8:00 AM and 6:00 PM. Construction is not permitted on Sundays or any federal holiday. Exceptions to these construction hours can be made when the maintenance, repair, or improvement cannot feasibly be conducted during normal business hours, as outlined in Section 10.28.040.

### *Vibration*

The municipal code has a definition for vibration but does not have specific limits or thresholds for vibration. In the absence of such standards, the Federal Transit Administration (FTA) provides criteria for acceptable levels of groundborne vibration for various types of special buildings that are sensitive to vibration (FTA 2006), shown in Table 5.10-6.

**Table 5.10-6 Groundborne Vibration Criteria: Architectural Damage**

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.50
II. Engineered concrete and masonry (no plaster)	0.30
III. Non-engineered timber and masonry buildings	0.20
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA 2006.

For the nearest buildings, the applicable vibration limit would be 0.20 PPV, per the FTA criterion for nonengineering timber and masonry buildings. The nearest building is the Hyatt Regency John Wayne Airport hotel (Hyatt Regency), approximately 250 feet from the project site. Although office buildings would have an applicable limit of 0.30 PPV, for the purposes of a conservative analysis, the nearest vibration-sensitive office receptor, the MacArthur Plaza office building (approximately 100 feet east), would use the vibration limit of 0.20 PPV.

## 5. Environmental Analysis

### NOISE

#### 5.10.1.2 EXISTING NOISE ENVIRONMENT

##### General Community Noise Setting

The project site is in a commercial area and is subject to noise from a myriad of transportation and stationary sources. The project site encompasses the 58,277-square-foot MacArthur Square shopping center, which consists of eight retail/commercial buildings, surface parking, and ornamental trees. The project site is surrounded by low- and mid-rise office buildings, shopping centers, restaurants, a car wash, and a hotel. A seven- to ten-story Hyatt Regency and a Staples office supply store are to the north across Corinthian Way; a Benihana restaurant and a car wash are to the west across Scott Drive; and two- to four-story office buildings are to the east and west of the site across Martingale Way and Dove Street, respectively.

Nearby noise sources include the nearby John Wayne Airport (JWA), surrounding commercial and office uses, and nearby roadways. Given the project site's proximity to JWA, major arterials (such as MacArthur Boulevard), and minor arterials, the predominant source for overall environmental noise in the area is assumed to be departing and arriving commercial planes and traffic flows on these nearby streets. According to the future noise contours (2025) in the City's noise element (2006), the proposed project site is outside the 60 dBA CNEL contours of major roadways. Additionally, it is within the 60 dBA CNEL contour for John Wayne Airport (see Appendix H for additional information). Therefore, existing noise levels at the project site are approximately 60 to 65 dBA CNEL. Thus, per Table 5.10-5, a significant noise level increase would occur if the project-related increment is greater than 2 dB, since the existing conditions are between 60 and 65 dBA CNEL.

According to the City's *Land Use Noise Compatibility Matrix* (Table 5.10-3), the proposed mixed-use residential project would be "Clearly Compatible," with no special noise insulation requirements. It is important to note that with the recent California Supreme Court decision issued December 17, 2015, regarding the assessment of the environment's impacts on proposed projects, it is generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478) (*CBLA v. BAAQMD*). As a result, while the noise from existing sources is taken into account as part of the baseline, the direct effects of exterior noise from nearby noise sources relative to land use compatibility of the project are no longer a required topic for impact evaluation under CEQA, and no determination of significance is required.

##### Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, hotels, and open space/recreation areas where quiet environments are necessary for the enjoyment, public health, and safety of the community. Commercial and industrial uses are generally not considered noise-sensitive uses. As measured from the property line of the project site to the nearest noise-sensitive buildings, the Hyatt Regency John Wayne Airport Hotel is approximately 80 feet north, and the Renaissance Newport Beach Hotel is approximately 650 feet east of the project site. In addition to these receptors, the proposed Koll Center Residences, a proposed residential, retail, and park mixed-use

## 5. Environmental Analysis

### NOISE

project is approximately 1,150 feet east of the site. These properties in the vicinity of the project site are currently exposed to noise from office and commercial uses, vehicle traffic, and aircraft overflights.

#### 5.10.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would result in:

- N-1 Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- N-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- N-3 A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- N-4 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- N-5 For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.
- N-6 For a project within the vicinity of a private airstrip, expose people residing or working the project area to excessive noise levels.

All impacts will be addressed in the following analysis.

#### 5.10.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address noise impacts follow.

##### 5.10.3.1 REGULATORY REQUIREMENTS

- RR NOI-1 The proposed project will be in compliance with the City of Newport Beach Municipal Code:
  - Chapter 10.26: Community Noise Control
  - Chapter 10.28: Loud and Unreasonable Noise

##### 5.10.3.2 STANDARD CONDITIONS

- SC NOI-1 The following City-adopted standard operating conditions of approval would apply to the proposed project:

## 5. Environmental Analysis

### NOISE

- The proposed project must comply with the exterior and interior noise standards for residential portions of mixed-use properties of the Noise Ordinance. The exterior noise level standard is 60 dBA between the hours of 7:00 AM and 10:00 PM and 50 dBA between the hours of 10:00 PM and 7:00 AM. The interior noise level standard is 45 dBA between the hours of 7:00 AM and 10:00 PM and 40 dBA between the hours of 10:00 PM and 7:00 AM. An acoustic study shall be performed by a qualified professional that demonstrates compliance with these standards of the Noise Ordinance and Municipal Code Section 20.48.130.E, Mixed-Use Projects Sound Mitigation. This acoustic study shall be performed and submitted to the Community Development Department prior to the issuance of building permits for each structure.
- The operator of the proposed residential and commercial facility uses shall be responsible for the control of noise generated by the subject facility including permanent stationary/mechanical equipment. Likewise, the individual apartment renters shall be responsible for the noise generated within their respective units. All noise generated by the proposed use shall comply with the provisions of Chapter 10.26 and other applicable noise control requirements of the Newport Beach Municipal Code. The maximum noise shall be limited to no more than noise limits specified in Table 5.10-4 for the specified time periods unless the ambient noise level is higher.
- All mechanical equipment shall be screened from view of adjacent properties and adjacent public streets for each residential structure, as authorized by a Site Development Review permit, and shall be sound-attenuated in accordance with Chapter 10.26 of the Newport Beach Municipal Code, Community Noise Control.
- The City of Newport Beach General Plan Noise Element, through Policy N 3.2, requires that residential developers notify prospective purchasers or tenants of aircraft overflight and noise.

#### 5.10.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.10-1: Construction activities would create temporary noise increases in the vicinity of the proposed project site but would be in compliance with the City's noise ordinance. [Threshold N-3]**

---

*Impact Analysis:* The City of Newport Beach provides an exemption<sup>3</sup> for construction noise when the work is performed within the hours specified in the noise ordinance (i.e., 7:00 AM to 6:30 PM on weekdays,

---

<sup>3</sup> Per Municipal Code Section 10.26.035, Paragraph D.

## 5. Environmental Analysis

### NOISE

and 8:00 AM to 6:00 PM on Saturdays).<sup>4</sup> There are no numerical noise level limits for construction activities. Compliance with the noise ordinance time window is mandatory and, as such, does not constitute mitigation under CEQA.

Construction activities would occur for approximately 38 months. Activities would include demolition of the entire MacArthur Square shopping plaza, site preparation/grading, excavation/shoring, utility installation, building foundations and building construction. Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul and (2) stationary-source noise from use of construction equipment. Existing uses surrounding the project site would be exposed to construction noise.

### Construction Vehicles

#### *On-Road Transport of Workers and Vendor/Haul Trucks*

The transport of workers and equipment to the construction site would incrementally increase noise levels along site access roadways. The worst-case flow of construction-related trips throughout the 38-month construction period would occur during the soil haul period, which includes site preparation, rough grading, and fine grading. There would be a total of 1,614 truck load trips during this period, which equals 538 truckload trips per day over a 3-day soil haul period. This number of construction-related vehicle trips would be an increase of approximately 3 percent in total daily vehicle flows along MacArthur Boulevard (between Campus Drive to Birch Street), which is an eight-lane Major Highway and has average daily traffic of approximately 24,250 with a roadway capacity of 72,000 (LSA 2018). Project traffic would result in a noise level increase of less than 2 dB CNEL and would, therefore, have a less than significant impact on noise receptors along the truck routes. Other phases of construction are anticipated to have less than 123 daily trips (for the aggregate of workers plus vendors plus haul-offs), and these phases would cause even less of an incremental difference in noise levels along construction trip routes than the worst-case soil haul phase.

Though individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA ( $L_{max}$ ) at 50 feet from the vehicle, these occurrences—although potentially audible for a few seconds—would generally be infrequent. Due to the infrequency of events, their relatively short-lived durations, their commonality with existing truck pass-bys, and the vehicle code exemption, construction vehicle movement noise would be less than significant.

#### *Truck Queuing*

For this size project, it is possible that multiple deliveries (such as for fresh cement) and/or haul-offs (during demolition and site preparation) could occur simultaneously (or in quick succession). Thus, construction-related trucks may end up being queued near the entrance(s) to the site and could potentially be idling while waiting to enter the construction zone. However, per the City of Newport Beach Policy N2.3, the proposed project is required to prepare a construction traffic management plan prior to building permit issuance that outlines items such as construction hours and truck routes. Construction trucks would be staged at an offsite

---

<sup>4</sup> Per Municipal Code Section 10.28.040, Paragraphs A and B.

## 5. Environmental Analysis

### NOISE

location acceptable to the City and would be dispatched to the site five to ten trucks at a time to prevent truck queuing at inappropriate locations. Additionally, noise from idling construction trucks would be overshadowed by normal traffic flow noise on nearby streets, particularly from daytime traffic flows on Dove Street or Corinthian Way. Therefore, idling trucks would not substantially add to the overall community noise environment. Further, according to the California Air Resources Board, construction trucks are prohibited from nonessential idling longer than five minutes. Based on the relatively low aggregate noise emissions and the short-term nature of such a source, queued construction trucks would create localized noise impacts that would be less than significant.

#### Construction Equipment

Noise generated during construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities. Each stage of construction involves the use of different kinds of construction equipment and therefore has its own distinct noise characteristics. Noise levels from construction activities are dominated by the loudest piece of construction equipment. The dominant noise source is typically the engine, although work piece noise (such as dropping of materials) can also be noticeable. Noise levels from project-related construction activities were calculated from the simultaneous use of all applicable construction equipment at spatially averaged distances (i.e., from the center of the general construction area) to the property line of the closest sensitive receptors. Although construction may occur across the entire site, the center of the proposed project best represents the potential average construction-related noise levels to the various sensitive receptors during the overall construction portion of the proposed project.

Many of the properties near the project site consist of office and commercial uses, and there are no residences within the vicinity of the project site; however, there are two hotel developments near the site: the Hyatt Regency John Wayne Airport Hotel is approximately 350 feet north of the acoustical center of the site, and the Renaissance Newport Beach Hotel is approximately 900 feet east. The Koll Center Residences project is a proposed residential, retail, and park mixed-use project approximately 1,400 feet east of the site.

Each stage of construction has a different equipment mix, depending on the work to be accomplished. The noise produced at each stage is determined by combining the  $L_{eq}$  contributions from each piece of equipment used at a given time. Construction activities associated with the proposed project would not require blasting or pile driving. In the construction of residential and mixed-use projects, demolition and grading typically generate the highest noise levels because they require the largest equipment. Construction noise quite often exhibits a high degree of variability because factors such as noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase result in different noise levels at a given sensitive receptor. Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels in excess of 80 dBA at 50 feet. Since noise from construction equipment is intermittent and diminishes at a rate of 6 dB per doubling distance,<sup>5</sup> the average noise levels at noise-sensitive receptors would be lower, because mobile construction equipment would move around the site with different loads and power requirements. Average noise levels are discussed below.

---

<sup>5</sup> The sound attenuation rate is generally conservative because it does not take into account attenuation provided by the existing buildings and structures around the project site.



## 5. Environmental Analysis NOISE

### *Average Construction Noise Levels*

Short-term noise during the approximately 38-month construction period can be associated with site preparation, grading, and building construction of the proposed land uses. As stated above, construction is performed in distinct steps, each with its own mix of equipment and its own noise characteristics. However, despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Using information provided by the project applicant and methodologies and inputs employed in the air quality assessment, the expected construction equipment mix was estimated and categorized by construction activity. The associated, aggregate sound levels—grouped by construction activity—are summarized in Table 5.10-7.

**Table 5.10-7 Project-Related Construction Noise Levels, Energy-Average ( $L_{eq}$ ) Sound Levels**

Construction Activity Phase	Sound Level at Various Distances from Construction Activities, dBA $L_{eq}$		
	Hyatt Regency Hotel (350 ft.)	Renaissance Newport Beach Hotel (900 ft.)	Proposed Koll Center Residences (1,400 ft.)
Demolition	67	59	55
Grading	69	60	57
Dry Utilities	64	56	52
Wet Utilities	65	57	53
Surface-Street Improvements	67	58	55

Note: Calculations performed with the FHWA's RCNM software are included in Appendix H. Distance measurements were taken using Google Earth (2018) from the acoustical center of the project site.

As shown, average noise levels for each construction phase would range between 64 to 69 dBA at the Hyatt Regency John Wayne Airport Hotel; receptors 500 feet or farther would experience noise levels of 60 dBA  $L_{eq}$  or lower. Assuming a typical interior noise reduction of 15 dB from exterior noise levels, the average noise levels due to project-related construction activities at the interior areas at the affected uses (i.e., closest receptors at the office building and Hyatt Regency) would generally range from 49 to 54 dBA  $L_{eq}$ . There may be instances where these noise-sensitive receptors would be exposed to higher levels of noise from construction equipment operation. However, these moments would be sporadic and limited during the demolition, grading, and site preparation phases of construction, primarily when large construction equipment passes by.

### *Construction Equipment Noise Summary*

Sensitive receptors near the project site would be exposed to elevated noise levels during the approximately 38-month construction schedule. Demolition and site preparation/grading activities are typically the phases that result in the most complaints and disturbances to nearby receptors. Demolition activities would occur for approximately one month, and site preparation/grading activities would occur for approximately one month. The noise averages in Table 5.10-7 show that noise from excavation and grading activities would be highest. Noise from the main construction of the buildings would have the longest duration and would last for the remaining 36 months.

## 5. Environmental Analysis

### NOISE

The noise levels related to project construction at the nearby office and Hyatt Regency facing the project site could be perceptible at times, especially when equipment is operating at maximum power and near the boundary of the site. The nearest receptors would sporadically experience perceptible noise levels, especially during the demolition, site preparation, and excavation activities. The highest estimated noise levels at exterior areas would be in the range of approximately 64 to 69 dBA at the Hyatt Regency John Wayne Airport Hotel.

The City of Newport Beach Municipal Code limits noise sources associated with construction, repair, remodeling, or grading of any real property to the hours between 7:00 AM and 6:30 PM on weekdays, and 8:00 AM and 6:00 PM on Saturdays. The code also exempts construction equipment from meeting the basic noise level limits (see Table 5.10-3). Construction activities would occur during the daytime when uses such as the Hyatt Regency are the least noise sensitive. Construction of the improvements would comply with the City of Newport Beach's construction noise ordinance; however, nearby hotel guests present during the daytime may be exposed to temporary disruptive interior noise levels from the construction activities. Therefore, although construction noise is exempt and would not result in a significant impact, standard conditions of approval would be included to further reduce noise levels that may result in temporary disruptive interior noise.

***Level of Significance before Mitigation:*** With implementation of RR NOI-1 and SC NOI-1, Impact 5.10-1 would be less than significant.

---

#### **Impact 5.10-2 Buildout of the proposed project would not expose sensitive uses to excessive levels of groundborne vibration. [Threshold N-2]**

---

***Impact Analysis:*** Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during (a) demolition and grading phases of construction and/or (b) the operation of large trucks over uneven surfaces during project operations. Since neither the City of Newport Beach nor the County of Orange sets quantitative vibration level standards for structural damage, impacts are defined as significant if they exceed the FTA standards of 0.20 inch/second.

#### **Operational Vibration Impacts**

The operation of the proposed project would not include any long-term vibration sources. Thus, no significant vibration effects from operations sources would occur.

#### **Construction Vibration Impacts**

Construction operations can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures, but can achieve the audible and

## 5. Environmental Analysis NOISE

perceptible ranges in buildings close to the construction site. Table 5.10-8 lists vibration levels for typical construction equipment.

**Table 5.10-8 Vibration Levels for Typical Construction Equipment**

Equipment	Approximate PPV Velocity at 25 Feet (in/sec)
Large Bulldozer	0.089
Vibratory Roller	0.210
Small Bulldozer	0.003
Loaded Trucks	0.076

Source: FTA 2006.

As shown in Table 5.10-8, vibration generated by certain vibration-intensive construction equipment has the potential to be substantial since these items have the potential to exceed the FTA criteria for architectural damage of 0.20 in/sec PPV within about 25 feet. However, since there are no buildings or sensitive structures within 25 feet of proposed construction activity, vibration levels would be below the criterion of 0.2 in/sec PPV, and a less than significant impact would occur.

*Level of Significance before Mitigation:* Impact 5.10-2 would be less than significant.

---

**Impact 5.10-3 Project implementation would not result in long-term operation-related noise that would exceed local standards. [Thresholds N-1 and N-3]**

---

*Impact Analysis:* The proposed project could cause a substantial increase in noise levels if it generates traffic volumes that are substantial enough to elevate ambient noise levels above the City of Newport Beach General Plan community noise standards.

### Off-Site Traffic Noise

Per General Plan Policy N 1.8 (summarized above in Table 5.10-5), the City of Newport Beach incremental noise impact criteria are a 3 dB increase for existing exposures from 55 to 60 dBA CNEL, a 2 dB increase for existing exposures from 60 to 65 dBA CNEL, a 1 dB increase for existing exposures from 65 to 75 dBA CNEL, and any dB increase for existing exposures greater than 75 dBA CNEL. The increase in traffic noise as a result of project implementation was calculated using the proposed increase in trips at intersections identified in the traffic impact analysis.

As discussed above in Section 5.10.2.1, the project site is outside the 60 CNEL noise contour for roadway traffic for major and minor arterials in the vicinity of the project site. Per the project's traffic study, the proposed project would generate 1,077 additional average daily trips, 123 additional AM peak hour trips, and 75 additional PM peak hour trips compared to the existing occupied uses (LSA 2018).

To calculate the incremental increase in noise as a result of the project trip increases, roadway segment volumes from the project traffic study for existing and existing plus project PM Peak Hour (from 4:00 PM to 6:00 PM) were input into a data spreadsheet using the formula  $10 \cdot \text{LOG}(\text{Existing} + \text{Project}/\text{Existing})$  (full

## 5. Environmental Analysis

### NOISE

calculations are included in Appendix H). PM peak hour volumes were used instead of AM peak hour because they were generally higher for intersection volumes. Projected trip volumes and their respective increase in vehicle noise generation were calculated for existing, existing with project, future, and future with project conditions in Table 5.10-9, *Project-Related Increase in Traffic Noise*, below.

**Table 5.10-9 Project-Related Increase in Traffic Noise**

Roadway Segment	Peak Hour Traffic Volumes				Noise Level Increase (dB)		
	Existing	Existing + Project	Future 2022	Future 2022 + Project	Project Increase <sup>1</sup>	Cumulative Increase due to Project <sup>2</sup>	Cumulative Increase with Project <sup>3</sup>
MacArthur Blvd. – Douglas to Campus Dr.	3,534	3,560	4,293	4,319	0.03	0.03	0.87
MacArthur Blvd. – Campus Dr. to Birch St.	2,531	2,557	3,227	3,253	0.04	0.03	1.09
Campus Dr. – MacArthur Blvd. to Von Karman Ave.	1,789	1,789	2,542	2,542	0.00	0.00	1.53
Campus Dr. – MacArthur Blvd. to Dove St.	2,630	2,630	3,144	3,144	0.00	0.00	0.78
Campus Dr. – Bristol St. N to Dove St.	2,864	2,877	3,414	3,427	0.02	0.02	0.78
Campus Dr. – Bristol St. N to Bristol St. S	2,461	2,474	2,863	2,876	0.02	0.02	0.68
Bristol St. N – North of Campus Dr.	3,601	3,607	3,694	3,700	0.01	0.01	0.12
Bristol St. N – Campus Dr. to Birch St.	2,306	2,312	2,423	2,429	0.01	0.01	0.23
Bristol St. S – W of Campus Dr. / Irvine Ave.	2,218	2,227	2,350	2,359	0.02	0.02	0.27
Bristol St. S – Campus Dr. / Irvine Ave. to Mesa Dr.	1,569	1,569	1,648	1,648	0.00	0.00	0.21
Irvine Ave. – W of S Bristol St.	2,701	2,705	3,044	3,048	0.01	0.01	0.52
Irvine Ave. – Bristol St. S to Bristol St. N	2,452	2,467	2,896	2,909	0.02	0.02	0.74
Irvine Ave. – S of Mesa Dr.	2,844	2,848	3,101	3,105	0.01	0.01	0.38
Irvine Ave. – Mesa Dr. and S Bristol St.	2,236	2,240	2,491	2,495	0.01	0.01	0.48
Mesa Dr. – Irvine Ave. to Santa Ana Ave.	858	858	910	910	0.00	0.00	0.26
Mesa Dr. – Irvine Ave. to SW Birch St.	1,092	1,092	1,140	1,140	0.00	0.00	0.19
MacArthur Blvd. – Birch St. to Campus Dr.	2,317	2,343	2,953	2,979	0.05	0.04	1.09
MacArthur Blvd. – Birch St. to Corinthian Way	1,897	1,911	2,383	2,397	0.03	0.03	1.02
<b>Birch St. – MacArthur Blvd. to Dove St.*</b>	1,358	1,378	1,592	1,612	<b>0.06</b>	<b>0.05</b>	0.74
Birch St. – MacArthur Blvd. to Von Karman Ave.	1,062	1,070	1,324	1,332	0.03	0.03	0.98
Birch St. – Bristol St. N to Dove St.	1,681	1,694	1,819	1,832	0.03	0.03	0.37
Birch St. – Bristol St. N to Bristol St. S	1,410	1,413	1,533	1,536	0.01	0.01	0.37
Bristol St. N – Birch St. to Campus Dr.	2,145	2,151	2,300	2,306	0.01	0.01	0.31
Bristol St. N – Birch St. to Dove St.	1,910	1,914	2,030	2,034	0.01	0.01	0.27
Birch St. – Bristol St. N to Bristol St. S	1,377	1,380	1,532	1,535	0.01	0.01	0.47
Birch St. – Bristol St. S to Mesa Dr.	1,350	1,350	1,541	1,541	0.00	0.00	0.57
Bristol St. S – Birch St. to Campus Dr. / Irvine Ave.	1,570	1,570	1,623	1,623	0.00	0.00	0.14
Bristol St. S – Birch St. to Jamboree Rd.	1,753	1,756	1,858	1,861	0.01	0.01	0.26
Von Karman Ave. – Campus Dr. to Dupont Dr.	1,860	1,864	2,015	2,019	0.01	0.01	0.36
Von Karman Ave. – Campus Dr. to Birch St.	1,436	1,440	1,549	1,553	0.01	0.01	0.34
Campus Dr. – Von Karman Ave. to MacArthur Blvd.	1,703	1,703	2,245	2,245	0.00	0.00	1.20
Campus Dr. – Von Karman Ave. to Jamboree Rd.	1,461	1,461	2,093	2,093	0.00	0.00	1.56
MacArthur Blvd. – Von Karman Ave. to Birch St.	1,821	1,835	2,323	2,337	0.03	0.03	1.08
MacArthur Blvd. – Von Karman Ave. to Jamboree Rd.	2,593	2,607	3,191	3,205	0.02	0.02	0.92
Von Karman Ave. – MacArthur Blvd. to Birch St.	1,169	1,169	1,309	1,309	0.00	0.00	0.49
Von Karman Ave. – MacArthur Blvd. to Dove St.	687	687	731	731	0.00	0.00	0.27

## 5. Environmental Analysis NOISE

**Table 5.10-9 Project-Related Increase in Traffic Noise**

Roadway Segment	Peak Hour Traffic Volumes				Noise Level Increase (dB)		
	Existing	Existing + Project	Future 2022	Future 2022 + Project	Project Increase <sup>1</sup>	Cumulative Increase due to Project <sup>2</sup>	Cumulative Increase with Project <sup>3</sup>
Bayview Place – SE Bristol St. to Bayview Way	498	498	498	498	0.00	0.00	0.00
SE Bristol St. – Bayview Place to Jamboree Rd.	2,853	2,856	3,050	3,053	0.00	0.00	0.29
SE Bristol St. – Bayview Place to Spruce Ave.	2,615	2,618	2,812	2,815	0.00	0.00	0.32
Jamboree Rd. – Campus Dr. to I-405	3,856	3,860	4,846	4,850	0.00	0.00	1.00
Jamboree Rd. – Campus Dr. to Birch St.	3,871	3,875	4,836	4,840	0.00	0.00	0.97
Campus Dr. – Jamboree Rd. to Carlson Ave.	1,602	1,602	1,925	1,925	0.00	0.00	0.80
Campus Dr. – Jamboree Rd. to Von Karman Ave.	1,323	1,323	1,705	1,705	0.00	0.00	1.10
Jamboree Rd. – Birch St. to Campus Dr.	3,883	3,887	4,840	4,844	0.00	0.00	0.96
Jamboree Rd. – Birch St. to MacArthur Blvd.	3,630	3,630	4,552	4,552	0.00	0.00	0.98
Birch St. – Jamboree east	9	9	9	9	0.00	0.00	0.00
Birch St. – Jamboree to Von Karman Ave.	582	586	725	729	0.03	0.02	0.98
MacArthur Blvd. – Jamboree Rd. to Von Karman Ave.	2,935	2,949	3,923	3,937	0.02	0.02	1.28
MacArthur Blvd. – Jamboree Rd. to University Dr.	3,105	3,112	4,224	4,231	0.01	0.01	1.34
Jamboree Rd. – MacArthur Blvd. to Birch St.	2,901	2,901	3,530	5,530	0.00	0.00	0.85
Jamboree Rd. – MacArthur Blvd. to Bristol St. N	2,755	2,762	3,447	3,454	0.01	0.01	0.98
Jamboree Rd. – Bristol St. N to MacArthur Blvd.	3,022	3,029	4,026	4,033	0.01	0.01	1.25
Jamboree Rd. – Bristol St. N to Bristol St. S	3,784	3,791	4,774	4,781	0.01	0.01	1.02
Bristol St. N – Jamboree to State Route 73	885	885	959	959	0.00	0.00	0.35
Bristol St. N – Jamboree to Birch St.	1,325	1,325	1,499	1,499	0.00	0.00	0.54
Jamboree Rd. – Bristol St. S to Bristol St. N	3,793	3,800	4,772	4,779	0.01	0.01	1.00
Jamboree Rd. – Bristol St. S to Bayview Way	4,189	4,196	5,048	5,055	0.01	0.01	0.82
Bristol St. S – Jamboree to State Route 73	930	933	950	953	0.01	0.01	0.11
Bristol St. N – Jamboree to SW Birch St.	2,862	2,865	3,188	3,191	0.00	0.00	0.47
Jamboree Rd. – Bayview Way to State Route 73	4,065	4,072	4,767	4,774	0.01	0.01	0.70
Jamboree Rd. – Bayview Way to Eastbluff Dr. / University Dr.	3,993	4,000	4,693	4,700	0.01	0.01	0.71
Bayview Way – Jamboree Rd. east	312	312	319	319	0.00	0.00	0.10
Bayview Way – Jamboree Rd. west	374	374	379	379	0.00	0.00	0.06
Jamboree Rd. – University Dr. / Eastbluff Dr. to Bayview Way	3,917	3,924	4,788	4,795	0.01	0.01	0.88
Jamboree Rd. – University Dr. / Eastbluff Dr. to Bison Ave.	3,525	3,532	4,514	4,521	0.01	0.01	1.08
University Dr. / Eastbluff Dr. – Jamboree to State Route 73	1,093	1,093	1,250	1,250	0.00	0.00	0.58
University Dr. / Eastbluff Dr. to Vista Del Oro	977	977	1,000	1,000	0.00	0.00	0.10
MacArthur Blvd. – I-405 NB to Main St.	4,602	4,617	5,453	5,468	0.00	0.00	0.75
MacArthur Blvd. – I-405 NB to Michelson Dr.	4,570	4,574	5,211	5,215	0.01	0.01	0.57
I-405 NB – MacArthur Blvd. East	2,020	2,031	2,340	2,351	0.02	0.02	0.66
MacArthur Blvd. – I-405 SB to Main St.	4,462	4,477	5,290	5,305	0.01	0.01	0.75
MacArthur Blvd. – I-405 SB to Michelson Dr.	4,345	4,371	5,379	5,405	0.03	0.02	0.95
I-405 SB – MacArthur Blvd. east	2,226	2,237	2,583	2,594	0.02	0.02	0.66
I-405 SB – MacArthur Blvd. to Airport Way	313	313	354	354	0.00	0.00	0.53

## 5. Environmental Analysis

### NOISE

**Table 5.10-9 Project-Related Increase in Traffic Noise**

Roadway Segment	Peak Hour Traffic Volumes				Noise Level Increase (dB)		
	Existing	Existing + Project	Future 2022	Future 2022 + Project	Project Increase <sup>1</sup>	Cumulative Increase due to Project <sup>2</sup>	Cumulative Increase with Project <sup>3</sup>
MacArthur Blvd. – Michelson Dr. to I-405 SB	4,254	4,280	5,373	5,399	0.03	0.02	1.04
MacArthur Blvd. – Michelson Dr. to Douglas Dr.	3,506	3,532	4,663	4,689	0.03	0.02	1.26
Michelson Dr. – MacArthur Blvd. to Von Karman Ave.	1,850	1,850	1,969	1,969	0.00	0.00	0.27
Michelson Dr. – MacArthur Blvd. to Airport Way	854	854	871	871	0.00	0.00	0.09
MacArthur Blvd. – Michelson Dr. to Douglas Dr.	3,665	3,691	5,111	5,137	0.03	0.02	1.47
MacArthur Blvd. – Douglas Dr. to Campus Dr.	3,407	3,433	4,332	4,358	0.03	0.03	1.07
<b>Douglas Dr. – Martin to MacArthur Blvd.</b>	362	362	947	947	0.00	0.00	<b>4.18</b>

<sup>1</sup> Project Increase is "Existing Plus Project" minus "Existing"

<sup>2</sup> Cumulative Increase due to Project is "Future 2022 plus Project" minus "Future 2022 Baseline"

<sup>3</sup> Cumulative Increase with Project is "Future 2022 plus Project" minus "Existing"

<sup>4</sup> Segments and values in **bold** would have the greatest increase in noise level for their respective scenarios.

As shown in Table 5.10-9, above, the street segment with the greatest noise increase would be the segment of Birch Street from MacArthur Boulevard to Dove Street. This street segment would experience a roadway noise level increase of 0.06 dB and 0.05 dB under project and cumulative conditions, respectively. This noise increase would be inaudible and below the 2 dB threshold of significance, which is the pertinent increment per Noise Element Policy 1.8 (Table 5.10-5 of this DEIR).

A significant cumulative traffic noise increase would be identified if project traffic were calculated to contribute 2 dBA CNEL or more under Cumulative Plus Project conditions to a significant traffic noise increase over existing conditions. As shown in Table 5.10-9, a cumulative traffic noise increase of 4.2 dBA is on Douglas Drive between MacArthur Boulevard and Martin Court. However, the proposed project would contribute 0.0 dBA to this increase, so it would not be significant. Therefore, although increases in traffic would result in an exceedance of noise thresholds under cumulative increase with project conditions, the proposed project would result in a less than significant impact to traffic noise increases on roadways in the vicinity of the project site.

### Recreational Noise

The proposed project would include a public park as well as outdoor residential amenities such as courtyards and pools. Recreational noise sources would typically include raised voices and the sound of the paddle hitting the ball (in the case of the proposed pickleball courts). In addition, outdoor dining areas would be a source of noise in the form of raised voices. No amplified music or public address systems are proposed. Therefore, noise associated with project recreational activities would be localized and is not anticipated to be audible at the nearest off-site sensitive receptor (Hyatt Regency Hotel) over existing traffic noise levels on MacArthur Boulevard and other local roadways. Per RR N-2 above, the project applicant would be required to demonstrate that noise levels from outdoor recreational and dining areas would not exceed the City's exterior and interior standards at on-site residential receptors as part of the City's standard operating conditions of approval and Municipal Code Section 20.48.130.E, Mixed-Use Projects Sound Mitigation. As



## 5. Environmental Analysis NOISE

required, an acoustic study shall be performed by a qualified professional that demonstrates compliance with these standards. Therefore, this impact would be less than significant.

### Stationary Source Noise

Operation of the proposed project would include use of rooftop HVAC systems for the residential and retail buildings. Such equipment would typically generate noise levels up to 75 dBA at a distance of 10 feet. Noise generated by mechanical systems to be installed at the proposed project site is expected to be similar to the mechanical equipment noise that is currently generated by the existing shopping center. Current site plans locate the closest project building approximately 300 feet from the active outdoor use area of the Hyatt Regency Hotel (pool). At this distance, noise from stationary mechanical equipment could reach up to 45 dBA, which would not exceed the City exterior nighttime noise threshold of 60 dBA for commercial uses.

In addition to stationary mechanical equipment noise sources, ongoing operations of the proposed retail uses would generate noise associated with truck movement and unloading activities at the proposed loading dock on Martingale Way. Major noise sources associated with trucks include airbrake discharge, king-pin coupling, back-up warning 'beep' tone, and drive-off. Reference noise levels indicate that project-related truck operations may result in instantaneous maximum noise levels of up to 75 dBA  $L_{max}$  at 50 feet (PlaceWorks 2012). The closest sensitive receptor to the proposed retail loading dock is the Hyatt Regency Hotel pool, located over 400 feet to the north. At this distance, loading dock noise (conservatively not accounting for any intervening structures) is projected to reach up to 57 dBA, which would not exceed the City exterior nighttime noise threshold of 60 dBA for commercial uses.

Per RR N-2, the project applicant would be required to demonstrate that noise levels from stationary noise sources, such as HVAC systems and the loading dock, would not exceed the City's exterior and interior standards at on-site residential receptors as part of the City's standard operating conditions of approval and Municipal Code Section 20.48.130.E, Mixed-Use Projects Sound Mitigation. An acoustic study shall be performed by a qualified professional that demonstrates compliance with these standards. Therefore, this impact would be less than significant.

*Level of Significance before Mitigation:* Impact 5.10-3 would be less than significant.

---

**Impact 5.10-4: The proximity of the project site to John Wayne Airport would result in exposure of future residents and workers to airport-related noise. [Thresholds N-5 and N-6]**

---

*Impact Analysis:* The project site is within the Airport Environs Land Use Plan of JWA, which serves both general aviation and scheduled commercial passenger airline and cargo operations. The noise levels of all commercial aircraft operations and many general aviation operations are recorded at 10 permanent noise monitoring stations around the airport. In accordance with the State of California Airport Noise standards, a detailed report is compiled every three months, and each year an annual CNEL contour is calculated. The aircraft operational data, noise measurements, and contours for JWA are relied upon for noise studies within the airport environs land use plan area.

## 5. Environmental Analysis

### NOISE

#### Ambient Airport Noise Environment

The project site is approximately 0.5 mile south of JWA, near the primary departure corridor. According to the Newport Beach General Plan Policy N 2.1, new development for proposed noise-sensitive uses in areas of 60 dBA or higher must meet interior and exterior noise levels.

According to a report prepared by Mestre Greve Associates for the City of Newport Beach and the “John Wayne Airport 2017 Annual 60-75 CNEL Noise Contours Map,” the project site is within the 60 dB CNEL noise contour but outside the 65 dB CNEL contour (Mestre Greve Associates 2014; Landrum and Brown 2017). Based on the City’s Land Use Noise Compatibility Matrix (Table 1 in the Noise Element), residential (mixed use) and commercial development are “clearly compatible” within the 60 to 65 dBA CNEL noise range. However, prior to the issuance of building permits, the City would require that the project applicant demonstrate that interior noise levels from aircraft be reduced to 45 dBA CNEL or less in all habitable rooms per the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2. An acoustic study shall be performed by a qualified professional that demonstrates compliance with these standards.

*Level of Significance before Mitigation:* Impact 5.10-4 would be less than significant.

#### 5.10.5 Cumulative Impacts

##### Mobile Source Noise

Project-related cumulative noise impacts would occur if the project’s contribution to cumulative noise increases results in a substantial noise increase in comparison to existing conditions (2 dBA or more with existing CNEL between 60 and 65 dBA in the vicinity of any noise-sensitive receptors). Project-induced traffic noise increases on local roadways in the vicinity of the project site were previously discussed under Impact 5.10-3.

The project’s traffic analysis analyzed several future scenarios:

- Existing
- Existing Plus Project
- Future 2022
- Future 2022 Plus Project (LSA 2018)

The cumulative plus project traffic noise increases would range from less than 1 to 4 dBA on affected roadway segments. A significant cumulative traffic noise increase would be identified if project traffic would contribute 1 dBA CNEL or more to a potentially significant cumulative impact. As shown in Table 5.10-9, a cumulative traffic noise increase of approximately 4 dBA would occur on Douglas Drive between MacArthur Boulevard and Martin Court. However, the proposed project would contribute 0.0 dBA to this increase on Douglas Drive. Consequently, project-related traffic noise increases would not contribute to potentially significant cumulative impact.

## 5. Environmental Analysis

### NOISE

#### Construction Noise and Vibration

Cumulative impacts would only occur if other projects are being constructed in the vicinity of the proposed project at the same time as the proposed project. The general area around the project site is built out, and the only other projects to be built in that vicinity are the proposed Koll Center Residences, which have not been constructed, and the Uptown Newport Project, which is currently under construction. Although construction of Phase 1 of the Uptown Newport Project is partially complete, construction of the Phase 2 improvements would overlap with construction of the proposed project. It is also anticipated that construction of the Koll Center Residences would overlap construction of the proposed project. However, due to the distance between the project site and the proposed Koll Center Residences (0.25 mile east) and the Uptown Newport Project (0.40 mile east) as well as intervening buildings, project construction noise would not combine with other planned and approved construction projects to create cumulatively considerable impacts. Therefore, cumulative construction and vibration impacts would be less than significant.

#### 5.10.6 Level of Significance Before Mitigation

Impacts 5.10-2, 5.10-3, and 5.10-4 are less than significant.

Upon implementation of RR NOI-1 and SC NOI-1, Impact 5.10-1 would be less than significant.

No impacts would be potentially significant.

#### 5.10.7 Mitigation Measures

No mitigation measures would be required.

#### 5.10.8 Level of Significance After Mitigation

Compliance with regulatory requirements and standard conditions of approval would ensure impacts are less than significant. No mitigation measures would be required.

#### 5.10.9 References

California Department of Transportation (Caltrans). 2002, February. *Transportation Related Earthborne Vibration (Caltrans Experiences)*. Technical Advisory, Vibration. TAV-02-01-R9601. Division of Environmental Analysis. Prepared by Rudy Hendricks.

California Department of Transportation. 2013, September. *Transportation- and Construction-Induced Vibration Guidance Manual*. Prepared by ICF International.

Federal Highway Administration (FHWA). 2006, January. *FHWA Roadway Construction Noise Model (RCNM) User's Guide*. FHWA-HEP-05-051. DOT-VNTSC-FHWA-05-01. Prepared by US Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center (Acoustics Facility).

## 5. Environmental Analysis

### NOISE

Federal Transit Administration (FTA). 2006, May. *Transit Noise and Vibration Impact Assessment*. United States Department of Transportation. FTA-VA-90-1003-06.

Governor's Office of Planning and Research. 2003, October. State of California General Plan Guidelines.

Harris, Cyril M. 1998. *Handbook of Acoustical Measurements and Noise Control*. 3rd edition. Acoustical Society of America. Woodbury, NY.

Landrum and Brown. 2018. John Wayne Airport 2017 Annual 60-75 (5 dB intervals) CNEL Noise Contours. <https://www.ocair.com/reportpublications/AccessNoise/cnelnoisecontours/2017.pdf>

LSA. 2018, July. Traffic Impact Analysis. Newport Crossings, Newport Beach, Orange County California.

Mestre Greve Associates. 2014, April. Noise Analysis Technical Report. Appendix C of Draft Environmental Impact Report No. 617 John Wayne Airport Settlement Agreement Amendment. Division of Landrum and Brown.

[http://www.newportbeachca.gov/pln/CEQA\\_REVIEW/John%20Wayne%20Airport%20DEIR/C%205A%20Appendices%20to%20FEIR%20617/Appendix%20C%20-%20Noise%20Analysis%20Technical%20Report.pdf](http://www.newportbeachca.gov/pln/CEQA_REVIEW/John%20Wayne%20Airport%20DEIR/C%205A%20Appendices%20to%20FEIR%20617/Appendix%20C%20-%20Noise%20Analysis%20Technical%20Report.pdf).

Newport Beach, City of. 2006, April 20. "Future Noise Contours." Figure N5 of City of Newport Beach General Plan.

[http://www.newportbeachca.gov/PLN/General\\_Plan/Figures/FigN5\\_FutNoise1\\_17x11color\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/Figures/FigN5_FutNoise1_17x11color_web.pdf).

PlaceWorks. 2012. City of Industry: Macy's Trucking Yard Noise Survey (Trailer Hook-up Simulation).

## 5. Environmental Analysis

### 5.11 POPULATION AND HOUSING

This section of the Draft Environmental Impact Report (DEIR) examines the potential for socioeconomic impacts of the proposed Newport Crossings Mixed Use project (proposed project) on the City of Newport Beach, including changes in population, employment, and housing.

#### 5.11.1 Environmental Setting

##### 5.11.1.1 REGULATORY BACKGROUND

###### California Housing Element Law

California planning and zoning law requires each city and county to adopt a general plan for future growth (California Government Code Section 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the Housing and Community Development Department (HCD) estimates the relative share of California's projected population growth that would occur in each county based on California Department of Finance population projections and historical growth trends. These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. Where there is a regional council of governments, the HCD provides the RHNA to the council. The council then assigns a share of the regional housing need to each of its cities and counties. The process of assigning shares gives cities and counties the opportunity to comment on the proposed allocations. The HCD oversees the process to ensure that the council of governments distributes its share of the state's projected housing need.

State law recognizes the vital role local governments play in the supply and affordability of housing. To that end, California Government Code requires that the housing element achieve legislative goals to:

- Identify adequate sites to facilitate and encourage the development, maintenance, and improvement of housing for households of all economic levels, including persons with disabilities.
- Remove, as legally feasible and appropriate, governmental constraints to the production, maintenance, and improvement of housing for persons of all incomes, including those with disabilities.
- Assist in the development of adequate housing to meet the needs of low- and moderate-income households.
- Conserve and improve the condition of housing and neighborhoods, including existing affordable housing. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Preserve for lower income households the publicly assisted multifamily housing developments in each community.

## 5. Environmental Analysis

### POPULATION AND HOUSING

The State of California Housing Element laws (Sections 65580 to 65589 of the California Government Code) require that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

#### **Regional Transportation Plan/Sustainable Communities Strategy**

The Southern California Association of Governments (SCAG) represents Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. It is a regional planning agency and serves as a forum for addressing regional issues concerning transportation, the economy, community development, and the environment.

SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increase capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce and economic growth and opportunity; promoting the links between public health, environmental protection, and economic opportunity; and incorporating the principles of social equity and environmental justice.

#### **Housing Accountability Act**

The Housing Accountability Act (HAA) requires that cities approve applications for residential development that are consistent with a city's General Plan and Zoning Code development standards without reducing the proposed density. Examples of objective standards are those that are measurable and have clear criteria that are determined in advance, such as numerical setback, height limit, universal design, lot coverage requirement, or parking requirement. Under the HAA, an applicant is entitled to the full density allowed by the zoning and/or General Plan provided the project complies with all objective General Plan, zoning, and subdivision standards and provided that the full density proposed does not result in a specific, adverse impact on public health and safety and cannot be mitigated in any other way.

#### **Amendment to the Housing Accountability Act (AB 678)**

AB 678 amends the HAA by increasing the documentation necessary and the standard of proof required for a local agency to legally defend its denial of low-to-moderate-income housing development projects. This bill, if the local agency considers the housing development project to be inconsistent, not in compliance, or not in conformity, would require the local agency to provide the applicant with written documentation identifying the provision or provisions, and an explanation of the reason or reasons it considers the housing development to be inconsistent, not in compliance, or not in conformity within specified time periods. If the local agency fails to provide this documentation, this bill would provide that the housing development project would be deemed consistent, compliant, and in conformity with the applicable plan, program, policy, ordinance, standard, requirement, or other similar provision.



## 5. Environmental Analysis POPULATION AND HOUSING

### Reasonable Person Standard (AB 1515)

This bill specifies that a housing development project is deemed consistent, compliant, and in conformity with an applicable plan, program, policy, ordinance, standard, requirement, or other similar provision if there is substantial evidence that would allow a reasonable person to conclude that the housing development project or emergency shelter is consistent, compliant, or in conformity. This bill added additional findings related to the Housing Accountability Act in this regard.

### City of Newport Beach Housing Element

Development of housing in the City of Newport Beach is guided by the goals, objectives, and policies of the housing element. The 2013–2021 Housing Element is an update and revision of the 2008 element and consists of new technical data, revised goals, updated policies, and a series of programs and implementing measures. The housing element is designed to facilitate attainment of the City’s regional housing needs allocation and to foster the availability of housing affordable to all income levels to the extent possible, given Newport Beach’s constraints. The housing element includes policies aimed at ensuring that adequate housing is provided in Newport Beach. In October 2013, HCD found the City’s 2013–2021 Housing Element consistent with state housing element law.

### City of Newport Beach’s Zoning Code Chapter 20.32 (Density Bonus)

The purpose of this Chapter is to provide a means for granting density bonuses and incentives in compliance with Government Code Sections 65915 through 65917. This Chapter provides density bonuses and incentives for the development of a specified amount of housing that is affordable to lower-, low-, and moderate-income households and senior citizens. For applicants developing a density bonus project available to a mix of income levels, a density bonus up to 35 percent may be granted.

In addition to the bonus units, projects using Density Bonus Law are entitled to reduced parking requirements and up to three regulatory incentives that result in actual and identifiable cost reductions to provide for affordable housing. Moreover, the City is required to waive any development standards that would physically preclude the project from developing at the density allowed under the Density Bonus Law.

#### 5.11.1.2 EXISTING CONDITIONS

##### Population

The population of Newport Beach and Orange County (for comparison purposes) from the 2000 and 2010 US Censuses and the 2017 California Department of Finance estimate are shown in Table 5.11-1. Note that the population growth percentage in Newport Beach between 2000 and 2017—21.3 percent—was substantially more than the corresponding growth rate for Orange County—12.2 percent.

## 5. Environmental Analysis

### POPULATION AND HOUSING

**Table 5.11-1 City of Newport Beach and Orange County Population, 2000–2017**

	2000	2010	2017	Change, 2000–2017	Percent Change, 2000–2017
City of Newport Beach	70,032	85,186	84,915	14,883	21.3%
Orange County	2,846,289	3,010,232	3,194,024	347,735	12.2%

Sources: US Census 2000, 2010; DOF 2018.

#### *Population Forecast*

Taking into account a combination of recent and past trends, technical assumptions, and local or regional growth policies, SCAG is able to generate regional growth forecasts for counties and their cities. SCAG’s growth forecast for Newport Beach and Orange County are shown in Table 5.11-2 and compared to 2010 US Census populations. SCAG’s forecast shows the city growing at a slower pace than the rest of Orange County. Note also that the population of Newport Beach is forecast to grow much slower between 2010 and 2040 than it did between 2000 and 2017 (see Table 5.11-1).

**Table 5.11-2 Population Forecast, City of Newport Beach and Orange County**

	2010	2012	2040	Change, 2010–2040	Percent Change, 2010–2040
City of Newport Beach	85,186	86,300	92,700	7,514	8.8%
Orange County	3,010,232	3,071,600	3,461,000	450,768	15.0%

Source: US Census 2010; SCAG 2016.

The MacArthur Square shopping center buildings and associated landscape and hardscape improvements currently cover the entire project site. Therefore, no residents currently reside onsite.

#### **Housing**

Estimated available housing, including unit type characteristics, in Newport Beach and Orange County is detailed in Table 5.11-3. Based on the vacancy rate, the city and county have approximately 38,728 and 1,037,262 households, respectively.

## 5. Environmental Analysis POPULATION AND HOUSING

**Table 5.11-3 Housing Units, City of Newport Beach and Orange County, 2017**

Housing Unit Type	City of Newport Beach	Orange County
Single-Family Detached	20,141	550,560
Single-Family Attached	7,010	130,802
Multi-Family	16,399	379,292
Mobile Homes	1,120	33,505
<b>Total</b>	<b>44,670</b>	<b>1,094,159</b>
Average Household Size	2.24	3.06
Vacancy Rate	13.3%	5.2%
Households	38,728	1,037,262

Source: DOF 2018.

### *Regional Housing Needs Assessment*

The RHNA is mandated by state housing law as part of the periodic process of updating housing elements of local general plans. State law requires that housing elements identify RHNA targets set by HCD to encourage each jurisdiction in the state to provide its fair share of very low, low, moderate, and upper income housing. State law does not require the City to build housing; rather, it requires cities and counties to adopt zoning regulations and standards that provide the opportunity for housing development. The RHNA does not promote growth, but provides a long-term outline for housing in the context of local and regional trends and housing production goals.

SCAG determines total housing need for each community in southern California based on three general factors: 1) the number of housing units needed to accommodate future population and employment growth; 2) the number of additional units needed to allow for housing vacancies; and 3) the number of very low, low, moderate, and above moderate income units needed in the community. Additional factors used to determine the RHNA include tenure, the average rate of units needed to replace housing units demolished, and other factors.

The City of Newport Beach's RHNA allocation for the 2014–2021 period is shown in Table 5.11-4. The City is required to ensure that sufficient sites planned and zoned for housing are available to accommodate its need and to implement proactive programs that facilitate and encourage the production of housing commensurate with its housing needs.

**Table 5.11-4 City of Newport Beach RHNA Allocation, 2014–2021**

Household Income Category	Target (Units)
Very Low Income	1
Low Income	1
Moderate Income	1
Above Moderate Income	2
<b>Total</b>	<b>5</b>

Source: Newport Beach 2013.

## 5. Environmental Analysis

### POPULATION AND HOUSING

#### *Household Forecast*

SCAG forecasts that the number of households in Newport Beach will increase by 2,900 between 2012 and 2040, as shown in Table 5.11-5. Household forecasts for Orange County are provided as a comparison; the county is forecast to grow much faster than Newport Beach.

**Table 5.11-5 Household Forecast, City of Newport Beach and Orange County**

	2012	2040	Change, 2012-2040	Percent Change, 2012-2040
City of Newport Beach	38,800	41,700	2,900	7.5%
Orange County	999,500	1,152,300	152,800	15.3%

Source: SCAG 2016.

The MacArthur Square shopping center does not have any housing on-site.

#### **Employment**

Based on the US Census's 2012-2016 American Community Survey 5-Year Estimate, there are 43,176 workers in the City of Newport Beach and 1,532,549 workers in Orange County (US Census 2016).

#### *Employment Projections*

SCAG employment projections for Newport Beach and Orange County are shown in Table 5.11-6. As shown, the overall county is projected to increase employment significantly by 2040.

**Table 5.11-6 Employment Projections, City of Newport Beach and Orange County**

	2012	2040	Change, 2012-2040	Percent Change, 2012-2040
City of Newport Beach	76,000	79,100	3,100	4.1%
Orange County	1,526,500	1,898,900	372,400	24.4%

Source: SCAG 2016.

The MacArthur Square shopping center is estimated to employ about 94 workers based on the 58,277 square feet and the employment density factor of one retail and service use job per 617 square feet (Natelson 2001).

#### **Jobs-Housing Balance**

The jobs-housing ratio is a general measure of the total number of jobs and housing units in a defined geographic area, without regard to economic constraints or individual preferences. The balance of jobs and housing in an area—in terms of the total number of jobs and housing units as well as the types of jobs versus the price of housing—has implications for mobility, air quality, and the distribution of tax revenues. The jobs-housing ratio is one indicator of a project's effect on growth and quality of life in the project area.

## 5. Environmental Analysis POPULATION AND HOUSING

SCAG applies the jobs-housing ratio at the regional and subregional levels to analyze the fit between jobs, housing, and infrastructure. A major focus of SCAG’s regional planning efforts has been to improve this balance. Jobs-housing goals and ratios are advisory only. No ideal jobs-housing ratio is adopted in state, regional, or city policies. Communities with more than 1.5 jobs per dwelling unit are considered jobs-rich and those with fewer than 1.50 jobs per dwelling unit are considered housing-rich. The American Planning Association (APA) is also an authoritative resource for community planning best practices, including recommendations for assessing jobs-housing ratios. Although the APA recognizes that an ideal jobs-housing ratio will vary from jurisdiction to jurisdiction, its recommended target for an appropriate jobs-housing ratio is 1.5, with a recommended range of 1.3 to 1.7 (Weltz 2003).

According to SCAG’s 2016-2040 Regional Transportation Plan/Sustainable Communities Strategies, the jobs-housing balance in Newport Beach is forecast to slightly decrease between 2012 and 2040, from 1.96 to 1.90, and remain jobs-rich. The jobs-housing balance in Orange County is estimated to increase from 1.53 to 1.65 during the same period and would maintain a healthy ratio (see Table 5.11-7).

**Table 5.11-7 Jobs-Housing Balance**

	Year	Employment	Households	Jobs-Housing Ratio
City of Newport Beach	2012	76,000	38,800	1.96
	2040	79,100	41,700	1.90
Orange County	2012	1,526,500	999,500	1.53
	2040	1,898,900	1,152,300	1.65

Source: SCAG 2016.

### 5.11.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- P-1 Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- P-2 Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- P-3 Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

No impacts were identified related to thresholds P-2 and P-3; these thresholds are analyzed in Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR.

## 5. Environmental Analysis

### POPULATION AND HOUSING

#### 5.11.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address population and housing impacts follow.

##### 5.11.3.1 REGULATORY REQUIREMENTS

No existing regulations are applicable to population and housing impacts of the proposed project.

##### 5.11.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to population and housing that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.11.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.11-1: The proposed project would introduce approximately 550 residents into the project area, but would not directly (for example, by proposing new homes or businesses) or indirectly (for example, by extension of roads or expansion of infrastructure) induce substantial additional growth. [Threshold P-1]**

---

##### *Impact Analysis:*

##### **Population**

Based on the 2010 Census data, Newport Beach has an average household size of 1.57 people for renters who live in structures with more than 50 units (US Census 2010). Therefore, the 350 proposed units would introduce approximately 550 residents into the project area.

SCAG projects the City to increase population by 7,514 residents between 2010 and 2040 (see Table 5.11-2). Assuming proportionate growth, there would be an increase of 4,258 residents between 2023, when the project is anticipated to be complete, and 2040. The 550 residents generated by the proposed project would be within the City's population projections, representing approximately 10.4 percent of expected population growth between 2010 and 2040 and 18.4 percent of the expected population growth between 2023 and 2040. The project also is expected to serve projected demand for housing and therefore, would not be expected to induce additional unplanned growth. Thus, the project would not induce a substantial growth in population and population growth impacts would be less than significant.



## 5. Environmental Analysis POPULATION AND HOUSING

### Housing

The proposed project would introduce 350 dwelling units into the Airport Area of Newport Beach, thereby providing more housing opportunities in the city. Of the 350 residential units, 29 would be studio units, 197 would be one-bedroom units, and 124 would be two-bedroom units. The proposed project is also reserving 78 of its 350 residential units for low-income households, consistent with the Newport Place Planned Community.

The 350 proposed units would represent approximately 12.1 percent of the projected housing growth by 2040 (SCAG 2016; see Table 5.11-5). Thus, the proposed project would be within the projected housing growth and impacts would be less than significant.

### Jobs-Housing Balance

The jobs to housing balance is an indicator of a project's effect on growth and quality of life. The MacArthur Square shopping center is estimated to employ about 94 workers based on the 58,277 square feet and the employment density factor of one retail and service use job per 617 square feet (Natelson 2001).

Development of the proposed project would eliminate these jobs. The project would result in temporary construction jobs. It is not anticipated that any of the construction workers who do not live in the City would relocate to the City permanently for a temporary job. The proposed project proposes development of 7,500 square feet of retail and restaurant uses, that is, about 12 jobs. The apartment complex is estimated to generate 4 full-time jobs—1 office manager, 1 maintenance superintendent/manager, and 2 maintenance technicians.<sup>1</sup> Total estimated employment generation by the proposed project is about 16 jobs. Therefore, project development is estimated to cause a net decrease of 78 jobs. Therefore, the project would not induce population growth through job creation.

Together, the net decrease of 78 jobs and addition of 350 dwelling units would decrease the anticipated jobs-housing balance of Newport Beach from 1.90 to 1.88 in 2040 (see Table 5.11-8). Because the jobs-housing ratio for the city is currently somewhat jobs-rich, the decrease in jobs-housing ratio would be a slightly favorable result from a planning perspective by providing more housing near employment centers.

**Table 5.11-8 Jobs-Housing Balance**

	Year	Employment	Households	Jobs-Housing Ratio
City of Newport Beach	2012	76,000	38,800	1.96
	2040	79,100	41,700	1.90
	2040 plus Project	79,022	42,050	1.88

Source: SCAG 2016.

Overall, the project would not induce substantial population growth in the area, but would serve growth already projected to occur. Furthermore, the project does not involve the extension of roads or other

<sup>1</sup> The employment estimate for the apartment complex is based on estimated employment for a 300-unit apartment complex (six employees), less one leasing agent and one collections agent. See Wren 2012.

## 5. Environmental Analysis

### POPULATION AND HOUSING

infrastructure or an increase in service capacity that might indirectly induce a substantial population growth in the area.

*Level of Significance before Mitigation:* Impact 5.5-1 would be less than significant.

#### 5.11.5 Cumulative Impacts

The area considered for cumulative impacts is the City of Newport Beach. Impacts are analyzed using General Plan projections in SCAG's 2016 Growth Forecast. Development activity in the City includes residential projects (see Table 4-1 in Section 4.0, *Environmental Setting*). Most of the proposed development is consistent with the City of Newport Beach General Plan and would therefore be expected to be consistent with SCAG's growth projections.

The Harbor Pointe Senior development would increase the population by approximately 121 residents in a 121-bed facility. This project requires a general plan amendment and was therefore not identified in SCAG's growth projections. Assuming 2.24 persons per dwelling unit, the remaining residential uses identified in Table 4-1 would cumulatively generate approximately 4,730 residents. This would represent approximately 65 percent of the 7,514-resident increase between 2010 and 2040, based on the current Department of Finance population estimates, inclusive of the Harbor Pointe Senior project. Additionally, the City's job-housing ratio is currently and is expected to remain "jobs rich". The addition of residential units would better balance the jobs-housing ratio. It should be noted that many of the projects identified in Table 4-1 have been previously approved and are under construction.

Environmental review is required for individual projects in the City, in the county, and the SCAG region in order for the potential impacts of each project to be assessed. Project-specific measures would be required, as needed, to reduce significant impacts. Additionally, the proposed project would not extend infrastructure that would induce additional population growth outside of the project site, and would therefore not combine with other related projects to contribute to a cumulative impact with respect to population growth. Infrastructure would be developed and sized to support the project, and not future projects. Should future projects be developed in the vicinity of the project site, additional capacity and facilities would likely need to be developed at that time. In summary, the proposed project—when combined with past, present and reasonably foreseeable future projects—would not constitute a cumulatively considerable contribution to significant adverse cumulative impacts to population, housing, or employment. Impacts would be less than significant.

#### 5.11.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impact would be less than significant: 5.11-1.

#### 5.11.7 Mitigation Measures

No mitigation measures are required.

## 5. Environmental Analysis POPULATION AND HOUSING

### 5.11.8 Level of Significance After Mitigation

Impact would be less than significant.

### 5.11.9 References

- Department of Finance (DOF). 2018, May 1. Report E-5: Population and Housing Estimates for Cities, Counties, and the State. January 1, 2011-2018, with 2010 Benchmark.  
<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.
- Natelson Company, The. 2001, October 31. Employment Density Study Summary Report.  
[http://www.scag.ca.gov/pdfs/Employment\\_Density\\_Study.pdf](http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf).
- Newport Beach, City of. 2013, September. City of Newport Beach General Plan Housing Element.  
[http://www.newportbeachca.gov/PLN/General\\_Plan/06\\_Ch5\\_Housing\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/06_Ch5_Housing_web.pdf).
- Southern California Association of Governments (SCAG). 2016, April. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).  
<http://scagrtpsc.net/Documents/2016/final/f2016RTPSCS.pdf>.
- US Census. 2000. Profile of General Demographic Characteristics: 2000. Census 2000 Summary File 1 (SF 1) 100-Percent Data.  
[http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_00\\_SF1\\_DP1&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF1_DP1&prodType=table).
- . 2010. Profile of General Population and Housing Characteristics: 2010. 2010 Census Summary File 1.  
[http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_SF1\\_SF1DP1&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_SF1DP1&prodType=table).
- . 2016. Industry by Occupation for the Civilian Employed Population 16 Years and Over. 2012-2016 American Community Survey 5-Year Estimates.  
[https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_16\\_5YR\\_S2405&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_S2405&prodType=table).
- Weltz, Jerry. 2003. Planning Advisory Service Report Number 516: Jobs-Housing Balance. American Planning Association.
- Wren Investment Group. 2012, August 19. Apartment Complex Site Staffing.  
<http://wreninvestment.com/2012/08/apartment-complex-site-staffing/>.

## 5. Environmental Analysis POPULATION AND HOUSING

*This page intentionally left blank.*

## 5. Environmental Analysis

### 5.12 PUBLIC SERVICES

This section addresses the potential impacts of the Newport Crossings Mixed Use project (proposed project) to public services providing fire protection and emergency services, police protection, school services, and library services. Park services are addressed in Section 5.13, *Recreation*. Public and private utilities and service systems, including water, wastewater, and solid waste services and systems, are addressed in Section 5.16.

#### 5.12.1 Fire Protection and Emergency Services

The information in this section is based partly on a written questionnaire response by Newport Beach Fire Department Chief Chip Duncan, dated February 13, 2018; a copy of the response is included in Appendix I of this DEIR.

##### 5.12.1.1 ENVIRONMENTAL SETTING

###### Regulatory Setting

Federal, state and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

###### *Federal*

###### *International Fire Code*

The International Fire Code (IFC) regulates minimum fire safety requirements for new and existing buildings, facilities, storage, and processes. The IFC includes general and specialized technical fire and life safety regulations addressing fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, use and storage of hazardous materials, protection of emergency responders, industrial processes, and many other topics.

###### *State*

###### *California Fire Code*

The California Fire Code (California Code of Regulations, Title 24, Part 9) is based on the most current (2012) IFC and includes amendments from the State of California fully integrated into the code. The California Fire Code contains fire safety-related building standards that are referenced in other parts of Title 24 of the California Code of Regulations.

###### *California Health and Safety Code*

Sections 13000 et seq. of the California Health and Safety Code include fire regulations for building standards (also in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

## 5. Environmental Analysis

### PUBLIC SERVICES

#### *Local*

#### *Newport Beach Municipal Code*

- **Chapter 3.12 (Property Development Tax).** This chapter outlines the need for collecting necessary funds to provide adequate fire stations and fire-fighting equipment, public City libraries, and public City parks—which cannot be met by the City’s ordinary revenues—through an excise tax upon the construction and occupancy of residential, commercial, and industrial units or buildings in the City.
- **Chapter 9.04 (Fire Code).** This chapter adopts by reference the most current (2016) California Fire Code.

#### **Existing Conditions**

The Newport Beach Fire Department (NBFD) would provide fire protection and emergency medical services to the project site. NBFD has 134 full-time staff, including 114 firefighting personnel and 12 full-time lifeguards; 81 firefighting personnel and all full-time lifeguards are trained as emergency medical technicians (basic life support). The city’s eight fire stations are staffed in three 48-hour shifts. Fire Department daily staffing per shift includes 1 Battalion Chief, 10 Fire Apparatus Engineers, 10 Fire Captains, 10 Paramedic/Firefighters, and 6 Firefighters. The front-line apparatus currently serving the City includes 8 Fire Engines, 2 Aerial Ladder Trucks, and 3 Paramedic Rescue Ambulances. The department has the capability of putting three additional reserve ambulances in service if needed. Medical service calls comprise about 78 percent of all calls received, due in part to an aging population.

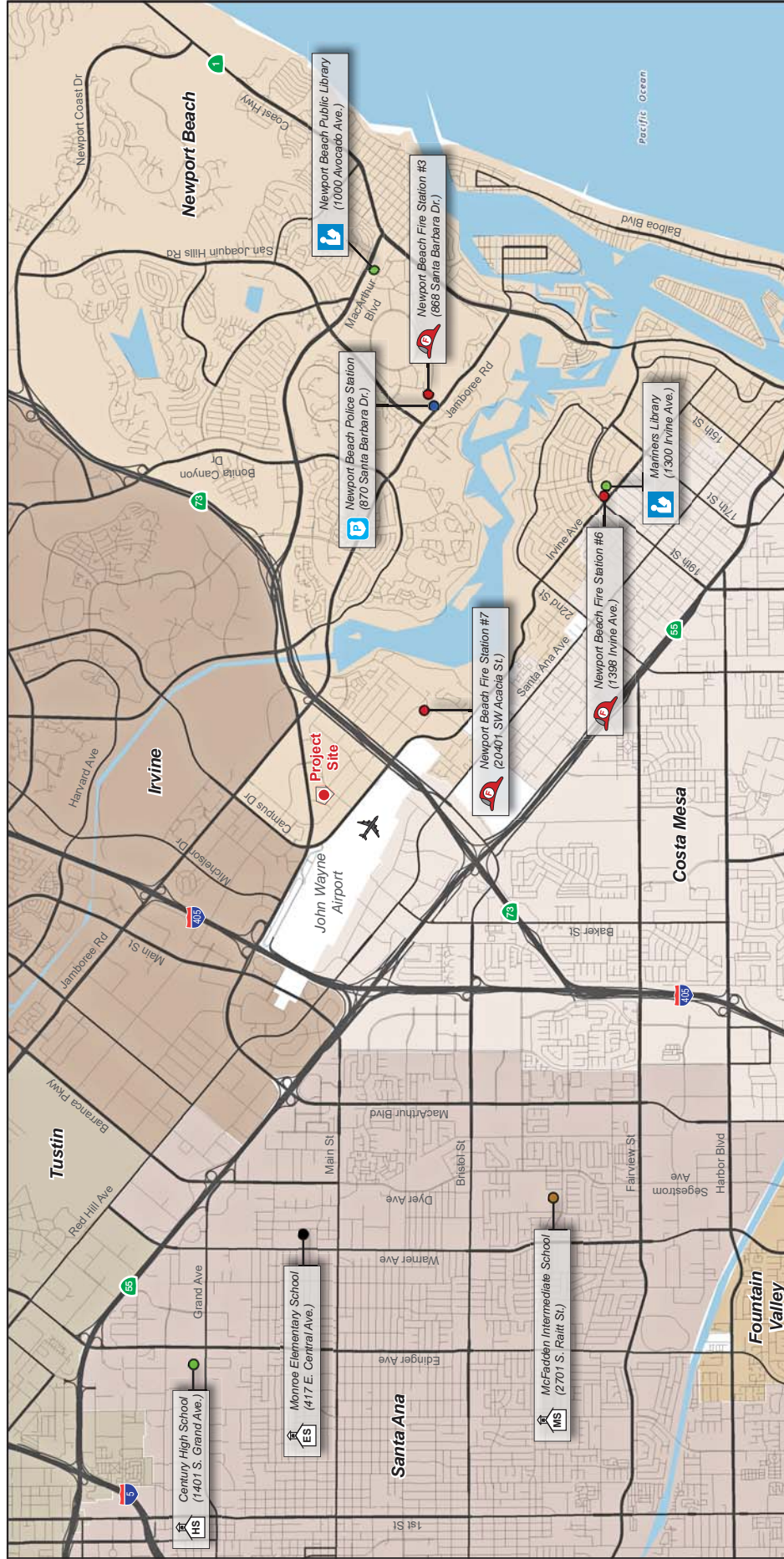
The nearest fire station to the project site and the first-in station for the site is Station 7 at 20401 Acacia Street, about one mile to the southwest (see Figure 5.12-1, *Public Services Facilities Map*). Station 7 is equipped with one fire engine; daily staffing is one captain, one engineer, and one firefighter. Apparatus and staffing at Station 7 and the two other nearest fire stations to the site—Stations 3 (Fashion Island) and 6 (Mariners) (see Figure 5.12-1)—are listed in Table 5.12-1.

**Table 5.12-1 Fire Stations**

Station	Address	Apparatus	Daily Staffing
Station 7 (Santa Ana Heights) <i>First-In Station</i>	20401 Acacia Street	1 Fire Engine	1 Captain 1 Engineer 1 Firefighter Paramedic
Station 3 (Fashion Island)	868 Santa Barbara Drive	1 Fire Engine 1 Ladder Truck 1 Paramedic Van	2 Captain 2 Engineer 3 Firefighter 2 Firefighter Paramedics 1 Battalion Chief
Station 6 (Mariners)	1348 Irvine Avenue	1 Fire Engine	1 Captain 1 Engineer 1 Firefighter Paramedic



Figure 5.12-1 - Public Services Facilities Map  
5. Environmental Analysis



## 5. Environmental Analysis

### **PUBLIC SERVICES**

*This page intentionally left blank.*

## 5. Environmental Analysis PUBLIC SERVICES

### Wildfire Hazard Zones

Much of the southeast half of the City, in the San Joaquin Hills, is mapped as a Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CAL FIRE 2011). The project site is not in a fire hazard severity zone.

### Response Times

The Nbfd travel response time performance objective for a priority incident requiring full personal protective equipment is less than 5 minutes 20 seconds 90 percent of the time. Response time objectives are goals, not mandatory.

The Nbfd travel response time performance objective for a priority incident *not* requiring full personal protective equipment is less than 5 minutes 90 percent of the time.

The current Nbfd average response time for priority incidents is 3 minutes 41 seconds, in accordance with the department's response time goals.

Nbfd has indicated addition of a paramedic rescue ambulance to Station 7 is needed to serve the increasing number of emergency medical service calls in the Airport Area with adequate response times, and to serve planned residential growth in that area. The additional ambulance would require increased staff of six firefighter/paramedics, that is, two per shift for three shifts. The existing facility has sufficient space for an additional ambulance and employees.

### Automatic Aid, Mutual Aid, and Dispatching

All fire departments in Orange County participate in an automatic aid agreement to ensure that the closest resources are dispatched to an emergency. Automatic aid includes engines, trucks, paramedics, and battalion chiefs. Automatic aid is assistance dispatched automatically by contractual agreement between two communities or fire districts. Mutual aid, by comparison, is arranged case by case. The City of Newport Beach also has individual mutual aid agreements with cities including Irvine, Costa Mesa, and Huntington Beach and the Orange County Fire Authority. Nbfd's Strike team responds to requests for mutual aid throughout the state to fight wildland fires or other types of emergencies. The City is a participant in Metro Net, a multicity dispatch center covering the cities of Huntington Beach, Newport Beach, and Fountain Valley in South Orange County and multiple cities in North Orange County.

### Funding

Equipment and staffing funding for Nbfd comes primarily from the City's general funds. A property excise tax levied on new developments, authorized by City Municipal Code Chapter 3.12, Property Development Tax, funds public improvements that include fire stations and equipment. The fire department also generates fees for services.

## 5. Environmental Analysis

### PUBLIC SERVICES

#### 5.12.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

FP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

#### 5.12.1.3 REGULATORY REQUIREMENTS AND STANDARD CONDITIONS

Applicable regulatory requirements and conditions of approval intended to address fire protection and emergency services impacts follow.

##### Regulatory Requirements

RR FP-1 New development shall pay a property excise tax per the City's Municipal Code Chapter 3.12, Property Development Tax.

##### Standard Conditions

There are no specific City-adopted standard conditions of approval related to fire protection and emergency services that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.12.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.12-1: The proposed project would introduce new residents, workers, and structures into Newport Beach Fire Department's service boundaries, thereby increasing the requirement for fire protection apparatus and personnel, but not resulting in the need for new or physically altered fire facilities. [Threshold FP-1]**

---

*Impact Analysis:* The proposed development of 350 apartments and 7,500 square feet of commercial space is expected to combine with other Airport Area developments to generate an increased demand for fire protection and emergency medical services. The increase in population and employees and the proposed multistory residential buildings and ground-level retail uses may result in increased demand for service from Nbfd in order to provide adequate fire protection and emergency medical services, including additional staffing, facilities, and equipment. The additional population anticipated with the proposed project could also potentially affect Nbfd's response time to the project site.

## 5. Environmental Analysis PUBLIC SERVICES

A paramedic unit would be dispatched from Fire Station 3 (Fashion Island), which is the closest paramedic unit to the site. In addition, Fire Station 7 has adequate space to support more personnel if required to serve the project. Therefore, the project would not result in a need for a new or physically altered fire station for NBFD to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

NBFD's operating budget is generated through tax revenues. Facilities, personnel, and equipment expansion and acquisition are tied to the City budget process and tax-base expansion. The project applicant/developer would be required to pay excise taxes to the City under Municipal Code Chapter 3.12, which was established for public improvements and facilities associated with NBFD, public libraries, and public parks. A portion of the taxes paid would be allocated for fire stations and firefighting apparatus. The project uses would also generate increased sales taxes and property taxes for the City's General Fund, some of which would be available to fund NBFD operations, including the needed staffing increase.

The City also involves NBFD in the development review process in order to ensure that the necessary fire prevention and emergency response features are incorporated into development projects. All site and building improvements proposed under the project would be subject to review and approval by NBFD prior to building permit and/or certificate of occupancy issuance.

Project development is required to comply with the current adopted fire codes, building codes, and nationally recognized fire and life safety standards of the City and NBFD, such as those outlined in Chapter 9.04 (Fire Code) of the Newport Beach Municipal Code, which impose design standards and requirements that seek to minimize and mitigate fire risk. Compliance with these codes and standards is ensured through the City's and NBFD's development review and building plan check process. For example, fire hydrants would be installed at key locations within the project site, as required by NBFD to meet the hose-pull requirements and provide adequate fire access for the land uses of the proposed project. Knox boxes would also be required where necessary (i.e., stairwells where the doors are locked for entry, vehicular and parking structure gated entries) to provide access for NBFD personnel.

***Level of Significance before Mitigation:*** After implementation of RR FP-1, project impacts under Impact 5.12-1 would be potentially significant.

### 5.12.1.5 CUMULATIVE IMPACTS

The proposed project, in combination with cumulative development projects, would contribute to a potentially significant cumulative impact on emergency medical service (EMS) response times in the Airport Area. The area considered for cumulative impacts overall is the City of Newport Beach, NBFD's service area. Other projects would result in increased population and employment, generating increased demands for fire protection and emergency medical services. The City's service population—that is, population plus employment—is forecast to increase from about 162,300 in 2012 to 171,800 in 2040, an increase of approximately 9,500 or 6 percent (SCAG 2016). Some of this projected population increase occurred between 2012 and 2018 and is now considered as part of the baseline. Other projects would pay increased sales taxes and property taxes and property excise taxes, generating additional revenue—some of which would be available to fund expanded NBFD operations and construction of new and/or expanded facilities.



## 5. Environmental Analysis

### PUBLIC SERVICES

As examples of City investments in new and remodeled fire stations, the City's 2017-2018 capital improvement program includes replacement of two fire stations—Stations 2, Lido, and 5, Corona Del Mar—as well as replacement of the fire engine garage at Station 6 (Newport Beach 2017).

However, addition of a paramedic rescue ambulance at Station 7, including the associated firefighter/paramedic personnel to staff the new paramedic unit, would be needed to serve the proposed project as well as existing and planned developments in the Airport Area with adequate response times. There is sufficient space at Station 7 for the ambulance and the two firefighter/paramedics per shift (six total) to staff the ambulance, and addition of the ambulance and staff would not require expansion or replacement of Station 7. It is anticipated that the increased taxes from the project and other future projects in the Airport Area would be sufficient to fund the necessary personnel to maintain adequate response times in the Airport Area. Nevertheless, impacts to fire and emergency services would be potentially cumulatively significant due to the need to add a paramedic rescue ambulance to Station 7 to maintain adequate response times for EMS calls in the Airport Area and the project's contribution would be cumulatively considerable.

#### 5.12.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Project development would contribute to a potentially significant cumulative impact on EMS response times in the Airport Area.

#### 5.12.1.7 MITIGATION MEASURES

PS-1 The project applicant/developer shall comply with the following measures related to fire protection and emergency services:

- Prior to the issuance of a building permit, the project applicant/developer shall provide payment to the City of Newport Beach equivalent to the cost for purchasing and equipping a new rescue ambulance with patient transport and advanced life support (ALS) capabilities to be located at Santa Ana Heights Fire Station No. 7. Because the cost of the ambulance exceeds the project's pro rata contribution to its cumulative impact, the project applicant shall be entitled to reimbursement from the City on a pro rata share basis, as determined by the City.
- The project applicant/developer shall participate, on a pro-rata basis, in any City-approved funding program for up to an additional six firefighter/paramedic personnel, as may be needed to fund staff for the new paramedic unit. The funding program may be a community facilities district or other funding program. Prior to the issuance of a building permit, the project applicant/developer shall execute a written agreement with the City of Newport Beach to participate in such a funding program if the City determines one is necessary and forms it prior to the City's issuance of the project's first certificate of occupancy.

#### 5.12.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.



## 5. Environmental Analysis PUBLIC SERVICES

### 5.12.2 Police Protection

The information in this section is based partly on a written questionnaire response from Newport Beach Police Department Lieutenant Tom Fishbacher dated February 20, 2018; a copy of this response is included in Appendix I to this DEIR.

#### 5.12.2.1 ENVIRONMENTAL SETTING

##### Regulatory Setting

No existing regulations related to police protection are applicable to the proposed project.

##### Existing Conditions

The Newport Beach Police Department would provide police protection to the proposed project. The city is divided into four areas; the project site is in Area 3, which extends from Balboa Island in the south to the Airport Business Center in the north. NBPD currently has 140 sworn officers and 80 nonsworn personnel. The police station is at 870 Santa Barbara Drive in Newport Center (see Figure 5.12-1). The City's 2017-2018 capital improvement program includes remodeling of the police station—e.g., the shooting range, Detective Division, various office work areas, and locker restrooms—to be funded from the City's general funds (Newport Beach 2017).

##### *Response Times*

NBPD's goal response time for emergency calls is 4 minutes. NBPD's average response time to emergency calls in 2017 was 3:05 minutes.

##### *Funding*

NBPD's operating budget is primarily generated through tax revenues and fees collected from penalties and requested services.

#### 5.12.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- PP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

## 5. Environmental Analysis

### PUBLIC SERVICES

#### 5.12.2.3 REGULATORY REQUIREMENTS

Applicable regulatory requirements and conditions of approval intended to address police protection impacts follow.

##### Regulatory Requirements

No existing regulations are applicable to police protection impacts of the proposed project.

##### Standard Conditions

There are no specific City-adopted standard conditions of approval related to police protection that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.12.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.12-2: The proposed project would introduce new structures, residents, and workers into the Newport Beach Police Department's service boundaries, thereby increasing the requirement for police protection facilities and personnel, but not resulting in the need for new or physically altered police facilities. [Threshold PP-1]**

---

*Impact Analysis:* Development of the proposed 350 apartments and 7,500 square feet of commercial spaces is anticipated to increase police protection demand. NBPD anticipates that it will be able to serve the proposed project with existing staff, facilities, and equipment. Development of a dog park could require NBPD animal control officers to respond to or patrol the area. Increased traffic is always a concern when development intensity is increased; however, no need for additional traffic enforcement staffing or equipment was identified. If a need for additional staff or equipment arises in the future due to project development, such need would be addressed through the City's normal budget process (Fishbacher 2018).

*Level of Significance Before Mitigation:* Impact 5.12-2 would be less than significant.

#### 5.12.2.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is NBPD's service area, that is, the City of Newport Beach. Other projects would increase population and employment, generating increased demands for police protection. The city's service population is forecast to increase from about 162,300 in 2012 to 171,800 in 2040, an increase of approximately 9,500 or 6 percent (SCAG 2016). Other projects would pay increased sales taxes and property taxes, generating additional revenue—some of which would be available to fund expanded NBPD operations and new and/or expanded facilities. Remodeling of the City's police station is included in

## 5. Environmental Analysis PUBLIC SERVICES

the City's 2017-2018 capital improvement program. Cumulative impacts would be less than significant after additional revenues generated by other projects, and project impacts would not be cumulatively considerable.

### 5.12.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Impact 5.12-2 would be less than significant.

### 5.12.2.7 MITIGATION MEASURES

No mitigation measures are required.

### 5.12.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

## 5.12.3 School Services

The information in this section is based partly on a written questionnaire response by Jeremy Cogan, Director of Facilities Planning for the Santa Ana Unified School District, dated February 23, 2018; a copy of this response is included in Appendix I of this DEIR.

### 5.12.3.1 ENVIRONMENTAL SETTING

#### Regulatory Background

*Senate Bill 50 (Chapter 407 of Statutes of 1998) (SB 50)*

SB 50 sets forth a state school facilities construction program that includes restrictions on a local jurisdiction's ability to impose mitigation for a project's impacts on school facilities in excess of fees set forth in Education Code 17620. It establishes three potential limits for school districts, depending on the availability of new school construction funding from the state and the particular needs of the individual school districts. Level one is the general school facilities fees imposed in accordance with Government Code Section 65995 as amended. Level two and three fees are alternate fees that are intended to represent 50 percent or 100 percent of a school district's school facility construction costs per new residential construction as authorized by Government Code Sections 65995.5, 65995.6, and 65995.7. On February 24, 2016, the State Allocation Board adjusted the maximum level-one residential school fee to be \$3.48 per square foot for residential development; \$0.56 per square foot for commercial, industrial, and senior housing projects; and \$0.406 per square foot for hotel/motel projects. Development fees authorized by SB 50 are deemed by Section 65996 of the California Government Code to be "full and complete school facilities mitigation."

#### Existing Conditions

The project site is in the Santa Ana Unified School District (SAUSD). SAUSD spans 26.6 square miles, including most of the City of Santa Ana; parts of the cities of Irvine, Tustin, Newport Beach, and Costa Mesa; and an area of unincorporated Orange County. SAUSD operates 60 schools, including 36 elementary schools, 9 intermediate schools, and 7 high schools (SAUSD 2018); districtwide enrollment in the 2017-18

## 5. Environmental Analysis

### PUBLIC SERVICES

school year was 53,131 (CDE 2018). The project site is served by three schools, listed in Table 5.12-2 and mapped on Figure 5.12-1.

**Table 5.12-2 Schools Serving the Project Site**

School	Grades	Address Distance from Project Site	Current Enrollment (October 2017)	Capacity (2016)	Available Capacity
Monroe Elementary School	K-5	417 E Central Avenue Santa Ana, CA 92707 <b>5 miles</b> from Irvine-Newport Development Area (INDA) <sup>1</sup>	328	519	191
McFadden Intermediate School	6-8	2701 S Raitt Street Santa Ana, CA 92704 <b>6 miles</b> from INDA	1,204	1,806	609
Century High School	9-12	1401 S Grand Avenue Santa Ana, CA 92705 <b>6 miles</b> from INDA	1,763	1,890	127

Source: Cogan 2018

<sup>1</sup> The Irvine-Newport Development Area (INDA) comprises the Irvine Business Center in the City of Irvine and the Airport District in the City of Newport Beach.

#### 5.12.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

SS-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services.

#### 5.12.3.3 REGULATORY REQUIREMENTS

Applicable regulatory requirements and conditions of approval intended to address school services impacts follow.

##### Regulatory Requirements

RR SS-1 New development shall pay development fees authorized deemed by Section 65996 of the California Government Code to be “full and complete school facilities mitigation.”

##### Standard Conditions

There are no specific City-adopted standard conditions of approval related to school services that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

5. Environmental Analysis  
PUBLIC SERVICES

5.12.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

**Impact 5.12-3: The proposed project would generate new students. Schools serving the project site have sufficient capacity for project-generated students. [Threshold SS-1]**

*Impact Analysis:* The proposed project is estimated to generate about 39 students—using SAUSD student generation factors for multifamily units—consisting of 22 elementary school students, 8 intermediate students, and 9 high school students (see Table 5.12-3).

**Table 5.12-3 Estimated Project Student Generation (350 Proposed Multifamily Units)**

School Level	Generation Factor per Household (multifamily units) <sup>1</sup>	Students Generated
Elementary (K-5)	0.0620	22
Intermediate (6-8)	0.0229	8
High (9-12)	0.0251	9
<b>Total</b>	<b>0.11</b>	<b>39</b>

<sup>1</sup> Source: Cogan 2018.

The three schools serving the project site have sufficient capacities for the proposed project’s student generation, as shown in Table 5.12-4. Project development would not require SAUSD to add school capacity as the schools serving the project site would have more than adequate capacity.

**Table 5.12-4 Project Impacts on School Capacities**

School	Existing Available Capacity (from Table 5.12-2) <sup>1</sup>	Project Student Generation (from Table 5.12-3)	Available Capacity After Project Student Generation
Monroe Elementary School	191	22	169
McFadden Intermediate School	609	8	601
Century High School	127	9	118

<sup>1</sup> Source: Cogan 2018.

Additionally, the need for additional school services and facilities is addressed by compliance with school impact assessment fees per Senate Bill 50, also known as Proposition 1A. SB 50—codified in California Government Code Section 65995—was enacted in 1988 to address how schools are financed and how development projects may be assessed for associated school impacts. To address the increase in enrollment at LAUSD schools that would serve the Proposed Project, the project applicant/developer would be required to pay school impact fees to reduce any impacts to the school system, in accordance with SB 50. These fees are collected by school districts at the time of issuance of building permits. As stated in Government Code Section 65995(h),

## 5. Environmental Analysis

### PUBLIC SERVICES

The payment or satisfaction of a fee, charge, or other requirement levied or imposed ... are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization ... on the provision of adequate school facilities.

Payment of the school impact fees would offset impacts from increased demand for school services associated with development of the proposed project by providing an adequate financial base to construct and equip new and existing schools. Although implementation of the proposed project would cause an incremental increase in demand for schools, this increase would be offset by the payment of school fees.

*Level of Significance Before Mitigation:* Upon implementation of RR SS-1, Impact 5.12-3 would be less than significant.

#### 5.12.3.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is the Santa Ana Unified School District, described in Section 5.12.3.1. The Residential Development School Fee Justification Study (SFJS), completed in 2014, projected development of 6,055 residential units in the District through 2035, at least 4,864 in the Irvine-Newport Development Area (INDA).<sup>1,2</sup> The projected units are estimated to generate about 1,051 students, 535 of whom (or about 51 percent of the total) would live in units in the INDA. The SFJS estimated that student generation would result in 786 unhoused students districtwide, all at the elementary and intermediate school levels; the number of unhoused students in the INDA was not specified (Dolinka 2014).

Other projects would pay school facilities fees to the SAUSD pursuant to SB 50. Such fees are defined under California Government Code 65996 to be full and complete school facilities mitigation. Therefore, cumulative impacts would be less than significant, and the proposed project impacts would not be cumulatively considerable.

#### 5.12.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of RR SS-1, Impact 5.12-3 would be less than significant.

#### 5.12.3.7 MITIGATION MEASURES

No mitigation measures are required.

#### 5.12.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

---

<sup>1</sup> The Irvine-Newport Development Area (INDA) comprises the Irvine Business Center in the City of Irvine and the Airport District in the City of Newport Beach.

<sup>2</sup> The 6,055 total residential units districtwide includes 496 multifamily units that have mitigated their impacts on SAUSD through separate fees via agreement with the district. The School Fee Justification Study does not specify where those units are. The 4,864 units in the INDA exclude those 496 units.



## 5. Environmental Analysis PUBLIC SERVICES

### 5.12.4 Library Services

The information in this section is based partly on the written questionnaire response by Tim Hetherington, Newport Beach Public Library Services Director, dated February 5, 2018; a copy of the response is included in Appendix I of this DEIR.

#### 5.12.4.1 ENVIRONMENTAL SETTING

##### Regulatory Setting

Local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

##### *Newport Beach Municipal Code*

- **Chapter 3.12 (Property Development Tax).** This chapter outlines the need for collecting necessary funds to provide adequate fire stations and fire-fighting equipment, public City libraries, and public City parks—which cannot be met by the City’s ordinary revenues—through an excise tax upon the construction and occupancy of residential, commercial, and industrial units or buildings in the City.

##### Existing Conditions

The Newport Beach Public Library (NBPL) provides library services to the City.

##### *Facilities*

The two nearest NBPL facilities to the project site are the Mariners Branch Library at 1300 Irvine Avenue, about 3.2 miles to the southwest; and the Central Library at 1000 Avocado Avenue in Newport Center, four miles to the south (see Figure 5.12-1). The Central Library is 71,000 square feet and has amenities such as student and children programs, passport services, a credit union, and a café. NBPL has two other branches, one in Corona del Mar and one on the Balboa Peninsula. The City’s 2017-2018 capital improvement program includes replacement of the Corona del Mar branch (Newport Beach 2017). The Mariner’s Branch has 2,000 square feet of building area. The building area and collection size at the Central Library are each considered adequate for that facility’s service area. The collection size at the Mariners Branch is regarded as adequate for its service area, but the building area is considered insufficient, with an additional 2,000 square feet needed to adequately serve its service area. However, there are few options respecting expansion of the Mariners Branch.

##### *Collections*

The NBPL has a systemwide collection of 320,408 items, consisting of 246,111 books, 55,391 media items, and 18,906 e-books.

##### *Funding*

Funding for library services is allocated through the City’s general fund and property excise taxes on new developments, per Chapter 3.12 of the City’s municipal code.

## 5. Environmental Analysis

### PUBLIC SERVICES

#### 5.12.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- LS-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services.

#### 5.12.4.3 REGULATORY REQUIREMENTS

Applicable regulatory requirements and conditions of approval intended to address library services impacts follow.

##### Regulatory Requirements

- RR LS-1 New development shall pay a property excise tax per the City Municipal Code Chapter 3.12, Property Development Tax.

##### Standard Conditions

There are no specific City-adopted standard conditions of approval related to school services that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.12.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.12-4: The proposed project would not generate additional population resulting in the need for the construction of new or expanded libraries. [Threshold LS-1]**

---

*Impact Analysis:* As stated in Section 5.11, *Population and Housing*, project development is forecast to add approximately 550 persons to the NBPL's service area. Thus, development would generate a very slight increase in demands for library services and facilities at the Mariners Branch. The proposed project would pay a property excise tax per City Municipal Code Chapter 3.12, part of which is designated for libraries; and would generate additional tax revenues supporting the City's General Fund

Therefore, the project would not create the need to construct or expand libraries and impacts on library facilities and services would be less than significant.

## 5. Environmental Analysis PUBLIC SERVICES

*Level of Significance before Mitigation:* With implementation of RR LS-1, Impact 5.12-4 would be less than significant.

### 5.12.4.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is the NBPL's service area, the City of Newport Beach. Other projects would generate additional residents in the City; the City's population is forecast to increase from about 86,300 to 92,700, an increase of about 6,400 or 7.4 percent, between 2012 and 2040 (SCAG 2016). Other projects would pay the City excise tax required under RR LS-1, and additional taxes supporting the City's General Fund, thus reducing impacts to library facilities and services. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

### 5.12.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of RR LS-1, Impact 5.12-4 would be less than significant.

### 5.12.4.7 MITIGATION MEASURES

No mitigation measures are required.

### 5.12.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

## 5.12.5 References

California Department of Education (CDE). 2018, May 31. Dataquest. <http://dq.cde.ca.gov/dataquest/>.

California Department of Finance (CDF). 2018, May. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2018. [http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/documents/E-5\\_2018InternetVersion.xls](http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/documents/E-5_2018InternetVersion.xls).

California Department of Forestry and Fire Prevention (CAL FIRE). 2011, October. Very High Fire Hazard Severity Zones in LRA: Newport Beach. [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps/FHSZ/orange/c30\\_NewportBeach\\_vhfhsz.pdf](http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/orange/c30_NewportBeach_vhfhsz.pdf).

Cogan, Jeremy (director of facilities planning). 2018, February 23. Written response to questionnaire. Santa Ana Unified School District. See Appendix I of this DEIR.

Dolinka Group. 2014, February 27. Residential Development School Fee Justification Study. Prepared for Santa Ana Unified School District. <https://www.sausd.us/cms/lib5/CA01000471/Centricity/Domain/113/Residential%20Development%20School%20Fee%20Justification%20Study.pdf>.

## 5. Environmental Analysis

### PUBLIC SERVICES

Duncan, Chip (fire chief). 2017, May. Comment letter on the Koll Center Residences project. Newport Beach Fire Department.

———. 2018, February 13. Written response to questionnaire. Newport Beach Fire Department. See Appendix I of this DEIR.

Fishbacher, Tom (lieutenant). 2018, February 20. Written response to questionnaire. Newport Beach Police Department. See Appendix I of this DEIR.

Hetheron, Tim (library services director). 2018, February 5. Written response to questionnaire. Newport Beach Public Library. See Appendix I of this DEIR.

Munoz, Elsa (head, support services). 2017, August 25. Written response to questionnaire for Connect Southwest LA TOD Specific Plan. Los Angeles County Public Library.

Newport Beach, City of. 2017, April 6. Fiscal Year 2017-18 Capital Improvement Program.  
<http://www.newportbeachca.gov/home/showdocument?id=54370>.

Santa Ana Unified School District (SAUSD). 2018, May 31. District Overview.  
<https://www.sausd.us/domain/3>.

Southern California Association of Governments (SCAG). 2016, April 7. Demographics & Growth Forecast. Appendix to 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.  
[http://scagrtpscscs.net/Documents/2016/final/f2016RTPSCS\\_DemographicsGrowthForecast.pdf](http://scagrtpscscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf).

## 5. Environmental Analysis

### 5.13 RECREATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed-Use project (proposed project) to impact public parks and recreational facilities in the City of Newport Beach.

#### 5.13.1 Environmental Setting

##### 5.13.1.1 REGULATORY BACKGROUND

State and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

##### State

###### *California Public Park Preservation Act*

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This ensures no net loss of parkland and facilities.

##### Local

###### *City of Newport Beach Municipal Code*

Title 20 (Planning and Zoning) of the City of Newport Beach Municipal Code (also known as the Zoning Code) identifies land use categories, development standards, and other provisions that ensure consistency between the general plan and proposed development and redevelopment projects. The following provisions from the Zoning Code focus on park and recreational facilities impacts.

- **Chapter 3.12 (Property Development Tax).** Outlines the City's property development tax, which funds public improvements and facilities—consisting of fire stations and firefighting equipment, public City libraries, and public City parks—that cannot be met by the ordinary revenues of the City. The excise tax is imposed upon the construction and occupancy of residential, commercial, and industrial units or buildings in the city.
- **Chapter 11.04 (Parks, Park Facilities, and Beaches).** Outlines the City's policy to allow maximum public use of public parks, park facilities, and beaches subject to rules and regulations necessary for administration and maintenance.

###### *Newport Place Planned Community*

As shown in Figure 3-3a, *Aerial Photograph: Airport Area*, the project site is in the City's "Airport Area" planning subarea, which is bounded by Campus Drive to the north and west, State Route 73 (SR-73) to the south, and Jamboree Road to the east. Within the Airport Area are established Planned Community

## 5. Environmental Analysis

### RECREATION

development plans. The project site is in the Newport Place Planned Community (NPPC). The established NPPC Development Standards were adopted by the Newport Beach City Council in December of 1970 (as amended through July of 2012). Development projects in the NCCP must adhere to the NPPC Development Standards, including those related to “Amenities and Neighborhood Integration,” which states:

Due to the potential land use incompatibility with other uses within the established commercial or industrial area, residential development shall incorporate sufficient amenities (e.g., parks, clubhouse, pool, etc.) for the use of the residents and incorporate necessary improvements (e.g., pedestrian walkways, open space, recreational space, pedestrian and bicycle connections) to allow integration into the existing community and larger residential development that may occur in the future. The number and type of amenities required and necessary improvements shall be determined through the Site Plan Review process based on the size, density, location, and any other factors deemed relevant.

#### 5.13.1.2 EXISTING CONDITIONS

Recreation is a major feature of Newport Beach, whose parks and beaches serve residents and visitors year-round. In addition to recreation resources, parks and other recreational facilities provide a multitude of benefits to the community, including open space, conservation of natural and significant resources, buffers between land uses, and preservation of scenic views.

The City of Newport Beach has an adopted standard of 5 acres per 1,000 persons for provision of parkland. The California Department of Finance estimated the population of Newport Beach in 2017 at 84,915 residents (DOF 2017). Using the City’s parkland standard, this population requires 424.6 acres of parkland. Presently, there are approximately 450 acres of park and recreation space in the City, and 237 acres of active beach recreation (Newport Beach 2018). Therefore, the City has a surplus of 262.4 acres of recreational acreage.

The San Joaquin Marsh and Wildlife Sanctuary encompasses approximately 300 acres of coastal freshwater wetlands. Owned by the Irvine Ranch Water District, the western boundary of the San Joaquin Marsh is approximately 1.48 mile southeast of the project site. The Upper Newport Bay Nature Preserve totals approximately 135 acres of bluffs surrounding the bay. The preserve is approximately 1.47 miles to the south of the site. Recreational facilities within 1.5 miles of the project site are identified in Table 5.13-1.



5. Environmental Analysis  
RECREATION

**Table 5.13-1 Recreational Facilities in Project Area**

Name	Type of Park	Location	Distance from Site (miles)	Size (acers)
UC Irvine Arboretum	Open Space	Campus Dr and Jamboree Rd, Irvine	0.64	12.5
Bayview Park	Community Park	Mesa Dr and Bay View Ave, Newport Beach	0.9	2
Mesa Birch Park	Mini Park <sup>1</sup>	2081 Mesa Dr, Newport Beach	1.12	0.2
Bonita Creek Park & Community Center	Community Center and Park	3010 La Vida, Newport Beach	1.35	12.4
Newport-Mesa Family YMCA	Private Community Center	2300 University Dr, Costa Mesa	1.38	3.7
San Joaquin Freshwater Marsh and Wildlife Sanctuary	Open Space	5 Riparian View, Irvine, CA 92612	1.48	300
Upper Newport Bay Regional Park (County facility)	Open Space	2301 University Dr, Newport Beach	1.47	1,000

Sources: Newport Beach 2006; Newport Beach GIS, [http://nbgis.newportbeachca.gov/NewportHTML5Viewer/?viewer=publicsite&runWorkflow=Community\\_Center\\_Search\\_StartUp&TAG=FACIL\\_080](http://nbgis.newportbeachca.gov/NewportHTML5Viewer/?viewer=publicsite&runWorkflow=Community_Center_Search_StartUp&TAG=FACIL_080); Newport Beach Recreation and Senior Services – Parks and Facilities, <http://nbgis.newportbeachca.gov/gispub/recreation/facilities/default.aspx>.

<sup>1</sup> According to the City of Newport Beach’s General Plan, mini parks are less than one acre in size, serve a fairly small service radius of ¼ mile, and are located within the neighborhood they serve. A few mini parks are located as urban trail heads along major trails or streets.

Furthermore, the City has been divided into 12 service areas for the purposes of park planning and to equitably administer parkland dedications and fees provided by residential development. The project site is in Service Area 4 (Santa Ana Heights/Airport Commercial). Service Area 4 is generally bound on the north and west by Campus Drive, on the south by the Upper Newport Bay Regional Park, on the southeast by Bayview Park, and on the east by Jamboree Road, and on the west by the Santa Ana River. There is currently a park surplus in Service Area 4, and the present two-acre Bayview Park and the proximity of the Upper Bay recreation area provide substantial recreational opportunities for this area. However, this service area is experiencing a shortfall in active playfields. In addition, the population in this service area is expected to increase under the future development that would be accommodated under the City’s General Plan. As with the proposed project, future development will be subject to special provisions that require the provision of onsite recreational amenities and dedication of land or payment of in-lieu fees (Newport Beach 2008).

**5.13.2 Thresholds of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

## 5. Environmental Analysis

### RECREATION

- R-1 Would 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.
- R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

### 5.13.3 Regulatory Requirements and Standard Conditions

#### 5.13.3.1 REGULATORY REQUIREMENTS

Applicable regulatory requirements and conditions of approval intended to address recreation impacts follow.

- RR REC-1 The proposed project will be required to comply with the provisions of the Zoning Code (Newport Beach Municipal Code Title 20), including Chapter 3.12 (Property Development Tax) and Chapter 11.04 (Parks, Park Facilities, and Beaches).
- RR REC-2 The proposed project will be required to comply with established NPPC Development Standards, including those related to “Amenities and Neighborhood Integration.”

#### 5.13.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to recreation that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

### 5.13.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.13-1: The proposed project would generate additional residents in the City of Newport Beach, which would result in an increase in the use of existing park and recreational facilities. [Threshold R-1]**

---

*Impact Analysis:* The proposed project would allow for the development of 350 apartment units. As stated in Section 5.11, *Population and Housing*, the proposed project has the potential to generate approximately 550 new residents in Newport Beach. This population increase would result in an increased use of existing City parks and recreational facilities.

General Plan Policy LU 6.15.13 applies to mixed-use districts designated MU-H2 in the Airport Area. The policy requires dedication and improvement of at least 8 percent of the gross land area of the first phase of development in each neighborhood, or 0.5 acre, whichever is greater, as a neighborhood park. The project site is designated MU-H2 and consists of 5.69 acres; 8 percent of the gross land area is 0.46 acre. Consistent with the requirement of Policy LU 6.15.13, the proposed project includes development of a half-acre public

## 5. Environmental Analysis RECREATION

park. As shown in Figure 3-4, *Conceptual Site and Landscape Plan*, an elongated, rectangular public park would be at the southern end of the project site with frontages on Dove Street and Martingale Way. Anticipated park amenities include a play lawn featuring playground equipment, shade structure, benches, and synthetic turf; fenced and separated dog parks for large and small dogs featuring synthetic turf; fitness terrace with fitness equipment and shade trellis; central dining terrace with overhead trellis, tables, and chairs; bocce ball court with shade cabanas; fenced pickleball court; and seat walls throughout.

Upon completion, the park would be dedicated to the City for public use; however, it would be managed and operated by the apartment property management company. The park would serve future project residents, employees, and patrons. It is also intended to serve the existing offices and business in the surrounding vicinity as a recreation and activity area and respite from the daily work environment. The half-acre park would meet the General Plan policy requirements.

Additionally, General Plan Policy LU 6.15.14 requires that each neighborhood park is clearly public in character and is accessible to all residents of the neighborhood. The policy also requires that each park be surrounded by public streets on at least two sides (preferably with on-street parking to serve the park) and be linked to residential uses in its respective neighborhood by streets or pedestrian ways. As shown in Figure 3-4, the proposed half-acre park has been located and designed in accordance the requirements of this policy.

Furthermore, as described in Chapter 3, *Project Description*, the project includes the following recreational amenities and facilities, which would be available to future project residents:

- **Pool Courtyard:** The pool courtyard includes a community pool and spa, a clubroom, an outdoor terrace, barbecue grills, and an outdoor fireplace. Chaise lounges and cabanas provide for poolside seating, and the spa terrace would be developed with lounging on deck or synthetic turf with a fireplace. A round metal trellis at the south end of the pool courtyard is intended for hanging “pod” chairs with views back to the clubroom. As shown in Figure 3-4, this courtyard would provide a direct connection to the proposed public park via a gated entry.
- **Entertainment Courtyard:** The entertainment courtyard is intended for the passive user and bisected by a pedestrian corridor (see Figure 3-4). Uses in this courtyard would include a fire pit, barbecue grills, soft seating, and overhead festival lights. Ground-level units surrounding the entertainment courtyard would have enlarged private patios fronting the courtyard.
- **Lounge Courtyard:** The lounge courtyard is intended for the passive user and bisected by a pedestrian corridor (see Figure 3-4). Uses in this courtyard would include a lounge cabana with fire pit, barbecue grills, communal dining tables, and soft seating. Ground-level units surrounding the lounge courtyard would have enlarged private patios fronting the courtyard.
- **Rooftop Terrace at Level 7:** The rooftop terrace would be on the seventh floor of the apartment building, north of the proposed parking structure. The terrace would provide direct views of the retail plaza below (see Figure 3-4). The terrace would include a spa with a cabana and sunning furniture. A fireside lounge with a three-sided fireplace, group shade structure, lounge seating, and overhead festival

## 5. Environmental Analysis

### RECREATION

lights would be provided at the center of the terrace. The rooftop would also include a dining terrace with barbecue grills, communal tables, and outdoor kitchen and a game lawn with synthetic turf, game tables, and overhead festival lighting.

- **View Deck at Level 5.** The view deck would be on the fifth floor of the apartment building, adjacent to the leasing office and club room (see Figure 3-4). The view deck would include an outdoor kitchen, lounge chairs, and a fireplace.

Other amenities and services available to future residents include a club room for entertainment and gatherings and a fitness facility. Also, each apartment unit would have a private patio or balcony. Ground-level units would have enlarged patios, and units on the second floor and above would have balconies.

Additionally, General Plan Policy LU 6.15.16 and Policy R1-2 require developers of multifamily residential developments on parcels eight acres or larger to provide 44 square feet of onsite recreational amenities for each dwelling unit. Although these policies are not directly applicable to the proposed project because the project site is less than eight acres, the project more than exceeds this requirement. The project provides approximately 22,700 square feet of onsite recreational facilities and 350 dwelling units, amounting to 65 square feet of onsite recreational facilities per dwelling unit.

Furthermore, the project site is in Service Area 4 (Santa Ana Heights/Airport Commercial). As noted above, Service Area 4 has a park surplus but a shortfall of playfields. As substantiated above, the proposed project would provide private recreational amenities for future residents as well as a half-acre public park for use by project and City residents. Also, all additional parks and recreational facilities within approximately 1.5 miles of the project site would be accessible to future project residents. Therefore, existing City park and recreational facilities and proposed recreational and park amenities implemented as part of the project would adequately serve future project residents.

Finally, the City's five acres of parkland per 1,000 persons requirement, as set forth in the City's Park Dedication Fee Ordinance (Chapter 19.52 [Park Dedication and Fees] of the City's Municipal Code) and General Plan Policy R1.1 do not apply to the proposed project, as the project is not a residential subdivision. The project does not involve or require a subdivision map because it is a for-lease apartment development. Subdivision maps are associated with for-sale residential developments, both single- and multifamily. Therefore, the ordinance is not applicable to the proposed project. However, as detailed above, the proposed project would provide a half-acre park in accordance with the requirement of General Plan Policy LU 6.15.13.

Based on the preceding, project residents would have ample recreational facilities onsite, and therefore are not expected to use City parks or recreational facilities such that substantial deterioration would occur or be accelerated. Therefore, the proposed project would not result in a significant impact on existing park and recreational facilities.

***Level of Significance before Mitigation:*** With implementation of RR REC-1 and RR REC-2, Impact 5.13-1 would be less than significant.

## 5. Environmental Analysis RECREATION

---

**Impact 5.13-2: Development of a 0.5-acre public community park and private recreational amenities under the proposed project would not result in environmental impact. [Threshold R-2]**

---

**Impact Analysis:** The proposed project includes development of a half-acre public park. As shown in Figure 3-4, *Conceptual Site and Landscape Plan*, and consistent with the General Plan Land Use Element Figure LU23 (Airport Area Residential Villages Illustrative Concept Diagram), the elongated, rectangular public park would be on the south side of the project site with frontages on Dove Street and Martingale Way. Upon completion, the park would be dedicated to the City for public use but would be managed and operated by the proposed project's property management company. Anticipated park amenities include a fenced dog park and/or playground area, central dining terrace with group shade structure, games terrace with outdoor ping pong and bocce court, multipurpose lawn area, and fenced pickleball court. A small off-street parking lot for park users is also proposed on the eastern end of the park. The public park would be landscaped with low-water-use plants. A tree and shrub hedge would be provided along the southern boundary to provide a visual and physical buffer between the park and the adjacent office parking lot to the south.

In addition, several private recreational amenities are proposed for the residential portion of the proposed project, including an entertainment courtyard, lounge, pool and pool courtyard, clubroom and view deck, and a rooftop terrace on the seventh floor. These amenities would be accessible only to project residents and their guests.

The environmental impacts of the proposed park and recreational amenities to be constructed onsite have been analyzed as a part of the overall impact evaluation for the proposed project in the respective topical section (e.g., air quality, land use and planning, transportation and traffic) of this EIR. Based on the analysis provided in the respective topical sections, development of the proposed park and recreational amenities in and of themselves would not result in environmental impact.

**Level of Significance before Mitigation:** With implementation of RR REC-1 and RR REC-2, Impact 5.13-2 would be less than significant.

### 5.13.5 Cumulative Impacts

Although the proposed project would introduce more people into the area and generate additional demand for parks and recreational facilities, the proposed project would provide both public and private open space and recreational amenities on the site. Therefore, the proposed project would accommodate the increased recreational demand associated with project development. Furthermore, the Uptown Newport development, a 25.05-acre mixed-use project at 43 II-432 I Jamboree Road, will include a two-acre public park. The Koll Center, a 13.16-acre mixed-use infill development at 4400 Von Karman Avenue, will also include a 1.17-acre park. As with all residents of and visitors to the City, future project residents would have access to all public recreational facilities in Newport Beach. Similarly, residents of and visitors to surrounding communities can use public recreational facilities in Newport Beach, and residents of Newport Beach have access to public recreational uses in other jurisdictions. All new development in Newport Beach requiring a subdivision map would be mandated to dedicate land, pay fees in lieu thereof, or a combination of both in compliance with the City's Municipal Code. Furthermore, the City has a surplus of 256 recreational acres and collects funds

## 5. Environmental Analysis

### RECREATION

for parks through property development taxes. Therefore, the proposed project would not combine with cumulative projects to result in a cumulatively significant impact to parks and recreational spaces.

#### 5.13.6 Level of Significance Before Mitigation

With implementation of RR REC-1 and RR REC-2, the following impacts would be less than significant.

- Impact 5.13-1: Development of the proposed project would not substantially impact existing parks and entertainment facilities.
- Impact 5.13-2: Development of the 0.5 acer park and on-site recreational facilities would not have significant impacts on the environment.

#### 5.13.7 Mitigation Measures

No significant impacts would occur and no mitigation measures are required.

#### 5.13.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.13.9 References

Department of Finance (DOF). 2018, May 1. Report E-5: Population and Housing Estimates for Cities, Counties, and the State. January 1, 2011-2018, with 2010 Benchmark.  
<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

Newport Beach, City of. 2006. Newport Beach General Plan.

———. 2018. Demographics and Statistics. <https://www.newportbeachca.gov/i-am-a/visitor/about-newport-beach/demographics-and-statistics>.



## 5. Environmental Analysis

### 5.14 TRANSPORTATION AND TRAFFIC

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed-Use project (proposed project) to result in transportation and traffic impacts in the circulation system. The analysis in this section is based in part on the following technical report:

- *Newport Crossings Traffic Impact Analysis*, LSA Associates, July 2018.

A copy of the technical study is included in Appendix J of this DEIR.

The traffic impact analysis (TIA) was prepared in accordance with the City of Newport Beach Traffic Phasing Ordinance traffic impact study requirements; County of Orange Congestion Management Program requirements; and the California Environmental Quality Act (CEQA) in support of the environmental documentation for the proposed project.

#### Terminology

The following terms are used throughout this section.

**Congestion Management Plan (CMP).** A federally mandated program in metropolitan planning areas to address and manage congestion through the implementation of strategies not calling for major capital investments.

**Highway Capacity Manual (HCM).** The HCM provides methods for quantifying highway capacity, serving as a fundamental reference on concepts, performance measures, and analysis techniques for evaluating the multimodal operation of streets, highways, freeways, and off-street pathways. The methodology used to assess the operation of intersections is based on the HCM.

**Institute of Transportation Engineers (ITE).** An international society of professionals in transportation and traffic engineering. The organization publishes the Trip Generation Manual, which provides trip generation data.

**Intersection Capacity Utilizations (ICU).** The ICU is a technique intended to evaluate signalized intersections. The ICU methodology estimates the volume-to-capacity (V/C) ratios for key conflicting traffic movements at an intersection. The methodology is used to assess the operation of intersections based on the V/C ratio and corresponding LOS grade.

**Levels of Service (LOS).** Roadway capacity is generally limited by the ability to move vehicles through intersections. A level of service (LOS) is a standard performance measurement to describe the operating characteristics of a street system in terms of the level of congestion or delay experienced by motorists. Service levels range from A through F to represent traffic conditions from best (uncongested, free-flowing conditions) to worst (total breakdown with stop-and-go operation).

**Orange County Transportation Authority (OCTA).** OCTA is the local transportation authority in Orange County that is responsible for transportation planning, programing, and operations and serves as the primary transit operator in the county.

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

**Vehicles Miles Traveled (VMT).** The number of vehicle miles of travel is an indicator of the travel levels on the roadway system by motor vehicles. This estimate is based upon traffic volume counts and roadway length.

#### 5.14.1 Environmental Setting

##### 5.14.1.1 REGULATORY BACKGROUND

State, regional, and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

##### **State and Regional**

###### *Senate Bill 743*

On September 27, 2013, SB 743 was signed into law. The Legislature found that with adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce VMT and thereby contribute to the reduction of greenhouse gas emissions (GHG), as required by the California Global Warming Solutions Act of 2006 (AB 32). Additionally, AB 1358, described above, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users.

SB 743 started a process that could fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts in many parts of California (if not statewide). As part of the new CEQA Guidelines, the new criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. OPR developed alternative metrics and thresholds based on VMT. The final draft of changes to CEQA Guidelines were published in November 2017 and require certification and adoption before they go into effect. They have been submitted to the Secretary of the Natural Resources Agency and are currently under the rulemaking review process. After the Secretary of the Natural Resources Agency certifies the guidelines, automobile delay, as described solely by level of service of similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment. Implementation is expected in early 2019. There will be an opt-in period until July 1, 2020, for agencies to adopt the guidelines and new VMT-based criteria. Currently, automobile delay can still be considered a significant impact, and the cities of Newport Beach and Irvine continue to use their respective, established LOS criteria.

###### *California Department of Transportation (Caltrans)*

Caltrans is the primary state agency responsible for transportation issues. Caltrans approves the planning, design, and construction of improvements for all state-controlled facilities, including Interstate 405, State Route 73, and the associated interchanges for these facilities. Caltrans has established standards for roadway traffic flow and developed procedures to determine if state-controlled facilities require improvements. For state-controlled intersections, level of service standards and impact criteria specified by Caltrans will apply.

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

### Orange County Congestion Management Plan

The CMP is intended to link transportation, land use, and air quality decisions and to address the impact of local growth on the regional transportation system. Compliance with CMP requirements ensures a city's eligibility to compete for state gas tax funds for local transportation projects. The Orange County CMP was established in 1991, and the most recent CMP was adopted in 2017. The CMP requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System. Per the CMP guidelines, this number is based on the desire to analyze any impacts that comprise 3 percent or more of the existing CMP highway system facilities' capacity. The CMP highway system includes specific roadways—including state highways and super streets (now known as smart streets)—and CMP arterial monitoring locations/intersections. Therefore, the CMP TIA requirements relate only to the designated CMP highway system.

### Local

#### *City of Newport Beach*

#### *General Plan Circulation Element*

The circulation element, which was updated in 2006, governs the long-term mobility system in the City of Newport Beach. The circulation element includes goals and policies that are closely correlated with the land use element and are intended to provide the best possible balance between the City's future growth and land use development, roadway size, traffic levels of service, and community character. In Newport Beach, the acceptable LOS for all study intersections is LOS D, with the exception of intersections in the airport area where LOS E is acceptable.<sup>1</sup> Applicable transportation plans, policies relating to transportation, and analysis of project consistency for each of the policies are included in Table 5.9-1, *General Plan Consistency Analysis*, in Section 5.9, *Land Use and Planning*.

#### *City of Newport Beach Municipal Code*

- **Chapter 12.62, Temporary Street Closure** outlines the permit requirements and process for the temporary closure of public streets. For example, Section 12.62.030, Issuance of Permit, states that the City Manager may issue a permit if the time and location requested will not unreasonably inconvenience the public, create unusual traffic or policing problems, or interfere with the peace and quiet of the surrounding neighborhood.
- **Chapter 13.01, Street Construction Permits** outlines the provisions for street construction permits.
- **Chapter 15.38, Fair Share Traffic Contribution Ordinance** has been established by the City Council to establish a fee—based upon the unfunded cost to implement the Master Plan of Streets and Highways—to

---

<sup>1</sup> As stated in the General Plan Circulation Element, the Airport Area is heavily impacted by through traffic accessing John Wayne Airport and high-density development in the Irvine Business Complex. The circulation improvements that would be necessary to accommodate traffic from these sources and achieve LOS "D" would require extensive Capital Improvement Program budget expenditures and would be contrary to the desires of Newport Beach residents expressed during the Visioning Process for this General Plan. For these reasons, LOS "E" is the standard for any intersection in the Airport Area shared with the City of Irvine (which has established LOS "E" as its standard in the adjacent Irvine Business Complex).

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

be paid in conjunction with the issuance of a building permit. The ordinance sets forth procedures for calculating the fair-share amounts for residential projects, hotel/motels, and office/retail/commercial uses, which are adopted by City Council resolution.

- **Chapter 15.40, Traffic Phasing Ordinance (TPO)** ensures that the effects of new development projects are mitigated by developers as they occur. Specifically, the ordinance was established to:
  - Provide a uniform method of analyzing and evaluating the traffic impacts of projects that generate a substantial number of average daily trips and/or trips during the morning or evening peak hour period.
  - Identify the specific and near-term impacts of project traffic and ensure that development is phased with identified circulation system improvements.
  - Ensure that project proponents, as conditions of approval pursuant to this chapter, make or fund circulation system improvements that mitigate the specific impacts of project traffic on primary intersections at or near the time the project is ready for occupancy.
  - Provide a mechanism for ensuring that project proponents' cost of complying with traffic-related conditions of project approval is roughly proportional to project impacts.

The ordinance also clarifies the standards and required findings for project approvals. In accordance with Section 15.40.030 of the municipal code, there are provisions for comprehensive phase land use development and circulation system improvement plans, such as the Circulation Improvement and Open Space Agreement (see Section 5.9, *Land Use and Planning*).

#### *City of Irvine*

In Irvine, LOS E (peak hour ICU less than or equal to 1.00) is considered acceptable in the Irvine Business Complex (IBC) intersections. At other study area intersections in Irvine, LOS D (peak hour ICU less than or equal to 0.90) is acceptable. At Irvine intersections, if the intersection would operate at unacceptable levels of service and the project contribution is 0.02 or greater, mitigation is required to bring intersection back to an acceptable level of service or to no project conditions.

#### **5.14.1.2 METHODOLOGY**

The following describes the methodologies utilized to evaluate LOS at intersections. The degree of congestion at an intersection is described by the level of service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour.

#### **Intersections Level of Service Methodology**

Intersection LOS grades correspond to a range of V/C (vehicles/capacity) or delay values. The V/C, delay, and corresponding intersection LOS are described in Table 5.14-1. The study area includes intersections under the jurisdiction of Newport Beach, Irvine, and Caltrans. As required by the cities of Irvine and Newport Beach and the Newport Beach TPO, the analysis of signalized intersections was performed using the Intersection Capacity

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Utilization (ICU) methodology. The assessment of intersection conditions addresses LOS in terms of V/C ratio for ICU analysis for signalized intersections in Newport Beach and Irvine, and the HCM method for Caltrans intersections.

For Newport Beach intersections, the ICU calculations assume a lane capacity of 1,600 vehicles per hour and no clearance interval (or loss time). For Irvine intersections, the ICU calculations assume a lane capacity of 1,700 vehicles per hour and a clearance interval, or loss time of 0.05 (in v/c). The City of Irvine has established LOS E as a satisfactory LOS in the IBC. The Traffix Version 8 software package was used to determine intersection LOS for the study intersections in Irvine and Newport Beach.

The HCM (6th ed.) methodology was used to determine the LOS of signalized intersections at freeway interchanges, as required by Caltrans. The HCM signalized intersection methodology uses delay (in seconds per vehicle), as opposed to capacity, as the measure of effectiveness. All HCM analysis for Caltrans intersections has been developed using Synchro (Version 10.1) software.

**Table 5.14-1 Local Intersection Evaluation Levels of Service Descriptions**

Level of Service	Description	HCM Method <sup>1</sup> (Delay in seconds)	ICU Method (V/C Ratio) <sup>2</sup>
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.	≤ 0–10	0.00–0.60
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.	> 10–20	0.61–0.70
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.	> 20–35	0.71–0.80
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.	> 35–55	0.81–0.90
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.	> 55–80	0.91–1.00
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.	> 80	> 1.00

Source: LSA Associates 2018.

<sup>1</sup> HCM delay values for signalized intersections.

<sup>2</sup> V/C= Volume to Capacity

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

### Roadway Segment Level of Service Methodology

The roadway segment analysis is included at the request of the City of Irvine. Roadway segment V/C ratios were determined using City of Irvine daily traffic volumes and capacities. Facility types were taken from the Irvine General Plan and the countywide Master Plan of Arterial Highways. MacArthur Boulevard between I-405 and Birch Street is an eight-lane Major Highway with a daily capacity of 72,000 vehicles. Table 5.14-2 illustrates the relationship of roadway average daily trips (ADT) to LOS for an eight-lane Major Highway.

**Table 5.14-2 Roadway Segment Levels of Service Correspondence**

Level of Service	Volume to Capacity	Roadway ADT
A	≤0.60	≤43,200
B	>0.60 and ≤0.70	>43,201 and ≤50,400
C	>0.70 and ≤0.80	>50,401 and ≤57,600
D	>0.80 and ≤0.90	>57,601 and ≤64,800
E	>0.90 and ≤1.00	>64,801 and ≤72,000
F	>1.00	>72,001

Source: LSA Associates 2018  
 ADT = average daily trips

### 5.14.1.3 EXISTING CONDITIONS

#### Roadway Network

Regional access to the project vicinity is provided by Dove Street, Scott Drive, and Martingale Way, with access to and from regional locations via Birch Street and MacArthur Boulevard. The existing roadway network in the study area is described below:

- **MacArthur Boulevard** is a six-lane divided roadway located east of the project site providing a regional connection from Santa Ana/Costa Mesa to Coast Highway in Newport Beach. According to the City of Newport Beach’s Master Plan of Streets and Highways, MacArthur Boulevard is classified as a Major Road. In the vicinity of the proposed project, the posted speed limit is 55 miles per hour (mph). Sidewalks are provided on both sides of the roadway. The sidewalk on the east side between Jamboree Road and Campus Drive is designated for bicycle riding. On-street parking is prohibited.
- **Jamboree Road** is a divided roadway located east of the project site providing a regional connection from State Route 261 in Tustin to Coast Highway in Newport Beach. Jamboree Road has varying lanes (six to eight lanes) within the study area. According to the City of Newport Beach’s Master Plan of Streets and Highways, Jamboree Road is classified as a Major Road. In the vicinity of the proposed project, the posted speed limit is 55 mph. Sidewalks are provided on both sides of the roadway. Class II bicycles lanes are provided on both sides of the road between Bayview Way and Coast Highway. On-street parking is prohibited.
- **Campus Drive–Irvine Avenue** is a divided roadway located west, north, and east of the project site. It extends from Turtle Rock Drive in Irvine to Cliff Drive in Newport Beach. Within the study area, Campus



## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

Drive—Irvine Avenue has four lanes between Jamboree Road and MacArthur Boulevard and six lanes between MacArthur Boulevard and Mesa Drive. According to the City of Newport Beach's Master Plan of Streets and Highways, Campus Drive—Irvine Avenue is classified as a Secondary Road between Jamboree Road and MacArthur Boulevard and is classified as a Major Road between MacArthur Boulevard and Mesa Drive. In the vicinity of the proposed project, the posted speed limit is 45 mph north of Bristol Street South and 50 mph south of Bristol Street South. Sidewalks are provided on both sides of the roadway. Class II bicycle lanes are provided on both sides of the road from MacArthur Boulevard to Cliff Drive. On-street parking is prohibited in the vicinity of the proposed project.

- **Birch Street** is a four-lane roadway divided by a two-way left-turn lane located north of the project site, providing a local connection through Newport Beach between Jamboree Road on the border of Irvine, and Irvine Avenue on the border of Costa Mesa. According to the City of Newport Beach's Master Plan of Streets and Highways, Birch Street is classified as a Secondary Road. In the vicinity of the proposed project, the posted speed limit is 45 mph. Sidewalks are provided on both sides of the roadway. Bicycle facilities are not provided, and on-street parking is permitted. Bus stops for OCTA Route 178 are provided on this roadway in the vicinity of the proposed project.
- **Dove Street** is a four-lane undivided local roadway located directly south of the project site. The posted speed limit is 40 mph. Sidewalks are provided on the north side of the roadway. Bicycle facilities are not provided, and on-street parking is prohibited.
- **Corinthian Way** is a four-lane undivided local roadway located directly north of the project site that provides direct access to the project site. There is no posted speed limit. Sidewalks are provided on both sides of the roadway. Bicycle facilities are not provided, and on-street parking is prohibited.
- **Scott Drive** is a four-lane undivided local roadway located directly west of the project site that provides direct access to the project site. There is no posted speed limit. Sidewalks are provided on both sides of the roadway. Bicycle facilities are not provided, and on-street parking is prohibited.
- **Martingale Way** is a two-lane undivided local roadway located directly east of the project site that provides direct access to the project site. There is no posted speed limit. Sidewalks are provided on both sides of the roadway. Bicycle facilities are not provided, and on-street parking is permitted.

### Transit Service

Transit facilities will be accessible to and from the project site. Public transit bus service in the study area is provided by OCTA. In the project vicinity, OCTA bus stops are currently provided at Birch Street/Corinthian Way (approximately 600 walkable feet from the project site), and Birch Street/Dove Street (approximately 500 walkable feet from the project site). OCTA Route 178 serves all stops at these locations.

A nearby bus stop at MacArthur Boulevard/Campus Drive serves OCTA Route 472, and bus stops at Von Karman Avenue/Campus Drive serve OCTA Routes 59, 178, and 472. Just over 1 mile from the project site, at

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

Von Karman Avenue/Michelson Drive, bus stops serve more regional lines, including OCTA Routes 178, 211, and 213 and Irvine Shuttle (iShuttle) Routes 400A and 401B.

OCTA Route 59 provides service to and from Anaheim and Irvine via Von Karman Avenue. OCTA Route 178 provides transportation to and from Huntington Beach and Irvine via Birch Street and Campus Drive. OCTA Route 211 provides transportation to and from Huntington Beach and Irvine via I-405. OCTA Route 213 provides service to and from Brea and Irvine via State Route 55 (SR 55). OCTA Route 472 provides service to and from the Tustin Metrolink Station and the IBC via Campus Drive and Jamboree Road. The iShuttle, operated and managed by OCTA, serves local destinations in Irvine. iShuttle Routes 400A and 401B serve the IBC and provide transportation to/from the Tustin Metrolink Station and John Wayne Airport.

A major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. Because the aforementioned bus routes do not have a service interval of fifteen minutes or less during the morning or afternoon peak periods, the project area is not considered a major transit stop. A review of maps from the Southern California Association of Governments indicates that the project site is not considered a transit priority area (area within one-half mile of a major transit stop).

### Bicycle and Pedestrian Paths

Land uses in close proximity to the project site include other office and industrial uses, employment centers, and future residential sites, all of which are accessible by nonautomotive means.

Pedestrian access to the site would be from all building façades facing Scott Drive, Corinthian Way, Dove Street, and Martingale Way. Private passageways would connect the residential uses to the street, and public passageways would connect the retail space and the public park. Where modes intersect (i.e., streets and sidewalks), accessible ramps would be incorporated.

Bicycle travel could be used from the project site to employment, shopping, and recreational destinations. Cyclists would be able to travel from the site to regional destinations by traveling west on Dove Street to Birch Street. Designated bike lanes are not located on the local streets surrounding the project site (i.e., Corinthian Way, Martingale Way, Scott Drive, and Dove Street). Class II bicycle lanes (defined by pavement striping and signage to delineate a portion of the roadway for bicycle travel) are provided on both sides of Campus Drive–Irvine Avenue from MacArthur Boulevard to Cliff Drive. The sidewalk on the east side of MacArthur Boulevard between Campus Drive and Jamboree Road is designated for bicycle riding.

### Existing Traffic Conditions

Existing traffic volumes at all study intersections were collected on typical weekdays in February, April and May 2017 during the AM peak period (7:00–9:00 AM) and the PM peak period (4:30–6:30 PM). Traffic counts sheets are in Appendix A of the traffic study, which is included in Appendix J. The locations of study intersections and roadway segments are shown on Figure 5.14-1, *Study Intersections and Roadway Segments*. Study area locations were selected in consultation with the City of Newport Beach and the City of Irvine. A total of 21 intersections (12

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

intersections in Newport Beach, 5 intersections in both Newport Beach and Irvine, and 4 intersections in Irvine) and 4 roadway segments were included in the study area (1 roadway in Newport Beach and 3 roadways in Irvine). The following describes the existing conditions for study intersections and roadway segments.

### *Intersection Levels of Service*

The intersection lane geometries and intersection turn movement volumes are shown in Figures 4 and 5 of the TIA (see Appendix J). Table 5.14-3 shows existing levels of service for the 18 study intersections for AM and PM peak hours. All study intersections currently operate at satisfactory levels of service in both peak hours.

**Table 5.14-3 Summary of Intersection Operations Existing Conditions**

Intersection	Acceptable LOS	AM Peak Hour		PM Peak Hour	
		ICU	LOS	ICU	LOS
1 MacArthur Boulevard/Campus Drive	E	0.504	A	0.842	D
2 Campus Drive/Bristol Street North	E	0.540	A	0.713	C
3 Campus Drive-Irvine Avenue/Bristol Street South	D	0.681	B	0.507	A
4 Irvine Avenue/Mesa Drive	D	0.472	A	0.590	A
5 MacArthur Boulevard/Birch Street	D	0.364	A	0.507	A
6 Birch Street/Bristol Street North	D	0.627	B	0.526	A
7 Birch Street/Bristol Street South	D	0.463	A	0.517	A
8 Von Karman Avenue/Campus Drive	E	0.615	B	0.697	B
9 MacArthur Boulevard/Von Karman Avenue	D	0.541	A	0.525	A
10 Bayview Place/Bristol Street South	D	0.494	A	0.503	A
11 Jamboree Road/Campus Drive	E	0.622	B	0.579	A
12 Jamboree Road/Birch Street	E	0.502	A	0.480	A
13 MacArthur Boulevard/Jamboree Road	E	0.571	A	0.610	B
14 Jamboree Road/Bristol Street North	D	0.340	A	0.414	A
15 Jamboree Road/Bristol Street South	D	0.656	B	0.608	B
16 Jamboree Road/Bayview Way	D	0.438	A	0.453	A
17 Jamboree Road/Eastbluff Drive-University Drive	D	0.613	B	0.546	A
18 MacArthur Boulevard/I-405 northbound ramps	E	0.563	A	0.609	B
<i>HCM Delay (Caltrans methodology)</i>	<i>E</i>	<i>36.0</i>	<i>D</i>	<i>22.8</i>	<i>C</i>
19 MacArthur Boulevard/I-405 southbound ramps	E	0.562	A	0.658	B
<i>HCM Delay (Caltrans methodology)</i>	<i>E</i>	<i>19.6</i>	<i>B</i>	<i>22.0</i>	<i>C</i>
20 MacArthur Boulevard/Michelson Drive	E	0.669	B	0.933	E
21 MacArthur Boulevard/Douglas	E	0.435	A	0.438	A

Source: LSA Associates 2018.

Note: Delay is reported in seconds per vehicle.

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

#### *Roadway Levels of Service*

The following roadway segments were evaluated under existing conditions for daily levels of service:

- MacArthur Boulevard between I-405 southbound ramps and Michelson Drive
- MacArthur Boulevard between Michelson Drive and Douglas
- MacArthur Boulevard between Douglas and Campus Drive
- MacArthur Boulevard between Campus Drive and Birch Street

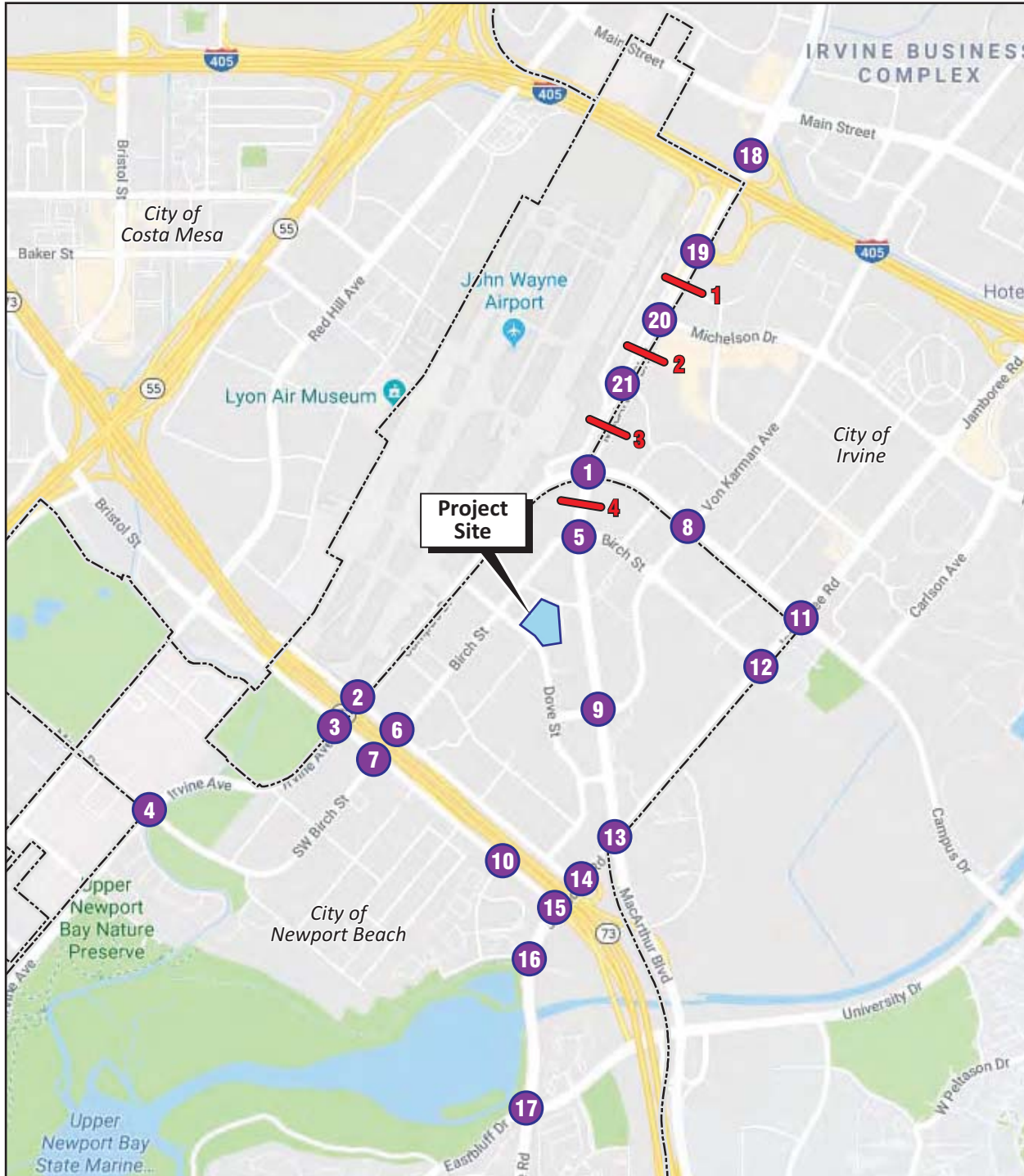
The traffic impact analysis concluded that all study area roadway segments currently operate at satisfactory LOS ranging from A to C.

#### **5.14.2 Thresholds of Significance**





According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project could:

- T-1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- T-2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- T-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- T-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-5 Result in inadequate emergency access.
- T-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Figure 5.14-1 - Study Intersections and Roadway Segments  
5. Environmental Analysis



**LEGEND**

-  Project Site
-  Study Area Intersection
-  Study Area Roadway Segment
-  City Boundary

0 2,200  
Scale (Feet)



Source: LSA, 2018

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

*This page intentionally left blank.*



## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

### 5.14.2.1 ACCEPTABLE LEVEL OF SERVICE AND SIGNIFICANCE CRITERIA

#### City of Newport Beach Intersections

Based on the review of the City of Newport Beach TPO and the General Plan, the acceptable LOS for all study intersections is LOS D, with the exception of intersections in the airport area where LOS E is acceptable. Table 5.14-3 shows the acceptable LOS at each study intersection.

A “significant” traffic impact for study intersections in the City of Newport Beach requires an increase of 0.01 or more in project-related V/C for intersections already operating at unacceptable levels of service (E or F) in the no-project conditions. Also, if the proposed project causes an intersection that operates at an acceptable level of service in the no-project conditions to operate at unacceptable level of service (E or F outside airport area; F within airport area), it is a significant traffic impact for that intersection.

#### Irvine Intersections and Roadways

For study intersections in Irvine, the acceptable level of service is LOS E. A significant impact occurs when the proposed project causes a study area intersection to exceed satisfactory LOS, or the intersection already exceeds satisfactory LOS and the project-generated traffic increases the ICU by 0.02 or more. Project mitigation is required to reduce the ICU back to 1.00, or baseline if the baseline is greater than 1.00.

For study roadway segments in Irvine, LOS E is acceptable. A significant impact occurs if the project-generated traffic causes a roadway segment to exceed acceptable LOS or when the roadway segment in question exceeds the acceptable LOS E and the impact of the development is greater than or equal to 0.02.

#### CMP Intersections

A project impact would occur if the proposed project would cause a CMP intersection to fall below LOS E and cause a cumulative increase of more than 0.10 in V/C ratio at any CMP intersection with an established LOS standard worse than LOS E.

#### State Highway Intersections

Caltrans coordinates with the jurisdictional agency on the appropriate target LOS, but aims to maintain LOS C on all state highway facilities. The City of Irvine has determined LOS E to be acceptable at these intersections, and for intersections in the airport area in Newport Beach LOS E is acceptable. The project impact on a Caltrans intersection would be significant if the proposed project causes an intersection operating at LOS E to deteriorate to LOS F.

### 5.14.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address transportation and traffic impacts follow.

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

#### 5.14.3.1 REGULATORY REQUIREMENTS

- RR TRAF-1 The proposed project will abide by applicable City of Newport Beach Municipal Codes, namely:
- Chapter 20.66, Off Street Parking and Loading
  - Chapter 15.40, Traffic Phasing Ordinance
  - Chapter 12.62, Temporary Street Closure
  - Chapter 13.01, Street Construction Permits

#### 5.14.3.2 STANDARD CONDITIONS

- SC TRAF-1 The following City-adopted standard operating conditions of approval would apply to the proposed project:
- The proposed project will be required to prepare a construction traffic management plan as follows:
    - Prior to commencement of demolition and grading of the project, the applicant shall submit a construction management and delivery plan to be reviewed and approved by the Public Works Department. The plan shall include discussion of project phasing; parking arrangements for both sites during construction; anticipated haul routes and construction mitigation. Upon approval of the plan, the applicant shall be responsible for implementing and complying with the stipulations set forth in the approved plan.
    - Traffic control and truck route plans shall be reviewed and approved by the Public Works Department before their implementation. Large construction vehicles shall not be permitted to travel narrow streets as determined by the Public Works Department. Disruption caused by construction work along roadways and by movement of construction vehicles shall be minimized by proper use of traffic control equipment and flagman.

### 5.14.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.14-1: Project-related trip generation would not impact levels of service for the existing area roadway system. [Threshold T-1]**

---

*Impact Analysis:* The following tally describes potential project impacts at study intersections and roadway segments. The TIA prepared for the proposed project provides a detailed analysis of potential traffic and circulation impacts. Each study intersection was analyzed for the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

- Future Year (2022) Baseline Conditions
- Future Year (2022) Plus Project Conditions

Future 2022 conditions include background traffic due to ambient growth and approved projects and cumulative projects that may be fully operational by 2022<sup>2</sup>. The future year 2022 condition was developed by applying a growth rate to the existing traffic volumes, adding trips from cumulative (pending) projects in the vicinity, and adding trips from approved projects in the vicinity. The traffic study included traffic from 25 projects in Newport Beach and 30 projects in Irvine. The application of ambient growth and a detailed list of cumulative projects in Irvine and Newport Beach are provided in pages 20 to 24 of the TIA.

In addition to traffic analyses required under CEQA, traffic studies in the City of Newport Beach require an additional analysis consistent with the policies of the City of Newport Beach TPO. TPO requirements differ from the City's above-stated CEQA requirements in that the TPO's focus is on conditions one year after project occupancy or five years after project approval for larger projects that are not expected to be completed within five years.

### Project Trip Generation

The proposed project would consist of 350 residential units, 5,500 square feet of retail use, 2,000 square feet of restaurant use, and a 0.50-acre public neighborhood park. The proposed project would replace existing buildings on the project site that are occupied as retail and restaurant uses. To calculate the net project trip generation, trip generation for the proposed project was compared with trip generation for the existing buildings. Daily and peak-hour trips for the approved land use, existing land use, and the proposed project were generated using trip rates from the ITE Trip Generation Manual (10th ed.). A retail adjustment factor (10 percent reduction) was used to represent internal capture between the proposed residential and specialty retail uses, as directed by City of Newport Beach staff. The following provides a trip generation evaluation to address CEQA requirements and to address City of Newport Beach TPO requirements.

#### *TPO-Level Trip Generation*

For the TPO, vehicle trips for the previously approved land uses were subtracted from the project's trip generation to identify the potential new trips generated by the site, as shown in Table 5.14-4. The previously approved land uses were based on permit records and could be reoccupied without discretionary approvals. The proposed project would generate 1,033 fewer trip ends per day, 27 additional AM peak-hour trips, and 126 fewer PM peak-hour trips than the previously approved land uses. A TPO TIA is required for projects generating more than 300 daily trips. Because the proposed project would result in a net reduction of ADT from the approved uses (per TPO methodology), a detailed TPO TIA is not required.

---

<sup>2</sup> The City of Newport Beach normally requires an analysis of future conditions one year after project construction. The traffic impact analysis evaluated traffic impacts based on an earlier estimate for project completion at the end of 2021. The estimate for the project completion has been revised to early 2023. A review of traffic conditions was performed for 2024 conditions at key intersections and roadway segments and is discussed in this section under Impact 5.14-1. The results of the intersections and roadway operations for 2024 conditions indicate that no impacts would occur, and the results of the analysis performed for all study intersections and roadways under 2022 conditions are valid and unchanged for 2024 conditions.

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

### CEQA Trip Generation

For the CEQA analysis, vehicle trips associated with the currently occupied land uses were subtracted from the project's trip generation to determine the net new trips generated by the existing site, as shown in Table 5.14-5. This provides a comparison of future trips with the project versus existing (baseline) conditions, as required under CEQA. As shown, the proposed development is projected to generate 1,077 net new trip-ends per day, with 123 net new trips during the AM peak hour (27 inbound, 96 outbound) and 75 net new trips during the PM peak hour (43 inbound, 32 outbound) when compared to the existing occupied uses. The existing uses were determined from a site survey, and the existing buildings were occupied at the time of project application. Because the proposed project would result in a net increase of more than 300 daily trips under the CEQA trip generation methodology, a traffic impact analysis is required to address CEQA requirements.

**Table 5.14-4 Project Trip Generation (TPO)**

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<b>Trip Rates<sup>1</sup></b>									
Shopping Center	–	TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
Quality Restaurant <sup>2</sup>	–	TSF	83.84	0.58	0.15	0.73	5.23	2.57	7.8
High-Turnover (Sit-Down) Restaurant	–	TSF	112.18	5.47	4.47	9.94	6.06	3.71	9.77
Medical/Dental Office	–	TSF	34.8	2.17	0.61	2.78	0.97	2.49	3.46
Multifamily Housing (Mid-Rise)	–	DU	5.44	0.09	0.27	0.36	0.27	0.17	0.44
Specialty Retail <sup>3</sup>	–	TSF	40	0.72	0.48	1.2	1.8	1.8	3.6
<b>Previously Approved Land Uses Trip Generation</b>									
Shopping Center	31.73	TSF	1,198	18	12	30	58	63	121
Quality Restaurant	14.032	TSF	1,176	8	2	10	73	36	109
High-Turnover (Sit-Down) Restaurant	7.096	TSF	796	39	32	71	43	26	69
Medical/Dental Office	5.419	TSF	189	12	3	15	5	14	19
<b>Total</b>			<b>3,359</b>	<b>77</b>	<b>49</b>	<b>126</b>	<b>179</b>	<b>139</b>	<b>318</b>
<b>Project Trip Generation</b>									
High-Turnover (Sit-Down) Restaurant	2	TSF	224	11	9	20	12	8	20
Multifamily Housing (Mid-Rise)	350	DU	1,904	31	95	126	95	59	154
Specialty Retail	5.5	TSF	220	4	3	7	10	10	20
Retail Adjustment Factor <sup>4</sup>	-10%		-22	0	0	0	-1	-1	-2
<b>Total</b>			<b>2,326</b>	<b>46</b>	<b>107</b>	<b>153</b>	<b>116</b>	<b>76</b>	<b>192</b>
<b>Net Trip Generation (Project-Approved Uses)</b>			<b>-1,033</b>	<b>-31</b>	<b>58</b>	<b>27</b>	<b>-63</b>	<b>-63</b>	<b>-126</b>

Source: LSA Associates 2018.

DU = dwelling units

TPO = Traffic Phasing Ordinance

TSF = thousand square feet

<sup>1</sup> Trip rates from the *Trip Generation Manual*, 10<sup>th</sup> edition (ITE 2017).

<sup>2</sup> AM peak hour split from AM peak hour of the generator.

<sup>3</sup> Trip rates from the San Diego Association of Governments (SANDAG) (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates* (2002).

<sup>4</sup> Retail adjustment factor (10 percent reduction) for internal capture between residential and retail uses, as directed by City of Newport Beach staff.

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

**Table 5.14-5 Project Trip Generation (CEQA)**

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<b>Trip Rates<sup>1</sup></b>									
Shopping Center		TSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
Quality Restaurant <sup>2</sup>		TSF	83.84	0.58	0.15	0.73	5.23	2.57	7.8
High-Turnover (Sit-Down) Restaurant		TSF	112.18	5.47	4.47	9.94	6.06	3.71	9.77
Medical/Dental Office		TSF	34.8	2.17	0.61	2.78	0.97	2.49	3.46
Multifamily Housing (Mid-Rise)		DU	5.44	0.09	0.27	0.36	0.27	0.17	0.44
Specialty Retail <sup>3</sup>		TSF	40	0.72	0.48	1.2	1.8	1.8	3.6
<b>Existing Trip Generation</b>									
Shopping Center	6.932	TSF	262	4	3	7	13	13	26
Quality Restaurant	9.632	TSF	808	6	1	7	50	25	75
High-Turnover (Sit-Down) Restaurant	1.596	TSF	179	9	7	16	10	6	16
Medical/Dental Office		TSF	0	0	0	0	0	0	0
<b>Total</b>			<b>1,249</b>	<b>19</b>	<b>11</b>	<b>30</b>	<b>73</b>	<b>44</b>	<b>117</b>
<b>Project Trip Generation</b>									
High-Turnover (Sit-Down) Restaurant	2	TSF	224	11	9	20	12	8	20
Multifamily Housing (Mid-Rise)	350	DU	1,904	31	95	126	95	59	154
Specialty Retail	5.5	TSF	220	4	3	7	10	10	20
Retail Adjustment Factor <sup>4</sup>	-10%		-22	0	0	0	-1	-1	-2
<b>Total</b>			<b>2,326</b>	<b>46</b>	<b>107</b>	<b>153</b>	<b>116</b>	<b>76</b>	<b>192</b>
<b>Net Trip Generation (Project—Existing)</b>			<b>1,077</b>	<b>27</b>	<b>96</b>	<b>123</b>	<b>43</b>	<b>32</b>	<b>75</b>

Source: LSA Associates 2018.

DU = dwelling units

TSF = thousand square feet

<sup>1</sup> Trip rates from the *Trip Generation Manual*, 10<sup>th</sup> edition (ITE 2017).

<sup>2</sup> AM peak hour split from AM peak hour of the generator.

<sup>3</sup> Trip rates from the San Diego Association of Governments (SANDAG) (*Not So*) *Brief Guide of Vehicular Traffic Generation Rates* (2002).

<sup>4</sup> Retail adjustment factor (10 percent reduction) for internal capture between residential and retail uses, as directed by City of Newport Beach staff.

### Project Trip Distribution and Assignments

The net project trips were distributed to the surrounding roadways based on the location of the proposed project in relation to local and regional transportation facilities. The trip distribution percentages were multiplied by the project trip generation to arrive at the project-generated trip assignment at each study area location. The project trip distribution and net project trip assignment are illustrated on Figure 5.14-2.

### Existing Plus Project Conditions

This section presents the results of adding project-related trips to existing traffic volumes. The Existing Plus Project scenario is a hypothetical scenario that assumes full implementation of the proposed project and full absorption of project traffic on the existing circulation system. The intersection analysis results are summarized in

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

Table 5.14-6. All intersections would operate at acceptable LOS under Existing Plus Project conditions. Based on the threshold for significant impacts of the proposed project, the addition of project traffic would not cause a significant impact at any study intersection.

Table 5.14-7 presents existing roadway segment ADT volumes, V/C ratios, and corresponding LOS. As this table indicates, all study area roadway segments currently operate at satisfactory LOS. Net daily project trips were added to the study area roadways with the same distribution used in the peak-hour analysis. Thus, 35 percent of net daily project trips were added to MacArthur Boulevard. With the addition of the proposed project, all study area roadway segments are anticipated to continue to operate at satisfactory LOS. Therefore, a significant project impact would not occur at a study area roadway segment under Existing Plus Project conditions.



5. Environmental Analysis  
TRANSPORTATION AND TRAFFIC

Table 5.14-6 Existing Plus Project Intersection Level of Service Summary

	Intersection	No Project						Plus Project						Difference		Project Impact
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	
1	MacArthur Boulevard/Campus Drive	0.504	A	0.842	D	0.509	A	0.842	D	0.005	0.000	0.000	No			
2	Campus Drive/Bristol Street North	0.540	A	0.713	C	0.544	A	0.714	C	0.004	0.001	0.001	No			
3	Campus Drive-Irvine Avenue/Bristol Street South	0.681	B	0.507	A	0.682	B	0.509	A	0.001	0.002	0.002	No			
4	Irvine Avenue/Mesa Drive	0.472	A	0.590	A	0.472	A	0.590	A	0.000	0.000	0.000	No			
5	MacArthur Boulevard/Birch Street	0.364	A	0.507	A	0.365	A	0.513	A	0.001	0.006	0.006	No			
6	Birch Street/Bristol Street North	0.627	B	0.526	A	0.627	B	0.528	A	0.000	0.002	0.002	No			
7	Birch Street/Bristol Street South	0.463	A	0.517	A	0.466	A	0.517	A	0.003	0.000	0.000	No			
8	Von Karman Avenue/Campus Drive	0.615	B	0.697	B	0.616	B	0.698	B	0.001	0.001	0.001	No			
9	MacArthur Boulevard/Von Karman Avenue	0.541	A	0.525	A	0.541	A	0.526	A	0.000	0.001	0.001	No			
10	Bayview Place/Bristol Street South	0.494	A	0.503	A	0.495	A	0.504	A	0.001	0.001	0.001	No			
11	Jamboree Road/Campus Drive	0.622	B	0.579	A	0.622	B	0.579	A	0.000	0.000	0.000	No			
12	Jamboree Road/Birch Street	0.502	A	0.480	A	0.504	A	0.481	A	0.002	0.001	0.001	No			
13	MacArthur Boulevard/Jamboree Road	0.571	A	0.610	B	0.572	A	0.611	B	0.001	0.001	0.001	No			
14	Jamboree Road/Bristol Street North	0.340	A	0.414	A	0.342	A	0.414	A	0.002	0.000	0.000	No			
15	Jamboree Road/Bristol Street South	0.656	B	0.608	B	0.656	B	0.609	B	0.000	0.001	0.001	No			
16	Jamboree Road/Bayview Way	0.438	A	0.453	A	0.439	A	0.453	A	0.001	0.000	0.000	No			
17	Jamboree Road/Eastbluff Drive-University Drive	0.613	B	0.546	A	0.615	B	0.547	A	0.002	0.001	0.001	No			
18	MacArthur Boulevard/I-405 northbound ramps	0.563	A	0.609	B	0.565	A	0.611	B	0.002	0.002	0.002	No			
	HCM Delay (Calltrans methodology)	36.0	D	22.8	C	35.9	D	22.8	C	(0.1)	0.0	0.0	No			
19	MacArthur Boulevard/I-405 southbound ramps	0.562	A	0.658	B	0.565	A	0.661	B	0.003	0.003	0.003	No			
	HCM Delay (Calltrans methodology)	19.6	B	22.0	C	19.9	B	22.2	C	0.3	0.2	0.2	No			
20	MacArthur Boulevard/Michelson Drive	0.669	B	0.933	E	0.674	B	0.935	E	0.005	0.002	0.002	No			
21	MacArthur Boulevard/Douglas	0.435	A	0.438	A	0.440	A	0.440	A	0.005	0.002	0.002	No			

Source: LSA Associates 2018.  
Notes: Delay is reported in seconds per vehicle.  
LOS D is acceptable at all intersections, except for intersections 1, 2, 8, 11 to 13, 18 to 21, where LOS E is acceptable.  
**Bold**= deficient operations

5. Environmental Analysis  
TRANSPORTATION AND TRAFFIC

Table 5.14-7 Existing and Existing Plus Project Roadway Segment Level of Service Summary

	MacArthur Boulevard Segment	Capacity	Existing			Project ADT	Existing Plus Project			Significant Impact?	
			ADT	V/C	LOS		ADT	V/C	LOS	AM	PM
1	I-405 southbound ramps to Michelson Drive	72,000	51,828	0.72	C	377	52,205	0.73	C	No	No
2	Michelison Drive to Douglas	72,000	35,670	0.50	A	377	36,047	0.50	A	No	No
3	Douglas to Campus Drive	72,000	34,969	0.49	A	377	35,346	0.49	A	No	No
4	Campus Drive to Birch Street	72,000	24,250	0.34	A	377	24,627	0.34	A	No	No

Source: LSA Associates 2018

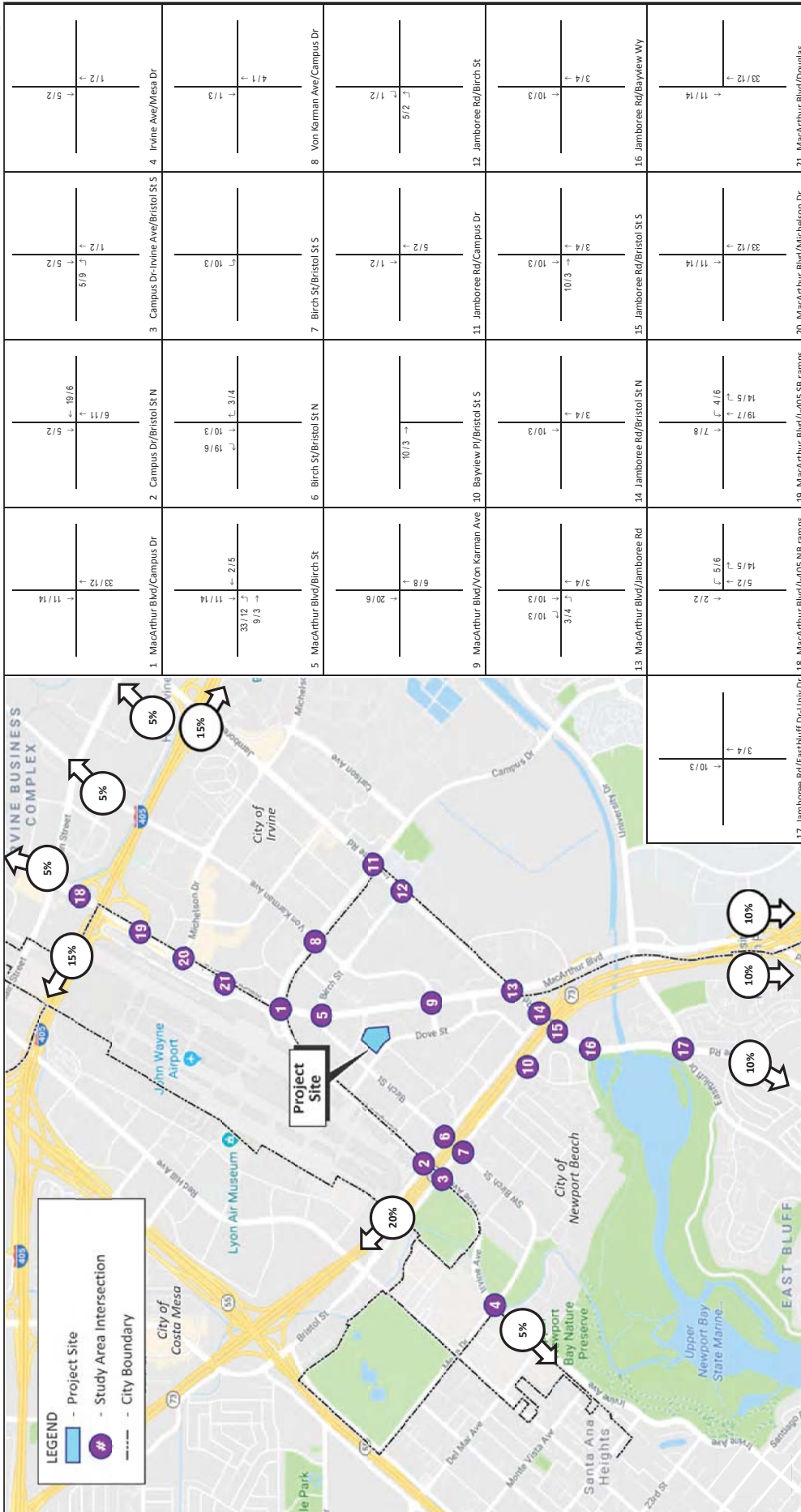
Δ = change

ADT = average daily trips

LOS = level of service

V/C = volume-to-capacity ratio

Figure 5.14-2 - Project Trip Distribution and Assignment  
5. Environmental Analysis



LEGEND  
XXXXXX AMIPM Volume



Source: LSA, 2018

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

*This page intentionally left blank.*

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

### 2022 Conditions

The intersection levels of service have been evaluated based on the ICU methodology. The LOS summary for intersections for the 2022 conditions without and with the proposed project, and the increase in V/C due to the proposed project are shown in Table 5.14-8. As shown, all study area intersections operate at acceptable LOS except for MacArthur Boulevard/Michelson Drive (LOS F in the PM peak hour), which is in Irvine. With the addition of the proposed project, this intersection is anticipated to continue to operate at unsatisfactory LOS. However, the ICU does not increase by 0.02 or greater. Therefore, the trips generated from the proposed project would not cause a significant impact on any of the study intersections.

Table 5.14-9 presents 2022 roadway segment ADT volumes, V/C ratios, and corresponding LOS without and with the project. As this table indicates, all study area roadway segments would operate at satisfactory LOS under 2022 conditions without the project. Net daily project trips were added to the study area roadways with the same distribution used in the peak-hour analysis. Thus, 35 percent of net daily project trips were added to MacArthur Boulevard. With the addition of the project, all study area roadway segments are anticipated to continue to operate at satisfactory LOS with the project. Therefore, a significant project impact would not occur at a study area roadway segment under 2022 conditions.

A review of traffic conditions in 2024 with the project has also been performed at key intersections and roadway segments where the project would have the highest potential to result in traffic impacts. The LOS calculations are included in Appendix J. A review of LOS calculations for intersections 1 (MacArthur Boulevard at Campus Drive), 13 (MacArthur Boulevard at Jamboree Road), 18 (MacArthur Boulevard at I-405 Northbound Ramps), and 20 (MacArthur Boulevard at Michaelson Drive) and for the roadway segment of MacArthur Boulevard between I-405 south-bound ramps and Michaelson Drive indicate that no significant impacts would occur with the project under 2022 conditions.

***Level of Significance before Mitigation:*** Impact 5.14-1 would be less than significant.

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

*This page intentionally left blank.*



5. Environmental Analysis  
TRANSPORTATION AND TRAFFIC

Table 5.14-8 2022 Plus Project Intersection Level of Service Summary

	Intersection	No Project						Plus Project						Project Impact
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	
1	MacArthur Boulevard/Campus Drive	0.695	B	0.917	E	0.700	B	0.917	E	0.005	0.000	0.000	No	
2	Campus Drive/Bristol Street North	0.614	B	0.744	C	0.619	B	0.745	C	0.005	0.001	0.001	No	
3	Campus Drive-Irvine Avenue/Bristol Street South	0.724	C	0.570	A	0.724	C	0.572	A	0.000	0.002	0.002	No	
4	Irvine Avenue/Mesa Drive	0.502	A	0.624	B	0.502	A	0.624	B	0.000	0.000	0.000	No	
5	MacArthur Boulevard/Birch Street	0.458	A	0.611	B	0.460	A	0.618	B	0.002	0.007	0.007	No	
6	Birch Street/Bristol Street North	0.666	B	0.568	A	0.666	B	0.570	A	0.000	0.002	0.002	No	
7	Birch Street/Bristol Street South	0.470	A	0.542	A	0.474	A	0.542	A	0.004	0.000	0.000	No	
8	Von Kaman Avenue/Campus Drive	0.739	C	0.798	C	0.740	C	0.799	C	0.001	0.001	0.001	No	
9	MacArthur Boulevard/Von Kaman Avenue	0.592	A	0.596	A	0.592	A	0.597	A	0.000	0.001	0.001	No	
10	Bayview Place/Bristol Street South	0.503	A	0.534	A	0.505	A	0.535	A	0.002	0.001	0.001	No	
11	Jamboree Road/Campus Drive	0.735	C	0.716	C	0.735	C	0.716	C	0.000	0.000	0.000	No	
12	Jamboree Road/Birch Street	0.597	A	0.597	A	0.598	A	0.598	A	0.001	0.001	0.001	No	
13	MacArthur Boulevard/Jamboree Road	0.736	C	0.811	D	0.738	C	0.813	D	0.002	0.002	0.002	No	
14	Jamboree Road/Bristol Street North	0.423	A	0.479	A	0.424	A	0.480	A	0.001	0.001	0.001	No	
15	Jamboree Road/Bristol Street South	0.723	C	0.703	C	0.723	C	0.705	C	0.000	0.002	0.002	No	
16	Jamboree Road/Bayview Way	0.498	A	0.512	A	0.499	A	0.512	A	0.001	0.000	0.000	No	
17	Jamboree Road/Eastbluff Drive-University Drive	0.718	C	0.665	B	0.720	C	0.666	B	0.002	0.001	0.001	No	
18	MacArthur Boulevard/I-405 northbound ramps	0.646	B	0.699	B	0.648	B	0.701	C	0.002	0.002	0.002	No	
	HCM Delay (Calltrans methodology)	42.0	D	22.7	C	41.9	D	22.8	C	(0.1)	0.1	0.1	No	
19	MacArthur Boulevard/I-405 southbound ramps	0.654	B	0.765	C	0.656	B	0.768	C	0.002	0.003	0.003	No	
	HCM Delay (Calltrans methodology)	22.8	C	34.1	C	23.2	C	34.7	C	0.4	0.6	0.6	No	
20	MacArthur Boulevard/Michelson Drive	0.741	C	<b>1.050</b>	F	0.746	C	<b>1.052</b>	F	0.005	0.002	0.002	No	
21	MacArthur Boulevard/Douglas	0.712	C	0.775	C	0.716	C	0.776	C	0.004	0.001	0.001	No	

Source: LSA Associates 2018.  
Delay is reported in seconds per vehicle.  
LOS D is acceptable at all intersections, except for intersections 1, 2, 8, 11 to 13, 18 to 21, where LOS E is acceptable.  
**Bold= deficient operations**

5. Environmental Analysis  
TRANSPORTATION AND TRAFFIC

Table 5.14-9 Future Year 2022 Roadway Segment Level of Service Summary

	MacArthur Boulevard Segment	Capacity	Future Year 2022		Project ADT	Future Year 2022 Plus Project		Δ V/C	Significant Impact?		
			ADT	V/C		LOS	ADT		V/C	AM	PM
1	I-405 southbound ramps to Michelson Drive	72,000	63,185	0.88	377	63,562	0.88	D	0.00	No	No
2	Michelson Drive to Douglas	72,000	44,778	0.62	377	45,155	0.63	B	0.01	No	No
3	Douglas to Campus Drive	72,000	41,964	0.58	377	42,341	0.59	A	0.01	No	No
4	Campus Drive to Birch Street	72,000	30,719	0.43	377	31,096	0.43	A	0.00	No	No

Source: LSA Associates 2018

Δ = change

ADT = average daily trips

LOS = level of service

V/C = volume-to-capacity ratio

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

### Impact 5.14-2: Project-related traffic would not result in traffic impacts per traffic phasing ordinance (TPO) requirements. [Threshold T-1]

**Impact Analysis:** A TPO TIA is required for projects generating more than 300 daily trips. As discussed in Section 5.14.3.1, the project would generate 1,033 fewer trip ends per day, 27 additional AM peak-hour trips, and 126 fewer PM peak-hour trips than the previously approved land uses. Because the proposed project would result in a net reduction of ADT from the approved uses (per TPO methodology), a detailed TPO TIA is not required. In addition, the intersection analysis provided in Impact 5.14-1 concluded that the proposed project would not result in a significant impact at study intersections.

**Level of Significance before Mitigation:** Impact 5.14-2 would be less than significant.

### Impact 5.14-3: The project-related traffic would not result in significant impacts to state highway intersections in the study area. [Threshold T-1]

**Impact Analysis:** In the vicinity of the proposed project, two study intersections are owned and operated by Caltrans and were analyzed for existing and 2022 conditions:

- (#18) MacArthur Boulevard/I-405 northbound ramps
- (#19) MacArthur Boulevard/I-405 southbound ramps

As shown in Table 5.14-10, the Caltrans intersections currently operate at acceptable LOS during the AM and PM peak hours and would continue to operate at acceptable LOS under future conditions without and with the proposed project. The proposed project would cause increases in delays of up to 0.6 second per vehicle at these intersections, but these increases would not result in a change of the LOS grade. Based on the threshold for significant impacts described in Section 5.14.2.1, the trips generated by the proposed project would not cause a significant impact on any study intersections controlled by Caltrans.

**Table 5.14-10 Level of Service Summary, HCM Methodology, for Caltrans Intersections**

Scenario	Intersection	No Project				Plus Project				Difference		Project Impact
		AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	sec	sec	
Existing	MacArthur Boulevard/I-405 northbound ramps	36.0	D	22.8	C	35.9	D	22.8	C	(0.1)	0.0	No
	MacArthur Boulevard/I-405 southbound ramps	19.6	B	22.0	C	19.9	B	22.2	C	0.3	0.2	No
2022	MacArthur Boulevard/I-405 northbound ramps	42.0	D	22.7	C	41.9	D	22.8	C	(0.1)	0.1	No
	MacArthur Boulevard/I-405 southbound ramps	22.8	C	34.1	C	23.2	C	34.7	C	0.4	0.6	No

Source: LSA Associates 2018.

**Level of Significance before Mitigation:** Impact 5.14-3 would be less than significant.

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

---

**Impact 5.14-4: Project-related trip generation in combination with existing and proposed cumulative development would not result in designated road and/or highways exceeding county congestion management agency service standards. [Threshold T-2]**

---

*Impact Analysis:* In the vicinity of the proposed project, roadways and intersections that are part of the CMP Highway System include Jamboree Road north of MacArthur Boulevard, MacArthur Boulevard south of Jamboree Road, and the intersection of (#13) MacArthur Boulevard/Jamboree Road.

As stated in Section 5.14.1.1, the Orange County CMP states that a TIA will be required for CMP purposes for all proposed developments generating 2,400 or more daily trips, and that for developments which will directly access a CMP Highway System link, the threshold for requiring a TIA should be reduced to 1,600 or more trips per day. The proposed project is forecast to generate 1,077 new daily trips, less than the 2,400 threshold, and does not directly access the CMP Highway System; therefore, a CMP-level analysis is not required. According to the intersection LOS analysis in Impact 5.14-1, the CMP intersections in the study area would operate at LOS E or better, which are considered acceptable LOS per CMP requirements. The proposed project, therefore, would not result in a designated intersection exceeding County Congestion Management Agency service standards.

*Level of Significance before Mitigation:* Impact 5.14-4 would be less than significant.

---

**Impact 5.14-5: The proposed project would not result in a change in air traffic patterns or an increase in traffic levels that would result in substantial safety risks. [Threshold T-3]**

---

*Impact Analysis:* As discussed in Impact 5.7-3 in Section 5.7, *Hazards and Hazardous Materials*, the proposed project would conform with structure heights permitted under FAA regulations and would not adversely affect navigable airspace surrounding John Wayne Airport. Thus, the proposed project would not require relocation of air traffic patterns.

John Wayne Airport is a regional airport serving much of the air travel demand in Orange County. Project-generated residents and jobs would not result in substantial increases in air traffic levels at John Wayne Airport or other airports in the region. Impacts would be less than significant.

*Level of Significance before Mitigation:* Impact 5.14-5 would be less than significant.

---

**Impact 5.14-6: The proposed project would not modify any public road or introduce features that would result in hazardous conditions, and it would provide adequate emergency access. [Thresholds T-4 and T-5]**

---

*Impact Analysis:* Access to the project site is proposed via two unsignalized, full-access driveways on Scott Drive and Martingale Way. The two project driveways will be stop-controlled and the main streets (Scott Drive and Martingale Way) will be uncontrolled at each driveway. Each project driveway will have one outbound lane (i.e., a shared left-turn/right-turn lane). Because Scott Drive and Martingale Way are short, low-volume local streets, left-turn pockets would not be required for inbound vehicles at any of the project's driveways. The proposed project driveways will align with the opposing driveways to reduce conflicting turn movements. In addition, Scott Drive and Martingale Way are local streets with high visibility, low volume, and low speed.

## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

The TIA (Appendix J) concluded that the proposed project would allow for adequate vehicular circulation for vehicles in the project site. The project frontage on both streets will be landscaped such that adequate sight distance per the City of Newport Beach's development standards will be maintained. The proposed project would not modify any public road or introduce features that would affect vehicular, pedestrian, or bicycle circulation in the vicinity of the site. In addition, project traffic would not result in substantial delays and congestion that would affect the circulation of emergency vehicles in the study area. Impacts would be less than significant and no mitigation measures would be required.

*Level of Significance before Mitigation:* Impact 5.14-6 would be less than significant.

---

**Impact 5.14-7: The proposed project complies with adopted policies, plans, and programs for alternative transportation and would not decrease the performance or safety of such facilities. [Threshold T-6]**

---

*Impact Analysis:* As discussed in Section 5.14.1.3, the project vicinity is served by bus service and pedestrian and bicycle facilities that would provide transportation alternatives to the automobile. The general plan consistency analysis for the proposed project is in Table 5.9-1 in Section 5.9, *Land Use and Planning*. The following describes general plan policies related to alternative transportation and summarizes the project's consistency with those policies.

**Policy CE 4.1.4, Accommodate residential densities sufficient to support transit patronage, especially in mixed use areas such as the Airport Area.** The proposed higher residential density would sufficiently support transit patronage in the Airport Area. OCTA bus stops within a mile of the project site are located along Von Karman Avenue, Campus Drive, and Michelson Drive. OCTA bus routes that serve these stops include Routes 472, 59, 178, and 472. Additionally, just over a mile from the project site, bus stops are served by regional lines such as OCTA Routes 178, 211, and 213, and iShuttle Routes 400A and 401B. Thus, the proposed project would accommodate and support transit patronage by developing a high density residential development in a mixed use area.

**Policy CE 5.1.2, Link residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving.** The roads in the vicinity of the site include sidewalks that would connect future residents to restaurants, retail, and office, giving residents the opportunity to live, shop, and work without reliance on a car.

**Policy CE 5.1.3, Require new development projects to include safe and attractive sidewalks, walkways, and bike lanes in accordance with the Master Plan, and, if feasible, trails.** Pedestrian access to the site would be from all building façades facing Scott Drive, Corinthian Way, Dove Street, and Martingale Way. Private passageways would connect the residential uses to the street, and public passageways would connect the retail space and the public park. Where modes intersect (i.e., streets and sidewalks), accessible ramps would be incorporated. Therefore, the proposed project would be consistent with Policy CE 5.1.3.

In accordance with requirements of the California Green Building Code, bicycle racks will be provided in the retail plaza area and public park. Project residents would also be able to store their bicycles in their apartment units.

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

In summary, the proposed project would be consistent with City policies to support and promote alternative transportation. In addition, the proposed project would not modify any public road or introduce features that would affect vehicular, pedestrian, or bicycle circulation in the vicinity of the site. Project access and traffic would not displace any existing bus stop or decrease the performance or safety of any existing sidewalk, crosswalk, or bikeway. Project resident use of transit, pedestrian, and bicycle facilities also would not decrease the performance of such facilities, which have adequate capacity to serve the project. Therefore, the proposed project would not affect the use of alternative modes of transportation or conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or decrease the performance or safety for such facilities. No impact would occur, and no mitigation measures would be required.

*Level of Significance before Mitigation:* Impact 5.14-7 would be less than significant.

---

**Impact 5.14-8: Project-related construction worker, delivery, and construction vehicle trips would not adversely affect the operations of intersections and roadways in the study area. [Threshold T-1]**

---

*Impact Analysis:* Project construction activities would include demolition of the existing buildings in the site, asphalt demolition, mass excavation, fine grading, and building of the proposed project structures. It is expected that large construction equipment, such as excavators, dump trucks, cranes, and tractors, will be used during the project construction. Per the City of Newport Beach, construction is allowed Monday through Friday from 7:00 AM to 6:30 PM and Saturdays from 8:00 AM to 6:00 PM. Construction workers would park onsite unless a designated offsite parking area is approved by the City. Construction workers would not park on local streets.

As discussed in Section 3.3.2, it is anticipated that the proposed project would span approximately 39 months, from December 2019 to February 2023. The existing MacArthur Square shopping plaza would be completely demolished prior to site grading and building construction. Demolition activities are projected to occur for approximately a one-month period in December 2019 and generate approximately 12,400 tons of debris and asphalt. Demolition materials would be hauled offsite. Following demolition activities, the site would be graded and excavated for subterranean parking. These activities would take approximately one month and would require exporting approximately 14,540 cubic yards of soil. The highest number of haul trips would require up to 180 trips per day over the one-month soil haul period. Construction hauling would be limited to weekday hours between 9:00 AM to 4:00 PM.

There would be up to 567 construction worker trips per day during the construction period. It is reasonable to assume that the majority of the workers would arrive before 7:00 AM, when construction work is allowed to begin, and workers would stagger their arrivals to the project area (not all arrive at the same time) outside of the peak AM period. Importantly, no construction worker trips and construction haul trips would coincide because workers would arrive before 7:00 AM and hauling cannot start until 9:00 AM. Typically, Public Works does not allow for arrivals and departures of dirt-hauling trucks and other heavy trucks during AM and PM peak hours. Haul trips are normally permitted by City of Newport Beach Public Works between 9 AM and 4 PM.

The estimated construction-related haul truck traffic and traffic due to construction workers is less than the estimated proposed project daily trips (1,077 daily trips). The analysis in Impacts 5.14-1 to 5.14-4, above, concluded that the study intersections would operate at acceptable LOS under all scenarios. Given that project



## 5. Environmental Analysis TRANSPORTATION AND TRAFFIC

operation with 1,077 daily trips would not result in significant impacts and project construction would generate fewer trips, traffic from truck haul and construction workers would not result in a significant traffic impact during the construction period.

Per the City of Newport Beach, the proposed project is required to prepare a construction traffic management plan that outlines items such as construction hours, truck routes, traffic and parking effects, and safety procedures for pedestrians and cyclists. All proposed truck routes would be approved by the City before beginning construction. The specific parking locations for construction workers would be identified in the project's construction management plan.

Temporary delays in traffic may occasionally occur due to oversized vehicles traveling at lower speeds on streets. Such delays would be occasional and of short duration. This temporary traffic impact would only occur during a relatively short period of one month during demolition and one month during grading when truck hauling of demolition debris and soil would occur. These temporary delays would be considered less than significant.

*Level of Significance before Mitigation:* Impact 5.14-8 would be less than significant.

### 5.14.5 Cumulative Impacts

The analyses for Impacts 5.14-1, 5.14-2, 5.14-3 and 5.14-4 evaluate traffic conditions at local jurisdictions, CMP, and state-controlled intersections for cumulative conditions with and without the project. Cumulative traffic impacts consider the impacts of future growth and development in the City of Newport Beach and vicinity on the roadway system serving the area. The traffic study included traffic from 25 projects in Newport Beach and 30 projects in Irvine, and accounted for ambient traffic growth. Thus, the analysis of 2022 conditions considered cumulative impacts of the proposed project. The proposed project would not result in either project-specific significant or cumulatively considerable impacts. No mitigation measures would be required.

Site access is adequately designed and would not combine with other area traffic impacts to result in significant cumulative impacts on circulation, emergency access, or to create hazardous conditions.

The proposed project would not change air traffic patterns and therefore would not combine with other projects to change air traffic patterns.

The proposed project is consistent with adopted policies, plans, or programs regarding public transit, bicycle, and pedestrian facilities, and the performance and safety of such facilities, and would not combine with other area projects to result in significant impacts to such facilities.

### 5.14.6 Level of Significance Before Mitigation

Impacts 5.14-1, 5.14-2, 5.14-3, 5.14-4, 5.14-5, 5.14-6, 5.14-7, and 5.14-8 are less than significant.

### 5.14.7 Mitigation Measures

No mitigation measures are required.

## 5. Environmental Analysis

### TRANSPORTATION AND TRAFFIC

#### 5.14.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.14.9 References

LSA. 2018, July. Traffic Impact Analysis: Newport Crossings, Newport Beach, Orange County California.

Orange County Transportation Authority (OCTA). 2017, October. Congestion Management Program.

Southern California Association of Governments (SCAG). SCAG Open Data. Accessed July 16, 2018.

<https://maps.scag.ca.gov/scaggis/rest/services/OpenData/TPARTP2016Plan2040boundaryscag/MapServer>.

Transportation Resources Board (TRB). 2016. *Highway Capacity Manual*. 6th edition.

## 5. Environmental Analysis

### 5.15 TRIBAL CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed Use project (proposed project) to impact tribal cultural resources in the City of Newport Beach. The analysis in this section is based in part on the following information:

- *Cultural and Paleontological Resources Technical Memo for The Newport Crossings Mixed-Use, Newport Beach, Orange County, California*, Cogstone, February 2018.

A complete copy of this study is included as Appendix D to this DEIR.

#### 5.15.1 Environmental Setting

##### 5.15.1.1 REGULATORY BACKGROUND

Federal and state laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

##### **Federal**

###### *Archaeological Resources Protection Act*

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Indian lands.

###### *Native American Graves Protection and Repatriation Act*

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants and culturally affiliated Indian tribes.

##### **State**

###### *Public Resources Code*

Archaeological resources are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code (PRC). In addition, cultural resources are recognized as nonrenewable resources and therefore receive protection under the PRC and CEQA.

- **PRC Sections 5097.9–5097.991** provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the Native American Heritage Commission (NAHC). These sections also require notification to descendants of discoveries of Native American human remains and provide for treatment and disposition of human remains and associated grave goods.

## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

#### *Health and Safety Code*

The discovery of human remains is regulated by California Health and Safety Code Section 7050.5:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation...until the coroner...has determined...that the remains are not subject to...provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible.... The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and...has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

#### *Assembly Bill 52*

The Native American Historic Resource Protection Act (AB 52) took effect July 1, 2015, and incorporates tribal consultation and analysis of impacts to tribal cultural resources (TCR) into the CEQA process. It requires TCRs to be analyzed like any other CEQA topic and establishes a consultation process for lead agencies and California tribes. Projects that require a Notice of Preparation of an EIR or Notice of Intent to adopt a ND or MND on or after July 1, 2015, are subject to AB 52. A significant impact on a TCR is considered a significant environmental impact, requiring feasible mitigation measures.

TCRs must have certain characteristics:

- 1) Sites, features, places, cultural landscapes (must be geographically defined), sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources. (PRC Section 21074(a)(1))
- 2) The lead agency, supported by substantial evidence, chooses to treat the resource as a TCR. (PRC Section 21074(a)(2))

The first category requires that the TCR qualify as a historical resource according to PRC Section 5024.1. The second category gives the lead agency discretion to qualify that resource—under the conditions that it supports its determination with substantial evidence and considers the resource’s significance to a California tribe. The following is a brief outline of the process (PRC Sections 21080.3.1–3.3).

- 1) A California Native American tribe asks agencies in the geographic area with which it is traditionally and culturally affiliated to be notified about projects. Tribes must ask in writing.

## 5. Environmental Analysis TRIBAL CULTURAL RESOURCES

- 2) Within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it.
- 3) A tribe must respond within 30 days of receiving the notification if it wishes to engage in consultation.
- 4) The lead agency must initiate consultation within 30 days of receiving the request from the tribe.
- 5) Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a TCR, OR a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached.
- 6) Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on TCRs and discuss feasible alternatives or mitigation that avoid or lessen the impact.

### 5.15.1.2 EXISTING CONDITIONS

The proposed project is within the territory of the Tongva (Gabrielino) tribe. The Tongva geographical territory includes large portions of Los Angeles County, the northern part of Orange County, small sections of Riverside and San Bernardino counties, and the southern Channel Islands of Santa Barbara, San Clemente, San Nicolas, and Santa Catalina. The name “Gabrielino” is Spanish in origin and was used in reference to the Native Americans associated with the Mission San Gabriel. Today community members call themselves “Tongva,” meaning “people of the earth.” At the time of European contact, there were an estimated 5,000 Tongva living at 31 known villages.

Much of the southern California archaeological literature argues that the Gabrielino moved into southern California from the Great Basin around 4,000 Before Present (B.P.), “wedging” themselves between the Hokan-speaking Chumash, located to the north, and the Yuman-speaking Kumeyaay, located to the south (see Sutton 2009 for the latest discussion). This Shoshonean Wedge, or Shoshonean “intrusion” theory, is counter to the Gabrielino community’s knowledge about their history and origins. Oral tradition states that the Gabrielino have always lived in their traditional territory, with their emergence into this world occurring at Puvungna, located in Long Beach on the Alamitos Plain.

The Tongva are considered to have been one of the wealthiest tribes and to have greatly influenced tribes they traded with. Houses were domed, circular structures thatched with tule or similar materials. The best-known artifacts were made of steatite and were highly prized by the Tongva. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship.

The main food zones were marine, woodland, and grassland. Plant foods were, by far, the greatest part of the traditional diet at contact, and acorns were the single most important food source. Villages were near water sources, which were necessary for the leaching of acorns, a daily occurrence. Grass seeds were the next most

## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

abundant plant food, along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and tree fungus were prized as delicacies. Various teas were made from flowers, fruits, stems, and roots for medicinal cures as well as beverages.

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams, and salmon were available when they ran in the larger creeks. Marine foods were extensively utilized. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most common resource, including abalone, turban, mussels, clams, scallops, bubble shells, and others. The nearest recorded Tongva village is approximately 1.5 miles west of the proposed project. This village's name was Tevaaxa'anga. The village's location was once within a forested and marshy area into which the Los Angeles River drained until a flood in 1825 caused it to cut a channel to the ocean.

#### 5.15.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in 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, and that is:

- TCR-1 Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
- TCR-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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

#### 5.15.3 Regulatory Requirements and Standard Conditions

Applicable regulatory requirements and conditions of approval intended to address tribal cultural resources impacts follow.

##### 5.15.3.1 REGULATORY REQUIREMENTS

- RR TRC-1 As per AB52, within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it.



## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

RR CUL-1 California Health and Safety Code Section 7050.5 requires that if human remains are discovered within the proposed project site, disturbance of the site shall halt and remain halted until the coroner has investigated the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

#### 5.15.3.2 STANDARD CONDITIONS

There are no specific City-adopted standard conditions of approval related to tribal cultural resources that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

### 5.15.4 Environmental Impacts

#### 5.15.4.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.15-1: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource. [Threshold TCR-1 and TCR-2]**

---

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (CNRA 2018). The project site and existing buildings are not identified on any federal, state, or local historic registers— California Register of Historic Resources, California Historical Resources Inventory, California Historical Landmarks, California Points of Historical Interest and local historical registers.

An intensive archaeological pedestrian survey was conducted of the entire 5.69 acre property on February 2, 2018. No archaeological resources were encountered during the survey. However, site soils are considered moderately sensitive for buried archaeological resources (Refer to Impact 5.4-2). Ground disturbance during site grading and construction could damage archaeological resources that may be buried in site soils.

A Sacred Lands File search request was submitted to the Native American Heritage Commission (NAHC) on January 10, 2018, yielding negative results for known sacred lands within the project area. NAHC responded on January 11, 2018 and indicated that the project site is not identified in the agency's Sacred Lands File.

## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

NAHC did note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in the area.

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts to tribal cultural resources, as defined in Public Resources Code Section 21074. To date, two tribes (Gabrieleño Band of Mission Indians – Kizh Nation; and Juaneno Band of Mission Indians Acjachemen Nation) have requested to be included on the City’s AB 52 consultation list, which is a list of tribes the City maintains for consultation purposes for the purpose of mitigating potential impacts to tribal cultural resources under CEQA. Emails were sent to each of the tribes on January 3, 2018, which requested comments and responses from the tribes. The 30-day noticing requirement under AB 52 was completed, and to date none of the tribes has responded to the City’s AB 52 consultation letter. Thus, there is no indication that the project site contains any tribal cultural resources that are not also archeological or historic resources. For a discussion of impacts to archeological and historic resources, see Section 5.4.

*Impact Analysis:* Implementation of Regulatory Requirement RR TRC-1 is complete. With regulation RR CUL-1, Impact 5.15-1 is less than significant.

#### 5.15.5 Cumulative Impacts

Cumulative impacts to tribal cultural resources occur when the impacts of the proposed project, in conjunction with other projects and development in the region, result in multiple and/or cumulative impacts to tribal cultural resources in the area. Each future project in the City of Newport Beach will be required to evaluate that project’s impacts to site-specific tribal cultural resources as part of the CEQA review, including consultation with Native American tribes (e.g., Gabrielino/Tongva). Where significant impacts to tribal cultural resources are identified, projects would be required to either avoid impacts or implement feasible mitigation measures to reduce impacts. Consequently, impacts to tribal cultural resources would not be cumulatively considerable and the project would not make a cumulative considerable contribution to potential impacts to tribal cultural resources.

#### 5.15.6 Level of Significance Before Mitigation

With the implementation of RR CUL-1, Impact 5.15-1 would be less than significant.

#### 5.15.7 Mitigation Measures

No significant impacts would occur and no mitigation measures are required.

#### 5.15.8 Level of Significance After Mitigation

Impacts would be less than significant.

## 5. Environmental Analysis TRIBAL CULTURAL RESOURCES

### 5.15.9 References

California Natural Resources Agency (CNRA). 2018. CEQA: The California Environmental Quality Act.  
<http://resources.ca.gov/ceqa/>.

## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

*This page intentionally left blank.*

## 5. Environmental Analysis

### 5.16 UTILITIES AND SERVICE SYSTEMS

#### 5.16.1 Wastewater Treatment and Collection

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Newport Crossings Mixed Use project (proposed project) to impact utilities and service systems in the City of Newport Beach. The information in this section is based partly on the following technical studies and service questionnaire response:

- *Sewer Analysis Report: Newport Crossings, Newport Beach, CA*, Fuscoe Engineering, December 2017. A complete copy of this study is included as Appendix K.1 to this DEIR.
- *Sewer and Water Demand Sheet: Newport Crossings*, Fuscoe Engineering, July 11, 2018. A complete copy of this sheet is included as Appendix K.2 to this DEIR.
- *Service questionnaire response*, Rudy Davila, Engineer, Orange County Sanitation District, February 26, 2018. A copy of this response is included in Appendix I to this DEIR.

##### 5.16.1.1 ENVIRONMENTAL SETTING

Regulatory Background

###### *Federal, State, and Regional*

###### *Federal Clean Water Act*

The Clean Water Act establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters (US Code, Title 33, Sections 1251 et seq.). Under the act, the US Environment Protection Agency is authorized to set wastewater standards and run the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that generate discharges that go directly into Waters of the United States. The federal Clean Water Act requires wastewater treatment of all effluent before it is discharged into surface waters.

###### *State Water Resources Control Board: Statewide General Waste Discharge Requirements (2006)*

The General Waste Discharge Requirements specify that all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California need to develop a sewer master plan. The plan evaluates existing sewer collection systems and provides a framework for undertaking the construction of new and replacement facilities in order to maintain proper levels of service. The master plan includes inflow and infiltration studies to analyze flow monitoring and water use data, a capacity assurance plan to analyze the existing system with existing land use and unit flow factors, a condition assessment and sewer system rehabilitation plan, and a financial plan with recommended capital improvements and financial models.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### *Santa Ana Regional Water Quality Control Board NPDES Permit*

The Santa Ana RWQCB sets wastewater discharge requirements for the Orange County Sanitary District (OCSD) Reclamation Plants No. 1 and No. 2 with its Order No. R8-2012-0035 issued in 2012.

#### *Local*

#### *Orange County Sanitation District Capital Facilities Charges*

The OCSD Capital Facilities Charge (Ordinance No. OCSD-40) is imposed when a property newly connects to the OCSD system or a previously connected property expands its use. Revenue generated from the charge is used for the acquisition, construction, and reconstruction of OCSD's wastewater collection, treatment, and disposal facilities; to repay principal and interest on debt instruments; or to repay federal or state loans for the construction and reconstruction of sewage facilities, together with costs of administration and provisions for necessary reserves.

#### *Orange County Sanitation District Ordinance Nos. 25 and 48*

OCSD Ordinance OCSD-25 sets forth some prohibitions on activities by food service establishments to minimize discharges of fat, oils, and grease to sewers.

OCSD Ordinance OCSD-48 sets limits on wastewater that is discharged to sewers and conveyed to OCSD wastewater treatment plants. The ordinance limits concentrations of certain substances, including metals, some hazardous materials such as pesticides, and oil and grease (petroleum derived).

#### *City of Newport Beach Municipal Code*

The municipal code identifies land use categories, development standards, and other general provisions that ensure consistency between the City's General Plan and proposed development projects. The following provisions from the City's municipal code focus on wastewater services impacts:

- **Chapter 14.24, Sewer Connection, Permits.** Requires dwelling units and business structures to connect to the City's public sewer network through an Application for Sewer Connection (Section 14.24.030). The sewer connection fee (Section 14.24.050) is \$250 per connection to the public sewer and must be paid prior to issuance of building permits. Section 14.24.065, Sewer Use Charge, details the monthly basic and/or supplemental sewer use charge for each dwelling unit or business structure connected to the public sewer system.
- **Section 14.28.020, Prohibited Use of Sewers.** Prohibits certain solids, liquids, or substances from being deposited or placed in any public sewer, manhole, or pipe line that discharges into a public sewer.

### Existing Conditions

#### *Wastewater Treatment*

Wastewater from the project site is treated at OCSD's two treatment facilities—Plant No. 1 in Fountain Valley and Plant No. 2 in Huntington Beach.



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

Plant No. 1 has treatment capacity of 196 million gallons per day (mgd) for primary treatment and 182 mgd for secondary treatment.<sup>1</sup> Average wastewater flows through Plant No. 1 are about 120 mgd; thus, residual capacity for primary treatment is about 76 mgd. Approximately 120 mgd of wastewater treated at Plant No. 1 is sent to the Orange County Water District (OCWD) for further treatment in the groundwater replenishment system (GWRS) facility in Fountain Valley. OCWD plans to expand the GWRS to 130 mgd capacity, with completion planned for 2023. Water treated at the GWRS is pumped and percolated into the Orange County Groundwater Basin (Basin), partly to create a barrier against seawater intrusion into the Basin and partly for future potable reuse. An additional 3 mgd of effluent from Plant No. 1 are sent to the OCWD for tertiary treatment in a separate facility; this water is then delivered to customers for irrigation use.

Plant No. 2 has a treatment capacity of 168 mgd for primary treatment and 150 mgd for secondary treatment. Average daily flows through the facility are about 65 mgd, for a residual capacity of 103 mgd for primary treatment.

### *Wastewater Treatment Requirements*

The Santa Ana RWQCB set waste discharge requirements for OCSD Plants No. 1 and No. 2 with its Order No. R8-2012-0035 issued in 2012 (SARWQCB 2012).

OCSD set limits on concentrations of certain substances—including metals, some hazardous materials such as pesticides, and oil and grease (petroleum-derived) in its Ordinance No. OCSD-48 in 2016. Such discharge limits are intended to prevent damage to OCSD sewers and treatment plants, and for the protection of OCSD staff and the public (OCSD 2016).

### *Sewers*

The City of Newport Beach owns and maintains local sewer mains in the City. Existing sewers in roadways surrounding the project site include:

- 10-inch vitrified concrete pipe mains in Dove Street, Scott Drive, and Corinthian Way
- Two 8-inch vitrified concrete pipe mains in Martingale Way (see Figure 5.16-1, *Existing Sewers*)

The OCSD operates and maintains about 410 miles of large-diameter trunk sewers and force mains. The nearest OCSD trunk sewer to the project site is in MacArthur Boulevard one block to the east (OCSD 2006).

---

<sup>1</sup> Sanitary wastewater is treated in the following three phases:

**Primary Treatment:** removal of solids using settling tanks;

**Secondary Treatment:** reduction of organic matter using bacteria and oxygen; followed by further removal of solids; and

**Tertiary Treatment:** filtration of wastewater to remove any solids remaining after the first two phases of treatment.

Most wastewater that undergoes tertiary treatment is disinfected after tertiary treatment. Disinfection methods include chlorine bleach and ultraviolet light. Tertiary-treated wastewater is often reused (i.e., recycled) for landscape and agricultural irrigation, groundwater recharge, and industrial uses.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### *Existing Wastewater Generation*

The existing MacArthur Square shopping center totals 58,277 square feet of building area. Tenants include retail and service uses. Average wastewater generation is estimated at about 5,680 gallons per day (gpd) from the Sewer and Water Demand Sheet provided by Fuscoe (see Appendix K.2).

#### **5.16.1.2 THRESHOLDS OF SIGNIFICANCE**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-1            Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- U-2            Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- U-5            Would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

#### **5.16.1.3 REGULATORY REQUIREMENTS AND STANDARD CONDITIONS**

Applicable regulatory requirements and conditions of approval intended to address wastewater treatment and collection impacts follow.

#### **Regulatory Requirements**

- RR USS-1        The proposed project will be designed, constructed, and operated in accordance with the Orange County Sanitation District's Ordinance Nos. 25 and 48. All wastewater discharges into OCS D facilities shall be required to comply with the discharge standards set forth to protect the public sewage system.
- RR USS-2        The proposed project's sewer, storm drain, solid waste, and other utility infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Newport Beach Municipal Code.

Figure 5.16-1 - Existing Sewers  
5. Environmental Analysis



Source: Fuscoe, 2017

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

*This page intentionally left blank.*

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### Standard Conditions

There are no specific City-adopted standard conditions of approval related to wastewater services that are applicable to the proposed project at this time; however, project-specific conditions of approval may be applied by the City during the discretionary approval process.

#### 5.16.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.16-1: Project-generated wastewater could be adequately treated by the wastewater service provider for the project. [Thresholds U-1, U-2 (part), and U-5]**

---

#### Impact Analysis:

#### Project Wastewater Generation

According to information obtained from Fuscoe's Sewer and Water Demand Sheet (see Appendix K.2), the proposed project operation is expected to generate an average flow of about 85,938 gpd of wastewater, a net increase of approximately 80,258 gpd from the existing commercial uses, which generate an estimated 5,680 gpd. The combined residual capacity of OCSD's two treatment plants is about 179 mgd. There is sufficient wastewater treatment capacity in the region for project-generated wastewater, and project development would not require construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

#### Wastewater Treatment

##### *Residential*

More than 99 percent of estimated wastewater generation from the proposed project would be from the apartment units. Wastewater from residences does not contain substances of types and amounts prohibited by OCSD Local Discharge Limits. Thus, project-generated wastewater would not adversely affect OCSD compliance with treatment requirements for effluent from its two treatment plants set forth in Santa Ana RWQCB Order No. R8-2012-0035.

##### *Commercial*

The proposed restaurant is expected to generate some fats, oils, and grease (FOG). OCSD Ordinance 25 sets forth some prohibitions on activities by food service establishments to minimize discharges of FOG to sewers: for instance, prohibiting discharge of waste cooking oil to drain pipes and installation or use of garbage disposals (OCSD 2013). Restaurant operation would comply with OCSD Ordinance 25.

**Level of Significance before Mitigation:** With implementation of RR USS-1 and RR USS-2, Impact 5.16-1 would be less than significant.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### 5.16.1.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is OCSD's service area, 479 square miles in central and northern Orange County with a population of about 2.6 million (OCSD 2018). Other projects in the service area would increase population and employment, thus increasing wastewater generation. The service population (that is, population plus employment) in all of Orange County is forecast to increase from about 4.79 million in 2015 to 5.36 million in 2040, an increase of about 570,000 or 12 percent (SCAG 2016). This analysis assumes that the increase in wastewater generation will be proportional to the increase in service population; and that such an increase within OCSD's service area will be proportional to that in Orange County as a whole.

The combined residual capacity of OCSD's two wastewater treatment plants is about 179 mgd, that is, approximately 49 percent of their combined primary treatment capacity. There is sufficient wastewater treatment capacity in the region for the cumulative increase in wastewater generation, and cumulative impacts would be less than significant. Project impacts would not be cumulatively considerable.

#### 5.16.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With the implementation of RR USS-1 and RR USS-2, Impact 5.16-1 would be less than significant.

#### 5.16.1.7 MITIGATION MEASURES

No mitigation measures are required.

#### 5.16.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

### 5.16.2 Water Supply and Distribution Systems

The information in this section is based partly on the following technical studies and service questionnaire response:

- *Water Demand Report, Newport Crossings, Newport Beach, California*, Fuscoe Engineers, December 2017. A complete copy of this report is included as Appendix K.3 to this DEIR.
- *Sewer and Water Demand Sheet: Newport Crossings*, Fuscoe Engineering, July 11, 2018. A complete copy of this study is included as Appendix K.2 to this DEIR.
- *Service questionnaire response*, George Murdoch, Municipal Operations Co-Director, City of Newport Beach Water Services. A copy of this response is included in Appendix I to this DEIR.



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### 5.16.2.1 ENVIRONMENTAL SETTING

#### Regulatory Background

State and local laws, regulations, plans, or guidelines that are applicable to the proposed project are summarized below.

#### *State*

##### *Mandatory Water Conservation*

Following Governor Brown's declaration of a state of emergency on July 15, 2014, the State Water Resources Control Board adopted Resolution No. 2014-0038. The Emergency Regulation was partially repealed by Resolution No. 2017-0024. The repealed regulation prohibited several activities, including (1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; (2) the use of a hose to wash a motor vehicle except where the hose is equipped with a shut-off nozzle; (3) the application of potable water to driveways and sidewalks; (4) the use of potable water in non-recirculating ornamental fountains; and (5) the application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall. The State Water Board resolution also directed urban water suppliers to submit monthly water monitoring reports to the State Water Board.

##### *Urban Water Management Planning Act*

The Urban Water Management Planning Act of 1983 (Water Code Sections 10610 et seq.), requires water suppliers to:

- Plan for water supply and assess reliability of each source of water over a 20-year period in 5-year increments.
- Identify and quantify adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implement conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions were added by the Water Conservation Act of 2009, which amends the Urban Water Management Planning Act and adds new water conservation provisions to the Water Code.

##### *20x2020 Water Conservation Plan*

The 20x2020 Water Conservation Plan, issued by the California Department of Water Resources in 2010 pursuant to the Water Conservation Act of 2009, established a statewide water conservation target of 20 percent reduction in water use by 2020 compared to the state's 2005 baseline use.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### *Local*

##### *City of Newport Beach Municipal Code*

The City of Newport Beach Water Shortage Contingency Plan is set forth in municipal code Chapter 14.16. The plan includes four levels of water supply shortages and requires restrictions and prohibitions on water use for each level.

Chapter 14.16 also sets forth several permanent water use prohibitions and restrictions—for instance, prohibiting water use for washing paved surfaces and use in decorative features except those using recirculating systems.

Water-efficient landscaping requirements are set forth in municipal code Chapter 14.17, Water Efficient Landscaping.

#### **Existing Water Supplies**

City of Newport Beach Water Services (NBWS) provides water to the project site. NBWS serves an area of about 36 square miles—that is, approximately the western and central two-thirds of the City; its estimated service area population in 2015 was 66,219 (Newport Beach 2016).

NBWS obtains water from three sources: groundwater from the Orange County Groundwater Basin, imported water from the Colorado River and northern California, and recycled water from OCSD.

#### *Groundwater*

NBWS obtains groundwater from the Orange County Groundwater Basin from four wells in Fountain Valley. The Basin underlies about 350 square miles of central and northern Orange County (see Figure 5.8-3, *Main Orange County Groundwater Basin*). Groundwater accounts for 70 percent of City supplies.

#### *Imported Water*

NBWS purchases imported water from the Municipal Water District of Orange County (MWDOC), which wholesales imported water to retail water purveyors in central and northern Orange County. MWDOC is a member agency of the Metropolitan Water District of Southern California (MWD), which imports water from the Colorado River via the Colorado River Aqueduct and purchases water imported from northern California via the State Water Project. MWD wholesales imported water to its 26 member agencies (Newport Beach 2016).

#### *Recycled Water*

NBWS purchases recycled water from the OCWD Green Acres Project, which includes a tertiary treatment facility with 7.5 mgd capacity. Recycled water is used by five customers, including irrigation use by two country clubs (Newport Beach 2016).

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### *Water Supplies Summary*

NBWS water supplies—by source in 2015 and forecast supplies over the 2020-2040 period—are shown in Table 5.16-1 for normal year conditions.

### *Water Demands*

Water demands in NBWS’s service area are forecast to increase from 16,033 acre-feet per year in 2015 to 16,973 acre-feet per year in 2040 (see Table 5.16-1). Water demands for the 2020-2040 period were projected using water demand factors for single-family residential, multifamily residential, and nonresidential land uses from the MWDOC 2015 Water Reliability Study, and demographic projections from the Center for Demographic Research at California State University Fullerton (Newport Beach 2016).

**Table 5.16-1 City of Newport Beach Current and Projected Water Supplies and Demands, Normal Years**

Water Supply Sources		Projected Water Supply (acre-feet)					
		2015 (actual)	2020	2025	2030	2035	2040
Supplies	Imported Water	4,338	4,161	4,491	4,511	4,495	4,487
	Groundwater	11,203	10,980	11,787	11,867	11,864	11,881
	Recycled Water	492	545	560	575	590	605
	<b>Total</b>	<b>16,033</b>	<b>15,685</b>	<b>16,838</b>	<b>16,953</b>	<b>16,949</b>	<b>16,973</b>
<b>Total Demands</b>		<b>16,033</b>	<b>15,685</b>	<b>16,838</b>	<b>16,953</b>	<b>16,949</b>	<b>16,973</b>
<b>Difference</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Newport Beach 2016.  
1 acre-foot is 325,851 gallons.

### *Water Supply Reliability*

The City forecasts that it will have sufficient water supplies to meet demands in single dry years and multiple dry years (that is, three consecutive dry years) over the 2020-2040 period, as shown in Tables 5.16-2 and 5.16-3.

**Table 5.16-2 City of Newport Beach Projected Single Dry Year Supply and Demand (acre-feet)**

	2020	2025	2030	2035	2040
<b>Total Supply</b>	16,626	17,848	17,970	17,966	17,991
<b>Total Demand</b>	16,626	17,848	17,970	17,966	17,991
<b>Difference</b>	0	0	0	0	0

Source: Newport Beach 2016.  
1 acre-foot is 325,851 gallons.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

**Table 5.16-3 City of Newport Beach Projected Multiple Dry Year Supply and Demand (acre-feet)**

		2020	2025	2030	2035	2040
<b>First Year Supply</b>	<b>Total Supply</b>	16,626	17,848	17,970	17,966	17,991
	<b>Total Demand</b>	16,626	17,848	17,970	17,966	17,991
	<b>Difference</b>	0	0	0	0	0
<b>Second Year Supply</b>	<b>Total Supply</b>	16,626	17,848	17,970	17,966	17,991
	<b>Total Demand</b>	16,626	17,848	17,970	17,966	17,991
	<b>Difference</b>	0	0	0	0	0
<b>Third Year Supply</b>	<b>Total Supply</b>	16,626	17,848	17,970	17,966	17,991
	<b>Total Demand</b>	16,626	17,848	17,970	17,966	17,991
	<b>Difference</b>	0	0	0	0	0

Source: Newport Beach 2016.  
 1 acre-foot is 325,851 gallons.

### Existing Water Distribution

Existing water mains in roadways surrounding the project site consist of a 12-inch asphalt concrete pipe in Dove Street and 8-inch asphalt concrete mains in Scott Drive, Corinthian Way, and Martingale Way (see Figure 5.16-2, *Existing Water Mains*).

#### 5.16.2.2 THRESHOLDS OF SIGNIFICANCE

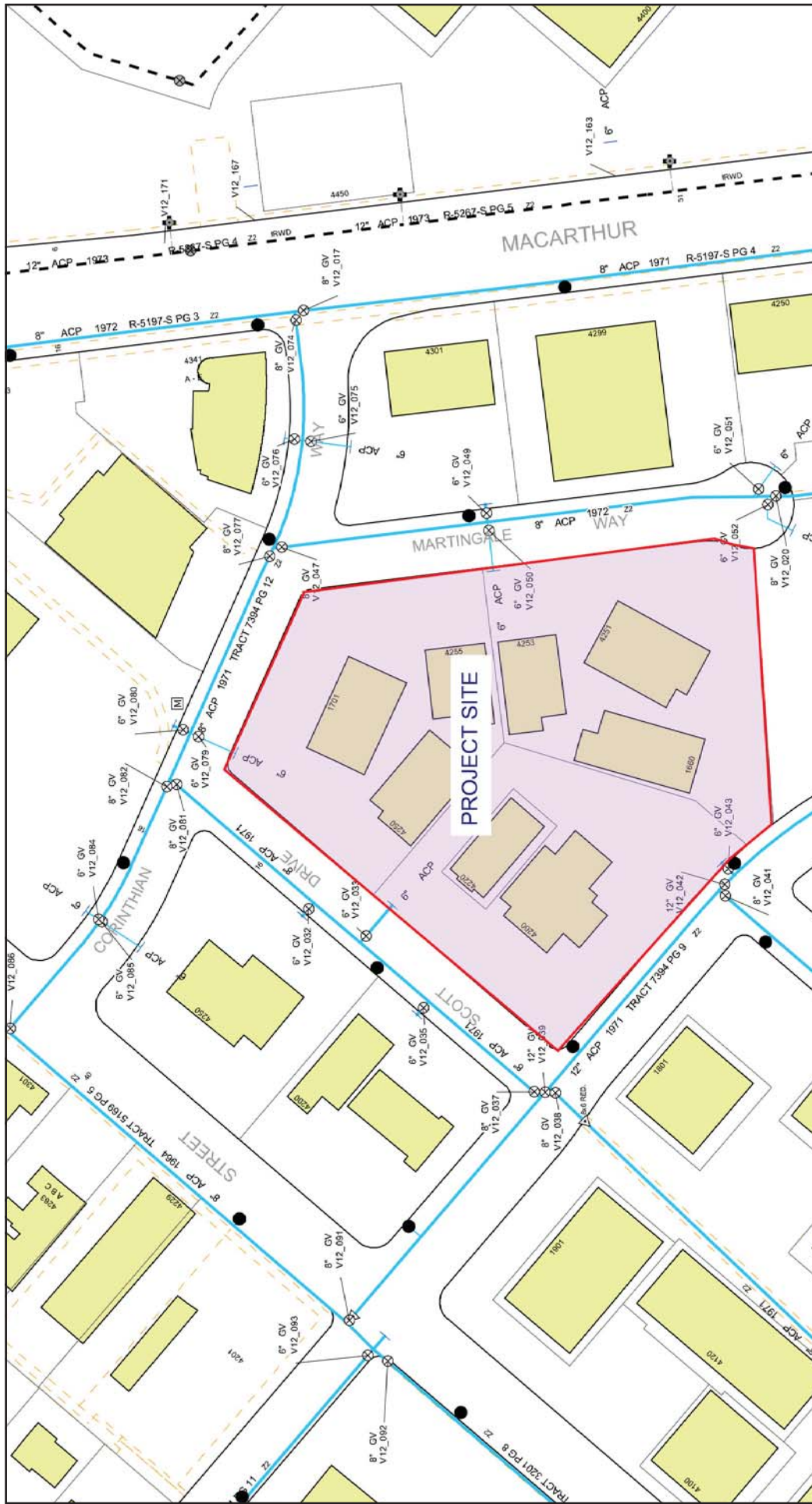
According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-2        Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- U-4        Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

#### 5.16.2.3 REGULATORY REQUIREMENTS AND STANDARD CONDITIONS

Applicable regulatory requirements and conditions of approval intended to address water supply and distribution system impacts follow.

Figure 5.16-2 - Existing Water Mains  
5. Environmental Analysis



## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

*This page intentionally left blank.*



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### Regulatory Requirements

RR USS-3 The proposed project's sewer, storm drain, and water infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Newport Beach Municipal Code.

### Standard Conditions

SC USS-1 The Project would be required to comply with the City of Newport Beach Municipal Code Chapter 14.16 related to water conservation and supply level regulations in effect during the construction and operation of the Project, and Municipal Code Chapter 14.17 with respect to water efficient landscaping.

#### 5.16.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.16-2: Water supply and delivery systems are adequate to meet project requirements. [Thresholds U-2 (part) and U-4]**

---

#### Impact Analysis:

#### Project Water Demands

Project operation is expected to use an average of about 178,189 gpd of water, as shown in Table 5.16-4. Existing water demand onsite is estimated at about 3,497 gpd at full occupancy,<sup>2</sup> for a net increase of approximately 174,692 gpd. The City of Newport Beach forecasts that it has sufficient water supplies to meet water demands in its service area through 2040 (see Table 5.16-1 above). The City's forecast is based on General Plan buildout projections, and the proposed project is consistent with the existing General Plan land use designation for the site. Therefore, the City's forecast of adequate water supplies through 2040 applies to the proposed project. Project development would not require the City to obtain new or expanded water supplies, and impacts would be less than significant.

---

<sup>2</sup> An existing water demand calculated at full occupancy is more conservative than the actual water demand. The existing structure is not at full occupancy; only 18,163 square feet is occupied.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

**Table 5.16-4 Estimated Project Water Demand**

Land Uses	Quantity	Water Demand, gallons per day (gpd)		
		Water Demand	Total (GPD)	
Proposed Project	Apartments	350 units	499.5 gal/du <sup>1</sup>	174,839
	Retail and restaurant	7,500 square feet	220 gal/ksf/day	1,650
	Park	0.5 acres	3,400 gal/acres/day	1,700
	<b>Total</b>			<b>178,189</b>
Existing conditions	Commercial/Office	58,277 square feet	60 gpd/ksf	3,497
<b>Net Increase</b>				<b>174,692</b>

Source: Fuscoe 2018 (see Appendix K.2).  
du: dwelling unit; ksf: 1,000 square feet; gpcd: gallons per capita per day  
<sup>1</sup> Average daily flow is 228.1 gpcd, and average number of persons per dwelling unit is 2.19. The demand is therefore 499.5 gal/du.

### Water Distribution

The proposed project utilities plan includes the following proposed water laterals: One 6-inch water service line and one 8-inch fire service line would both connect to an existing 8-inch water main in Martingale Way. One 6-inch water service line and one 8-inch fire service line would both connect to an existing 8-inch water main in Scott Drive (see Figure 5.16-3, *Proposed Utility Plan*). Impacts of construction of the proposed laterals would be part of the impacts of development of the whole project analyzed throughout Chapter 5 of this DEIR. No additional impact would occur.

**Level of Significance before Mitigation:** With implementation of RR USS-2 and SC USS-1, Impact 5.16-2 would be less than significant.

#### 5.16.2.5 CUMULATIVE IMPACTS

The area considered for cumulative water supply impacts is Newport Beach Water Services service area. Other projects in the service area would increase water demands. NBWS forecasts that it will have sufficient water supplies in its service area over the 2020-2040 period (see the description of demand projections above in Section 5.16.2.1). Other projects of certain sizes and types would be required to have water supply assessments prepared. If NBWS did not already have sufficient projected water supplies for such projects, it would be required to provide its plans for acquiring the needed supplies, including the cost and time frame needed, which could result in a cumulative impact. The City would be required to consider the results of water supply assessments in its CEQA findings on such projects. The project would not make a cumulatively considerable contribution to potentially significant cumulative impacts related to water supply because its additional demand was considered in the City's current water management plan.

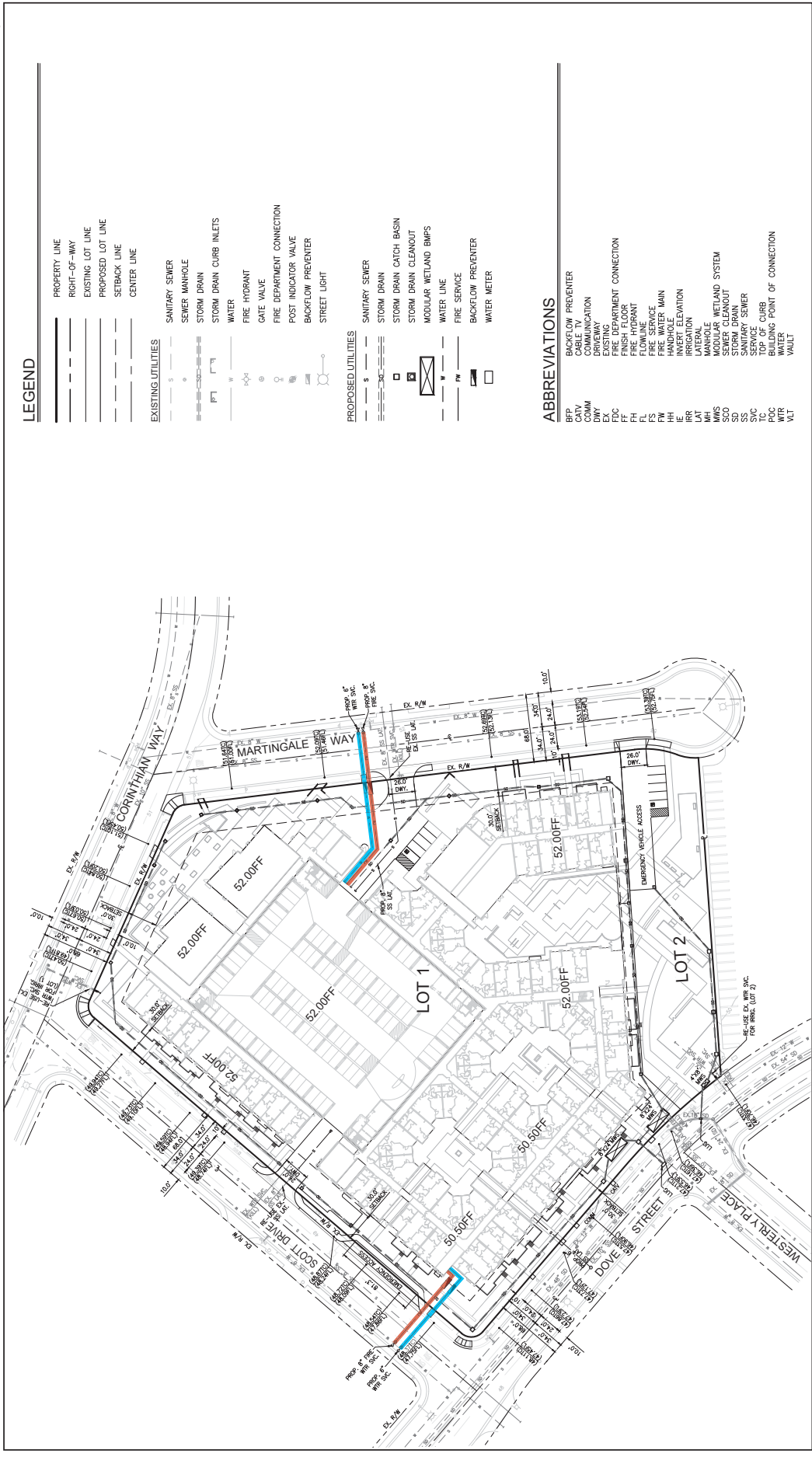
#### 5.16.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With the implementation of RR USS-2 and SC USS-1, Impact 5.16-2 would be less than significant.

#### 5.16.2.7 MITIGATION MEASURES

No mitigation is required.

Figure 5.16-3 - Proposed Utility Plan  
5. Environmental Analysis



**LEGEND**

- PROPERTY LINE
  - RIGHT-OF-WAY
  - EXISTING LOT LINE
  - PROPOSED LOT LINE
  - SETBACK LINE
  - CENTER LINE
- 
- EXISTING UTILITIES**
- SANITARY SEWER
  - SEWER MANHOLE
  - STORM DRAIN
  - STORM DRAIN CURB INLETS
  - WATER
  - FIRE HYDRANT
  - GATE VALVE
  - FIRE DEPARTMENT CONNECTION
  - POST INDICATOR VALVE
  - BACKFLOW PREVENTER
  - STREET LIGHT
- 
- PROPOSED UTILITIES**
- SANITARY SEWER
  - STORM DRAIN
  - STORM DRAIN CATCH BASIN
  - STORM DRAIN CLEANOUT
  - MODULAR WETLAND BMPs
  - WATER LINE
  - FIRE SERVICE
  - BACKFLOW PREVENTER
  - WATER METER

**ABBREVIATIONS**

- BFP BACKFLOW PREVENTER
- CATV CABLE TELEVISION
- DMV DRIVEWAY
- EX EXISTING
- FDC FIRE DEPARTMENT CONNECTION
- FL FIRE FLOWLINE
- FL FIRE FLOWLINE
- FS FIRE SERVICE
- HH HANDHOLE
- HH HANDHOLE
- IE INVERT ELEVATION
- IRR IRRIGATION
- MH MANHOLE
- MMS MODULAR WETLAND SYSTEM
- SCD SEWER CLEANOUT
- SS SANITARY SEWER
- SVC SERVICE VALVE
- POC POINT OF CONNECTION
- WTR WATER
- VLT VAULT

Proposed Water Service Lateral  
Proposed Fire Service Lateral



Source: Architects Orange, 2017

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

*This page intentionally left blank.*

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### 5.16.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

## 5.16.3 Storm Drainage Systems

### 5.16.3.1 ENVIRONMENTAL SETTING

#### Regulatory Background

Laws and regulations governing storm drainage systems are listed here and described in Section 5.8, *Hydrology and Water Quality*, of this DEIR.

#### *Federal*

- Clean Water Act
- National Pollutant Discharge Elimination System

#### *State*

- Porter-Cologne Water Quality Act

#### *Santa Ana Regional Water Quality Control Board*

- Order No. R8-2009-0030: MS4 Permit for the part of Orange County in the Santa Ana River Basin

#### Existing Conditions

Existing drainage from the site is via surface flow and in concrete valley gutters in the medians of parking lot aisles. The two valley gutters converge near the south site boundary close to the intersection of Dove Street and Westerly Place, and discharges to curb and gutter in Dove Street. Drainage flows through a curb inlet in Westerly Place to underground storm drains. The storm drains discharge to the San Diego Creek Channel, which discharges to Upper Newport Bay. The storm drain in Dove Street is a 54-inch reinforced concrete pipe (RCP).

### 5.16.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-3 Would require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### 5.16.3.3 REGULATORY REQUIREMENTS AND STANDARD CONDITIONS

Applicable regulatory requirements and conditions of approval intended to address storm drainage system impacts follow.

##### Regulatory Requirements

RR USS-2 The proposed project's sewer, storm drain, and water infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Newport Beach Municipal Code.

RR HYD-2 **Orange County MS4 Permit (Order No. R8-2002-0010, NPDES No. CAS618030, as amended by R8-2009-00300):** The MS4 Permit requires new development and redevelopment projects to:

- Control contaminants into storm drain systems
- Educate the public about stormwater impacts
- Detect and eliminate illicit discharges
- Control runoff from construction sites
- Implement best management practices and site-specific runoff controls and treatments for new development and redevelopment

##### Standard Conditions

SC USS-2 The Project would be required to comply with Section 19.28.080 (Storm Drains) of the City's Municipal Code which requires developers to design and construct all drainage facilities necessary for the removal of surface water from the site (e.g., open/closed channels, catch basins, manholes, junction structures), and to protect off-site properties from a project's water runoff. The storm drain system must be designed in accordance with the standards of the Orange County Flood Division. A drainage fee is also charged to fund improvement to the City's drainage facilities.

#### 5.16.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

---

**Impact 5.16-3: Existing and/or proposed storm drainage systems are adequate to serve the drainage requirements of the proposed project. [Threshold U-3]**

---

**Impact Analysis:** The proposed project would involve two new 18-inch RCP storm drain laterals onsite. One lateral would drain the proposed mixed-use building and would consist of two major branches: one



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

extending around the west and north sides of the proposed buildings to near the intersection of Martingale Way and Corinthian Way, and the other extending around the south and east sides of the buildings to near the same intersection. The lateral would discharge to an existing 48-inch RCP main in Dove Street in the north end of its intersection with Westerly Place. The second lateral would drain the proposed park in the south end of the project site, discharging into the existing 54-inch RCP main in Dove Street in the south end of its intersection with Westerly Drive (see Figure 5.8-5, *Proposed Site Drainage*).

Project development would decrease impervious areas onsite from 5.12 acres (90 percent of the site) to 4.38 acres (77 percent of the site), a net decrease of 0.74 acre. Proposed pervious areas would include 34,600 square feet of common area landscaping, including the proposed park, and 21,459 square feet of private area landscaping. Landscaping would be provided between sidewalks and the buildings (see Figure 3-4, *Conceptual Site and Landscape Plan*).

Drainage from the off-site tributary areas, totaling about 3.72 acres, would continue to flow in curb and gutter to the same curb inlet in Westerly Place where drainage flows now.

The onsite comparison of the peak drainage flow rate from a 25-year storm for the proposed project is 0.26 cfs more than existing conditions. However, for the total peak drainage flow rate (confluence with street runoff) entering the public storm drain system, the peak flow rate for the developed conditions is 0.2 cfs less than existing (see Table 5.16-5).

**Table 5.16-5 Proposed Peak Drainage Flow Rates from a 25-Year Storm**

Area (Node at Discharge into Existing Storm Drain Main)	Acres	Peak Drainage Flow Rate, 25-Year Storm (Q <sub>25</sub> ), cubic feet per second		
		Proposed Conditions	Existing Conditions	Net Change, Proposed less Existing
Entire Project Site [200 + 300]	5.69	15.35	15.09	0.26
Project Site plus Offsite Tributary Areas [200 + 300 + 100]	9.41	23.53	23.73	-0.2

Source: Fuscoe 2018 (see Appendix G.1).

As demonstrated in the table, the proposed project would not exceed the capacity of the existing storm drain system because the total stormwater peak flow rates would decrease under the proposed conditions and, therefore, no new stormwater drainage facilities would need to be constructed or expanded, the construction of which could have significant environmental impacts. Impacts would therefore be less than significant.

**Level of Significance before Mitigation:** With implementation of RR USS-2, RR HYD-2, and SC USS-2, Impact 5.16-3 would be less than significant.

### 5.16.3.5 CUMULATIVE IMPACTS

The area considered for cumulative storm drainage impacts is the Newport Bay Watershed, which spans about 194 square miles of central and south-central Orange County (see Figure 5.8-1, *Newport Bay Watershed*).

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

Other projects in the region would increase impervious areas and thus increase runoff. Other projects meeting certain criteria would be required to implement low-impact development best management practices (BMP) requiring that specified amounts of runoff be infiltrated, evapotranspired, harvested and reused, or treated (see Section 5.8, *Hydrology and Water Quality*, for further discussion of BMPs). Implementation of such BMPs would reduce the amount of runoff entering public storm drain systems. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

#### 5.16.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With the implementation of RR USS-2, RR HYD-2 and SC USS-2, Impact 5.16-3 would be less than significant.

#### 5.16.3.7 MITIGATION MEASURES

No mitigation is required.

#### 5.16.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

### 5.16.4 Solid Waste

The information in this section is based partly on:

- *Service questionnaire response*, Keith Hinckley, Refuse Superintendent, City of Newport Beach General Services Department, February 15, 2018. A copy of the response is included in Appendix I to this DEIR.

#### 5.16.4.1 ENVIRONMENTAL SETTING

##### Regulatory Background

###### *Federal*

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

###### *State*

###### *Assembly Bills 939, 341, and 1826*

Assembly Bill 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

Assembly Bill 1826 (California Public Resources Code Sections 42649.8 et seq.), signed into law in September 2014, requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. This law also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily dwellings that consist of five or more units. Multifamily dwellings are not required to recycle food waste including food-soiled paper (CalRecycle 2018a). The law took effect in April 2016.

### *California Solid Waste Reuse and Recycling Access Act of 1991*

This act was passed by the state legislature and instructs the California Integrated Waste Management Board (now known as “CalRecycle”) to draft a “model ordinance” for the disposal of construction waste associated with development projects. This act also requires local agencies to ensure that development projects have adequate areas for the collection and loading of recyclable materials.

### *California Green Building Standards Code*

Section 5.408, Construction Waste Reduction, Disposal, and Recycling, of the California Green Building Standards Code (CALGreen) (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. CALGreen is updated on a three-year cycle; the 2016 CALGreen took effect on January 1, 2017. The CEC is currently considering the 2019 standards and anticipates adopting them in October 2018. Once adopted, they would take effect on January 1, 2020.

### *Local*

CALGreen is adopted by reference as Chapter 15.11 of the Newport Beach Municipal Code.

## **Existing Conditions**

### *Solid Waste Collection*

### *Trash and Recyclable Materials*

Franchised haulers provide commercial solid waste collection in the city. Franchised haulers are required to comply with state-mandated recycling and diversion requirements and provide the City with monthly tonnage reports, which includes collected and recycled weight. Five franchised haulers provide scheduled bin pickup service from commercial and multifamily residential land uses in Newport Beach—CR&R, Rainbow

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

Disposal, Waste Disposal, Waste Management of Orange County, and Universal Waste Systems. Recyclable materials must be stored and collected separately under AB 341.

#### *Organic Waste and Green Waste Collection*

Commercial and multifamily residential land uses generating four cubic yards (cy) or more of organic waste per week must have such waste stored and collected separately for composting. Multifamily residential uses are not required to recycle food waste, including food-soiled paper. The threshold for required composting of organic waste from commercial and multifamily residential uses will decrease to 2 cy per week in January 2019. Organic wastes are typically stored in smaller containers (e.g., 35-gallon or 55-gallon) than trash and recyclable materials are. Commercial and multifamily residential developments five acres and larger must comply with green waste composting requirements under AB 1826. Developments typically comply through certification by their landscape maintenance contractor that the contractor is hauling green waste to a composting facility.

#### *Solid Waste Recycling and Disposal Facilities*

In 2016 about 96 percent of the solid waste landfilled from Newport Beach was disposed of at two facilities—the Frank Bowerman Sanitary Landfill near Irvine and the Prima Deshecha Sanitary Landfill near San Juan Capistrano (CalRecycle 2018b). The landfills are both operated by the OC Waste & Recycling Department.

#### **Recycling Facilities**

Four recycling facilities are listed within an approximately 10-mile radius of the project site:

- Rainbow Transfer and Recycling Huntington Beach Collection Center, 17121 Nichols Lane, Huntington Beach
- Madison Materials, 1035 East 4th Street, Santa Ana
- RJM International, 2492 Walnut Ave, Tustin
- Sunset Environmental Transfer Station, 16122 Construction Circle West, Irvine (CalRecycle 2018g)

#### *Composting Facilities*

The two nearest composting facilities to the project site are the Tierra Verde Industries EcoCentre, 8065 Marine Way, Irvine, and the Rainbow Transfer/Recycling Company in Huntington Beach (CalRecycle 2018e).

#### *Facilities Accepting Construction and Demolition Waste*

Both the Frank Bowerman Sanitary Landfill and the Prima Deshecha Sanitary Landfill accept construction and demolition debris. In addition, six construction and demolition debris processing facilities within about 10 miles of the project site are:

- Tierra Verde Industries EcoCentre in Irvine

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

- All Variety Metals, 1016 North Santiago Street, Santa Ana
- Madison Materials in Santa Ana
- Ewles Materials, 16081 Construction Circle West, Irvine
- Sunset Environmental Transfer Station in Irvine
- Aguinaga Company, 16355 Construction Circle West, Irvine (CalRecycle 2018g)

### *Solid Waste Diversion*

There are 41 solid waste diversion programs serving the City of Newport Beach, including composting and material recovery facilities; household hazardous waste, recycling, and source reduction programs, including a business waste reduction program; and special waste materials including concrete/asphalt/rubble and tires (CalRecycle 2018f).

Compliance with AB 939 is measured in part by actual solid waste disposal amounts compared to targets; disposal amounts equal to or lower than targets are consistent with AB 939. In 2016, solid waste disposal targets for the City of Newport Beach were 9.6 pounds per day (ppd) for residents and 11.5 ppd for employees; actual disposal amounts were 6.8 ppd for residents and 7.6 ppd for employees (CalRecycle 2018f). The City is meeting its solid waste disposal targets consistent with AB 939.

### *Existing Solid Waste Generation*

Solid waste generation by the existing commercial uses is estimated at 350 pounds per day based on the 58,277 square feet of building area and the solid waste generation factor for retail uses of 0.006 ppd per square foot (CalRecycle 2018h).

#### **5.16.4.2 THRESHOLDS OF SIGNIFICANCE**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

#### **5.16.4.3 REGULATORY REQUIREMENTS AND STANDARD CONDITIONS**

Applicable regulatory requirements and conditions of approval intended to address solid waste impacts follow.

#### **Regulatory Requirements**

- RR USS-2 The proposed project's sewer, storm drain, solid waste and other utility infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Newport Beach Municipal Code.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

RR USS-3 The proposed project will store and collect recyclable materials in compliance with AB 341. Green waste will be handled in accordance with AB 1826.

#### Standard Conditions

SC USS-3 The Applicant shall prepare and obtain approval of a Construction and Demolition Waste Management Plan (CDWMD) for each phase of the Project. The CWMP shall list the types and weights or volumes of solid waste materials expected to be generated from construction. The CDWMP shall include options to divert from landfill disposal, nonhazardous materials for reuse or recycling by a minimum of 65 percent of total weight or volume.

#### 5.16.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

**Impact 5.16-4: Existing and/or proposed facilities could accommodate project-generated solid waste and comply with related solid waste regulations. [Thresholds U-6 and U-7]**

#### Impact Analysis:

#### Solid Waste Generation by Project Operation

Project operation is estimated to generate about 1,928 ppd of solid waste, as shown below in Table 5.16-6, for a net increase of about 1,819 ppd. There is adequate landfill capacity in the region for project-generated solid waste (see Table 5.16-7).

**Table 5.16-6 Estimated Project Solid Waste Generation**

Land Use	Quantity	Solid Waste Generation, pounds per day	
		Per unit/square foot <sup>1</sup>	Total
<b>Proposed Project</b>			
Apartments	350 units	5.31	1,859
Retail	5,500 square feet	0.006	33
Restaurant, casual	2,000 square feet	0.018	36
<b>Total</b>			<b>1,928</b>
<b>Existing Land Use</b>			
Retail	18,163 square feet	0.006	109
<b>Net Increase</b>			<b>1,819</b>

<sup>1</sup> Source: CalRecycle 2018f.



5. Environmental Analysis  
UTILITIES AND SERVICE SYSTEMS

**Table 5.16-7 Landfill Capacity**

Landfill and Nearest City	Current Remaining Capacity (cubic yards)	Maximum Daily Disposal Capacity (tons)	Average Daily Disposal, 2017 (tons) <sup>1</sup>	Residual Daily Disposal Capacity (tons)	Estimated Close Date
Frank R. Bowerman Irvine	205,000,000	11,500	7,296	4,204	2053
Prima Deshecha San Juan Capistrano	87,384,799	4,000	1,336	2,664	2067
<b>Total</b>	<b>292,384,799 (or 219,288,599 tons)</b>	<b>15,500</b>	<b>8,632</b>	<b>6,868</b>	<b>Not applicable</b>

Sources: CalRecycle 2018c, 2018d, 2018e.

<sup>1</sup> Average daily disposal is estimated based on 300 operating days per year. Each facility is open six days per week, Monday through Saturday, except certain holidays.

*Solid Waste Diversion*

The proposed project would include two trash rooms for the apartment units on the ground level of the parking structure, and a separate trash room for the retail and restaurant spaces; all three trash rooms would contain receptacles for recyclable materials. Solid waste collection from the buildings would include recyclable materials and organic materials collections separate from trash collection.

**Solid Waste Generation by Demolition and Project Construction**

Demolition is estimated to generate 158 pounds of demolition debris per square foot of building area demolished (USEPA 2009). Thus, demolition of the 58,277-square-foot shopping center is estimated to generate about 9,207,800 pounds—or 4,604 tons—of demolition debris. At least 65 percent of demolition debris and construction waste would be recycled and/or reused in accordance with the City of Newport Beach’s standard conditions. Eight facilities in the region accepting construction and demolition debris are identified above in Section 5.16.4.1. There are sufficient disposal and processing capacities for construction and demolition waste in the region for project-generated waste.

**Compliance with Regulations Governing Solid Waste Disposal**

Project construction and operation would comply with regulations governing solid waste disposal.

Project plans include three trash rooms that would house receptacles for recyclable materials as well as trash, in compliance with AB 341. Storage and collection of recyclable materials separate from trash would also comply with requirements for the City of Newport Beach under AB 939. Operation of the apartments would include recycling of green waste in accordance with AB 1826. The proposed restaurant would recycle food waste, including food-soiled paper, fats, oils, and grease.

At least 50 percent of construction and demolition debris would be recycled and/or salvaged for reuse in compliance with CALGreen Section 5.408 and Chapter 15.11 of the Newport Beach Municipal Code.

*Level of Significance before Mitigation:* With implementation of RR USS-2, RR USS-3, and SC USS-3, Impact 5.16-4 would be less than significant.

## 5. Environmental Analysis

### UTILITIES AND SERVICE SYSTEMS

#### 5.16.4.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is Orange County, the service area of OC Waste & Recycling that operates three landfills—the two described above plus Olinda Alpha Sanitary Landfill near Brea. Other projects would result in increased population and employment in Orange County. The countywide service population—that is, population plus employment—is forecast to increase by about 12 percent between 2015 and 2040 (SCAG 2016). The combined residual capacity of the two landfills described above, 6,868 tons per day, is about 80 percent of current average daily disposal at those two landfills. Thus, there is sufficient landfill capacity in the region for the cumulative increase in solid waste disposal. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

#### 5.16.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of RR USS-2, RR USS-3, and SC USS-3, Impact 5.16-4 would be less than significant.

#### 5.16.4.7 MITIGATION MEASURES

No mitigation measures are required.

#### 5.16.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

### 5.16.5 References

- California Department of Resources Recycling and Recovery (CalRecycle). 2018a, January 19. Mandatory Commercial Organics Recycling (MORE): Frequently Asked Questions. <http://www.calrecycle.ca.gov/recycle/commercial/organics/FAQ.htm>.
- . 2018b, January 18. Jurisdiction Disposal by Facility. <http://www.calrecycle.ca.gov/lgcentral/Reports/DRS/Destination/JurDspFa.aspx>.
- . 2018c, January 19. Facility/Site Summary Details: Frank Bowerman Sanitary Landfill: <http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0360/Detail/>.
- . 2018d, January 19. Facility/Site Summary Details: Prima Deshecha: <http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0019/Detail/>.
- . 2018e, January 18. Landfill Tonnage Reports. <http://www.calrecycle.ca.gov/SWFacilities/Landfills/Tonnages/>.
- . 2018f, January 18. Jurisdiction Diversion/Disposal Rate Summary (2007 - Current). <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx>.
- . 2018g, January 19. Facility Information Toolbox. <http://www.calrecycle.ca.gov/FacIT/Facility/Search.aspx#LIST>.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

- . 2018h, January 18. Estimated Solid Waste Generation Rates.  
<https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.
- Newport Beach, City of. 2016, June. 2015 Urban Water Management Plan.  
[https://wuedata.water.ca.gov/public/uwmp\\_attachments/5816098868/FINAL%20Newport%20Beach%20UWMP%20June%202016%2Epdf](https://wuedata.water.ca.gov/public/uwmp_attachments/5816098868/FINAL%20Newport%20Beach%20UWMP%20June%202016%2Epdf).
- Orange County Sanitation District (OCSD). 2006, April. Strategic Plan Update.
- . 2013, July 24. Fact Sheet: Prohibitions Relating to Discharge of Fats, Oils, and Grease (FOG).  
<https://www.ocsd.com/home/showdocument?id=544>.
- . 2018, January 19. Service Area. <https://www.ocsd.com/about-us/general-information/service-area>.
- Southern California Association of Governments (SCAG). 2016, April 7. Demographics & Growth Forecast. Appendix to 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.  
[http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS\\_DemographicsGrowthForecast.pdf](http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf).
- US Environmental Protection Agency (USEPA). 2009, March. Estimating 2003 Building-Related Construction and Demolition Materials Amounts.  
<http://www.epa.gov/osw/conservation/imr/cdm/pubs/cd-meas.pdf>.

## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

*This page intentionally left blank.*

## 6. Significant Unavoidable Adverse Impacts

---

At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. As shown in Table 1, *Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*, and substantiated in each individual topical section of this DEIR (Sections 5.1 through 5.16), the proposed project would not result in any significant unavoidable adverse impacts.

## 6. Significant Unavoidable Adverse Impacts

*This page intentionally left blank.*



# 7. Alternatives to the Proposed Project

---

## 7.1 INTRODUCTION

### 7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines § 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the proposed project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- “[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” (15126.6[b])
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact.” (15126.6[e][1])
- “The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, 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. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” (15126.6[e][2])
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.” (15126.6[f])
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries..., and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).” (15126.6[g][1])

## 7. Alternatives to the Proposed Project

- “Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” (15126.6[f][2][A])
- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.” (15126.6[f][3])

For each development alternative, this analysis:

- Describes the alternative.
- Analyzes the impact of the alternative as compared to the proposed project.
- Identifies the impacts of the project that would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, “[i]f an alternative would cause...significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.”

### 7.1.2 Project Objectives

As described in Section 3.2, *Statement of Objectives*, of this DEIR, the following objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

- **Objective 1.** To develop a multiunit mixed-use project that includes affordable housing units that will serve the various populations of the City of Newport Beach.
- **Objective 2.** To develop a mixed-use project that is consistent with and furthers the policies of the General Plan for the Airport Area without the need for a General Plan amendment.
- **Objective 3.** To locate additional housing within an area identified by the General Plan as an opportunity area for future housing.
- **Objective 4.** To develop a mixed-use project that contributes to a walkable and pedestrian-friendly community.
- **Objective 5.** To generate temporary employment in the construction industry.
- **Objective 6.** To improve the jobs-housing balance in Newport Beach and to provide new housing within close proximity to jobs and services.

## 7. Alternatives to the Proposed Project

- **Objective 7.** To provide beneficial site and area improvements, including extensive onsite private recreation amenities and the dedication of a public park to the City of Newport Beach.
- **Objective 8.** To develop a project that implements and is consistent with the intent of the Newport Place Planned Community Residential Overlay and that takes advantage of the Density Bonus allowed under both the City's zoning code and Government Code Section 65915.

### 7.1.3 Significant and Unavoidable Impacts

Pursuant to CEQA Guidelines Section 15126.6(b), alternatives to the proposed project include those that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. Based on the analysis in Chapter 5, *Environmental Analysis*, the proposed project would result in potentially significant environmental effects prior to mitigation in the areas of biological resources, cultural resources, and hazardous materials. However, with mitigation, impacts to these three topical areas would be avoided or reduced to less than significant levels. No significant and unavoidable impact would occur under implementation of the proposed project.

## 7.2 METHODOLOGY

As discussed above, CEQA requires consideration of a reasonable range of alternatives that would avoid or lessen the significant and unavoidable impacts of the proposed project. However, CEQA specifies that alternatives need not be analyzed with the same degree of specificity as the proposed project. Rather, an EIR must provide sufficient information about the project alternatives to allow for meaningful evaluation, analysis, and comparison with the proposed project. An EIR must consider the alternatives and evaluate the relative merits of the project and the alternatives. To comply with this standard, EIR alternative analysis generally also identifies whether an alternative would result in lesser, similar, or greater impacts than the project, even if the project's impacts would be less than significant.

## 7.3 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR.

### 7.3.1 Alternative Development Areas

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines

## 7. Alternatives to the Proposed Project

Section 15126.6[f][2][A]). Key factors in evaluating the feasibility of potential offsite locations for EIR project alternatives include:

- If it is in the same jurisdiction.
- Whether development as proposed would require a General Plan Amendment.
- Whether the project applicant could reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). (CEQA Guidelines Section 15126.6[f][1])

The project applicant does not own or control other comparable property in the City, and the proposed project does not require a General Plan Amendment. Moreover, the proposed project does not result in any significant, unavoidable impacts. Impacts that would be potentially significant prior to mitigation include air quality, biological resources, cultural resources, hazards and hazardous materials, and public services (fire protection and emergency services). Air quality measures are associated with the project's construction phase. Biological resource mitigation is limited to measures to protect migratory birds (potentially nesting birds at construction), and cultural resources mitigation includes archaeological and paleontological monitoring. These mitigation measures are likely to be required at any comparable alternative site in the City. The potential hazard is the detection of perchloroethylene (PCE), listed as a carcinogen under Proposition 65, in soil vapor from under the site at concentrations above the California Human Health Screening Level for residential land use. This will be mitigated to less than significant by required structural improvements (subslab ventilation system, membrane barrier and trench dams and conduit seals). For public services, the mitigation is to provide funding for an ambulance and to provide a pro rata share of the cost of increasing firefighter staffing. This measure likely would be required for any project that would increase demand for fire services and prompt a need for increased staffing in the City.

It was determined, therefore, that it is unlikely that there is an alternative project site that could potentially meet the objectives of the proposed project and reduce significant impacts of the project as proposed.

### 7.4 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following two alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any the environmental effects of the project. These alternatives are analyzed in detail in the following sections.

- **No Project Alternative** (required by CEQA). This alternative assumes that the existing development on the site would remain, and leases would be extended/renewed to continue commercial operations at the site.
- **Reduced Height and Density Alternative.** Under this alternative, the project's building height would be kept under the 55 feet. As a result, the fifth floor of residential units (63 units) , 7,995 square-foot amenity deck, a top of parking structure would all be eliminated. The retail, park, and residential

## 7. Alternatives to the Proposed Project

amenities would remain the same as the proposed project. As shown in Table 7-1, this alternative would include a total of 287 residential units, and the maximum structure height would be 55 feet...

An EIR must identify an “environmentally superior” alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. The preferred proposed project is analyzed in detail in Chapter 5 of this DEIR. This chapter provides a comparative analysis, by impact, for each of the alternatives. A conclusion with respect to an environmentally superior alternative is provided in Section 7.7.

### 7.4.1 Alternatives Comparison

Table 7-1 provides a statistical comparison of the proposed project and the two alternatives analyzed in this section.

**Table 7-1 Project Alternative Statistical Summary**

		Proposed Project	No Project Alternative	Reduced Height & Density Alternative
Dwelling Units (Total)		350	—	287
Affordable Units		78	—	67
Commercial/Office Space (Square Feet)		7,500	58,277	7,500
Park Acreage		0.5 ac	—	0.5 ac
Population <sup>1</sup>		550	—	451
Employment <sup>2</sup>		16	94	16
Building Height	Height to roof of habitable areas	55 ft.	—	45 ft.
	Height of tallest architectural feature	77 ft. 9 in.	Single story (approx. average height 14 ft)	55 ft.

<sup>1</sup> 1.57 average household size calculated based on 2010 Census data for Newport Beach (household size for renters living in structures with more than 50 units)

<sup>2</sup> An employment density factor of one job per 617 square feet was used for retail and service jobs (Natelson 2001). Projected jobs under the proposed project and the No Development Incentives or Waivers Alternative add 4 full-time jobs related to residential uses (e.g., 12 commercial + 4 residential = 16 total jobs).

## 7.5 NO PROJECT ALTERNATIVE

The No Project alternative is required to discuss the existing conditions at the time the notice of preparation is published and evaluate what would reasonably be expected to occur in the foreseeable future if the proposed project is not approved (CEQA Guidelines, Section 15126.6(e)). Pursuant to CEQA, this alternative is also based on current plans and consistent with available infrastructure and community services.

The project site is developed with 58,277 square feet of commercial and office uses. The shopping center consists of eight single-story commercial/retail buildings, surface parking, and various landscape (e.g., ornamental trees, shrubs) and hardscape improvements. MacArthur Square is characterized as an aging,

## 7. Alternatives to the Proposed Project

underutilized, and underperforming shopping center that supports a variety of retail and commercial business, including restaurants and retail shops. Current tenants include several restaurants, a dance studio, retail stores, and professional and medical offices. Under this alternative, no demolition of existing buildings would occur. The project site would remain a commercial/office complex and would not feature housing units.

Although existing conditions are characterized by a high vacancy rate, this would not be anticipated to continue if the proposed project is not approved. With the certainty of extending the commercial uses, longer lease terms and property upgrades could be anticipated.

### 7.5.1 Aesthetics

Under the No Project alternative, no new development would occur on the project site. It is anticipated that the existing buildings would remain, and improved maintenance and upgrades would potentially take place over time. Landscaping and surface parking would be expected to remain the same. In comparison, the proposed project would completely change the character of the site, introducing residential, retail, and park uses, and substantially increase the massing/scale of development on the property. Although aesthetic impacts are inherently subjective, the proposed project would introduce new buildings, more landscaping, and non-parking-lot open space. Therefore, it is concluded that the aesthetics impact for the No Project alternative (existing aging, parking-oriented commercial center) would be greater than the proposed project. As with the proposed project, aesthetic impacts would be considered less than significant.

### 7.5.2 Air Quality

Under this alternative, no new development would occur, and no construction or demolition activities would be required. While there may be some interior remodeling for new tenants, it is anticipated that this type of activity would generate minimal construction emissions as it would not require use of heavy off-road construction equipment and intensive construction processes. Thus, regional and localized construction-related emissions would be substantially reduced under this alternative compared to the proposed project. Additionally, the proposed project's construction-related regional emissions impacts requiring mitigation would be eliminated under this alternative. Construction-related air quality impacts, however, are less than significant for the proposed project upon implementation of required regulatory measures.

The existing commercial development is currently not fully occupied as approximately only 18,160 square feet of the existing 58,277 square feet of commercial space is occupied by various commercial and restaurant businesses. This represents only about a third of the available commercial space currently being utilized. As shown in Table 7-2, *Maximum Daily Regional Operational Emissions: Proposed Project vs. No Project Alternative*, assuming full occupancy under the No Project alternative and the same proportion of land uses as the current uses, it is anticipated that the existing development would generate about three times the emissions compared to the existing conditions. When compared to the proposed project, the No Project alternative would generate higher maximum daily NO<sub>x</sub> emissions, lower VOC and CO emissions, and similar amounts of SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. Based on the existing uses, it is anticipated that the No Project alternative would generate more average daily vehicle trips compared to the proposed project and would thus generate

## 7. Alternatives to the Proposed Project

higher mobile-source emissions of NO<sub>x</sub>, VOC, and CO. As shown in the table, the No Project alternative would not generate emissions that exceed the South Coast Air Quality Management District (SCAQMD) regional emissions thresholds. In addition, it is also anticipated that this alternative would not generate localized emissions that would exceed the SCAQMD localized significance thresholds. Thus, the No Project alternative would also result in less than significant regional and localized operational air quality impacts. Overall, this alternative would be environmentally superior to the proposed project with regard to air quality impacts due to the substantial reduction in construction-related emissions.

**Table 7-2 Maximum Daily Regional Operational Emissions: Proposed Project vs. No Project Alternative**

	Criteria Air Pollutants (lbs/day) <sup>1</sup>					
	ROG (VOC)	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Existing Conditions</b>						
Total	2	7	16	<1	5	1
<b>No Project Alternative (Full Occupancy)<sup>2</sup></b>						
Total	7	21	51	<1	15	4
Net Change	5	14	35	<1	10	3
SCAQMD Threshold	55	55	550	150	150	55
<b>Exceeds Threshold</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Proposed Project</b>						
Total	14	13	73	<1	16	5
Net Change Compared to No Project Alternative	7	-8	22	<1	1	1
SCAQMD Threshold	55	55	550	150	150	55
<b>Exceeds Threshold</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod, Version 2016.3.2.  
<sup>1</sup> Highest winter or summer. Emissions totals may not equal 100 percent due to rounding.  
<sup>2</sup> Assumes emissions are 3x the amount of the Existing Conditions emissions totals. No Project Alternative (Full Occupancy) may not appear to be 3x the Existing Conditions emissions due to rounding.

### 7.5.3 Biological Impacts

The No Project alternative would not result in redevelopment of the project site, and potential impacts to biological resources (i.e., migratory bird nesting habitat in onsite ornamental trees) would be eliminated. No impact would occur under this alternative, and impacts would be reduced compared to the proposed project, which requires mitigation to reduce impacts to less than significant.

### 7.5.4 Cultural Resources

Under this alternative, no demolition, grading, or redevelopment activities would occur on the project site. Accordingly, this alternative would not result in the potential to encounter paleontological and archaeological resources during grading activities. Since no earthmoving activities would occur, there would be no potential to damage cultural resources, and impacts would be reduced compared to the proposed project.



## 7. Alternatives to the Proposed Project

### 7.5.5 Geology and Soils

No new construction activities, including demolition and grading, would occur under the No Project alternative. This alternative would not involve any grading or excavation that could cause unstable subsurface geologic conditions or erosion impacts. However, seismic risks associated with the older buildings that were constructed under older and less conservative building code requirements would remain.

The No Project alternative would not introduce new, permanent residents to the project site that could be exposed to seismic ground shaking or other geologic hazards. Overall, therefore, geologic and soils impacts, would be reduced relative to the proposed project. These impacts would be less than significant without mitigation for both the No Project and proposed project (with regulatory compliance).

### 7.5.6 Greenhouse Gas Emissions

Under the No Project alternative, the existing development would remain, and no new development would occur. While some interior modeling might occur for new tenants, it is anticipated that these activities would not require use off-road construction equipment and intensive construction processes. Thus, construction-related GHG emissions under this alternative would be minimal and substantially reduced compared to the proposed project.

Regarding operation-phase GHG emissions, as discussed under the air quality discussion under this alternative, only about a third of the existing commercial space is currently occupied. Full occupancy of the existing development under the No Project alternative would result in about three times the emissions currently generated by the existing uses onsite. As shown in Table 7-3, *GHG Emissions: Proposed Project vs. No Project Alternative*, the No Project alternative would generate slightly less total and net annual GHG emissions compared to the proposed project. While the proposed project would result in the development of newer more energy efficient buildings, it would result in higher total building square footage compared to the existing commercial development.<sup>1</sup> Thus, it is anticipated that this alternative and the proposed project would result in comparable emissions from energy usage.<sup>2</sup> Overall, the primary difference in emissions between this alternative and the proposed project is attributed to area and mobile-source emissions. Based on the existing uses, it is anticipated that full occupancy under the No Project alternative would generate more average daily vehicle trips and higher mobile-source emissions than the proposed project. . However, similar to the proposed project, this alternative would also result in less than significant GHG emissions impacts.

---

<sup>1</sup> Development of the proposed residential/mixed-use building and the parking structure would result in approximately 726,464 building square feet compared to the existing 58,277 building square feet.

<sup>2</sup> The existing conditions generate 388 MTCO<sub>2</sub>e/yr of energy sector emissions. The No Project alternative is assumed to result in full occupancy of the existing development and would be three times the size in terms of occupied space compared to the existing conditions. Thus, it would yield similar annual energy sector emissions to the 1,253 MTCO<sub>2</sub>e/yr that would be generated under the proposed project.

## 7. Alternatives to the Proposed Project

**Table 7-3 GHG Emissions: Proposed Project vs. No Project Alternative**

Source	GHG Emissions	
	MTCO <sub>2</sub> e Per Year	
<b>Existing Uses<sup>1</sup></b>		
Total	1,246	
<b>No Project Alternative (Full Occupancy)<sup>2</sup></b>		
Total	3,999	
Net Change	2,753	
Proposed SCAQMD Bright-Line Threshold	3,000 MTCO <sub>2</sub> e	
<b>Exceeds Threshold?</b>	<b>No</b>	
<b>Proposed Project<sup>3</sup></b>		
Total	3,837	
Net Change Compared to No Project Alternative	-162	
Proposed SCAQMD Bright-Line Threshold	3,000 MTCO <sub>2</sub> e	
<b>Exceeds Threshold?</b>	<b>No</b>	

Source: CalEEMod, Version 2016.3.2.

Notes: Totals may not equal 100 percent due to rounding. MTCO<sub>2</sub>e = metric tons of carbon dioxide–equivalent emissions.

<sup>1</sup> Based on year 2017 emission rates. Utilizes the CalEEMod historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.<sup>3</sup>

<sup>2</sup> Based on year 2022 emission rates. Utilizes the CalEEMod historical energy rates, which are based on the 2005 Building Energy Efficiency Standards

<sup>3</sup> Based on year 2022 emission rates. Assumes the proposed buildings would meet the 2016 Building Energy Efficiency Standards. Modeling also includes applicable water efficiency improvements required under CALGreen.

Construction emissions are amortized over a 30-year project lifetime per recommended SCAQMD methodology (SCAQMD 2009).

Regarding consistency with the California Air Resources Board’s Scoping Plan, this alternative would not be as consistent as the proposed project because the existing buildings would remain and not be replaced with more energy efficient buildings. However, mobile source emissions associated with this alternative would still be in compliance with statewide regulations in controlling vehicle emissions. In terms of consistency with the Southern California Association of Governments’ Regional Transportation Plan / Sustainable Communities Strategy, because this alternative would retain the existing commercial uses rather than develop the residential and commercial uses as proposed, this alternative would be less effective than the proposed project in promoting alternative transportation modes such as walking, biking, and public transit. Moreover, the No Project alternative would not provide improvements designed to encourage pedestrian activity, as included in the proposed project. Overall, the GHG impact would be considered similar for the No Project alternative and the proposed project.

### 7.5.7 Hazards and Hazardous Materials

Under this alternative, no demolition or construction activities would occur on the project site. The potential for asbestos-containing materials and lead-based paint to be released during building demolition under the proposed project would be eliminated. Any existing hazardous emissions or uses would remain and would be required to continue complying with existing state and local regulations. Because no residential uses would be

<sup>3</sup> Because it is generally assumed that buildings built in later years are more energy efficient than buildings built in earlier years, use of the energy rates based on the 2005 Standard compared to earlier year standards would yield less total energy use. However, use of the 2005 Standard yields a more conservative result as it results in a larger net increase when netting out the existing land use emissions from the project emissions.

## 7. Alternatives to the Proposed Project

introduced to the site, implementation of Mitigation Measure 5.7-2—related to the presence of perchloroethylene (PCE) in onsite soils—would not be required. Therefore, impacts of this alternative would be less than significant and would be reduced compared to the proposed project.

### 7.5.8 Hydrology and Water Quality

Existing water quality conditions, groundwater supplies, drainage patterns, and runoff amounts would not change under the No Project alternative. This alternative would not introduce new sources of water pollutants to the project area. However, this alternative would not include improvements associated with new low-impact development, source control, site design, and treatment control best management practices (BMPs) to minimize runoff and water pollution. These BMPs are required measures that would occur under the proposed project and have a beneficial impact on stormwater quality. Overall, hydrology and water quality impacts would be slightly greater under this alternative but, as with the proposed project, would be less than significant.

### 7.5.9 Land Use and Planning

Like the proposed project, the No Project alternative would not require a General Plan amendment. The project site's existing commercial office uses are allowed per the site's General Plan designation (MU-H2, Mixed-Use District Horizontal-2) and zoning (General Commercial Site 6 of PC-11, Newport Place Planned Community). The No Project alternative, however, would not be as effective in achieving the General Plan's overall long-term vision for the Airport Area, which is designed to spur redevelopment of underperforming sites in order to create a mixed-use district where housing is located near jobs and services. Accordingly, land use impacts would be slightly greater than under the proposed project but would remain less than significant. As under the proposed project, the No Project alternative would not physically divide a community or create inconsistency with an adopted habitat conservation plan.

### 7.5.10 Noise

Under the No Project alternative, existing commercial office uses on the project site would continue indefinitely. Because no redevelopment would occur, no construction-related noise or vibration would occur. Therefore, construction-related noise impacts would be less than under the proposed project. As discussed in Section 5.10, *Noise*, construction-related noise impacts of the proposed project would be less than significant.

Operation of the No Project alternative would not introduce new stationary or mobile sources of noise to the project site, such as recreational noise. Since full tenant occupancy is assumed for this alternative, operational traffic would be increased in comparison to the proposed project. The No Project alternative has the potential to generate 1,033 more daily trips than the proposed project (3,359 daily trips in comparison to 2,326 for the proposed project). This increase, however, would result in a nominal increase in traffic noise. Overall, the No Project alternative would reduce noise impacts in comparison to the proposed project. However, as discussed in Section 5.10 of this DEIR, operation-related noise impacts of the proposed project would be less than significant.

## 7. Alternatives to the Proposed Project

### 7.5.11 Population and Housing

The No Project alternative would not introduce new residents to the project site, and therefore would not directly impact community population. However, this alternative would not help improve the area's jobs-housing balance or provide affordable housing units, which are stated goals of the City (see Sections 5.9, *Land Use and Planning*, and 5.11, *Population and Housing*). Like the proposed project, the No Project alternative would not displace housing or people. Under both scenarios, impacts to population and housing would be less than significant. Since the No Project alternative would not achieve some of the beneficial impacts of the proposed project, population and housing impacts of the No Project alternative are considered greater than the proposed project.

### 7.5.12 Public Services

Under the No Project alternative, the public service demand would not change. The existing development does not generate school and library service demand, and commercial use demand for other public services is typically lower for commercial uses than residential uses. The No Project alternative demand for fire and police services would be substantially less than for the proposed project, which includes the introduction of 350 residential units and requires mitigation. Public service impacts would be less than for the proposed project. Impacts for the proposed project, however, are less than significant with mitigation.

### 7.5.13 Recreation

Under this alternative, there would some increase in demand for recreational facilities or services from increased employee base, but that increase would be much less than the proposed project. This alternative would not provide the 0.5-acre public park and private recreational amenities that would be provided by the proposed project. As discussed in Section 5.13, *Recreation*, the City has sufficient parkland to meet project demand with the project's dedication of land and improvements for a 0.5-acre public park and considering the private recreational amenities provided as part of the project. Anticipated public park amenities provided by the project include a fenced dog park, tot lot, central dining terrace with group shade structure, games terrace with outdoor ping-pong and bocce court, multipurpose lawn area, and fenced pickleball court. Although the No Project alternative would not generate a large new demand for parks, it would not provide the recreational benefits planned for the proposed project. In comparison to the proposed project, therefore, the No Project alternative would be considered to have a slightly greater impact on recreation. Recreation impacts for both the No Project Alternative and proposed project are less than significant without mitigation.

### 7.5.14 Transportation and Traffic

This alternative would retain the existing land uses onsite. As shown in Table 5.14-5, *Project Trip Generation (CEQA)*, in Section 5.14 of this DEIR, the existing land uses generate approximately 1,077 fewer trips than the proposed project (1,249 daily trips in comparison to 2,326 for the proposed project). However, the existing building has vacancies and could be fully occupied without discretionary approvals. Compared to the proposed project, the No Project alternative has the potential to generate 1,033 more daily trips (3,359 daily trips in comparison to 2,326 for the proposed project). The alternative would worsen traffic at study area

## 7. Alternatives to the Proposed Project

intersections (see Section 5.14, *Transportation and Traffic*) compared to the proposed project and has the potential to result in significant impacts at the following intersections and roadway segments, forecast to operate at LOS D, E and F:

### Intersections

- 1. MacArthur/Campus (LOS E during the PM peak hour)
- 13. MacArthur/Jamboree (LOS D during the PM peak hour)
- 18. MacArthur/I-405 (LOS D during the AM peak hour under Caltrans analysis)
- 20. MacArthur/Michelson (LOS F during the PM peak hour)

### Roadway Segments

- MacArthur Blvd between I-405 to Michelson (LOS D)

Because this alternative would retain the existing commercial office uses rather than develop the residential and commercial uses as proposed, this alternative would be less effective than the proposed project in promoting alternative transportation modes such as walking, biking, and public transit. Moreover, the No Project alternative would not provide improvements designed to encourage pedestrian activity that are included in the proposed project.

Overall, transportation and traffic impacts would be worsened compared to the proposed project and may result in significant impacts. The traffic impacts of this alternative would, therefore, be greater than for the proposed project and potentially significant.

### 7.5.15 Tribal Cultural Resources

Under this alternative no ground disturbances would occur. There would be no potential for tribal cultural resources impacts. Tribal cultural resources impacts of this alternative would be reduced compared to the proposed project. However, tribal cultural resources are not a significant and unavoidable impact of the proposed project.

### 7.5.16 Utilities and Service Systems

The existing commercial development is currently not fully occupied because it is being held open for redevelopment—only about 18,160 square feet of the 58,277 square feet of commercial space is occupied by various commercial and restaurant businesses. The No Project alternative assumes full occupancy and the same proportion of land uses as the current uses. Table 7-4, *Service and Utility Demand: Proposed Project vs. No Project Alternative*, shows the anticipated increase in wastewater and solid waste generation and in water, electricity, and gas consumption due to full occupancy. It is anticipated that the existing infrastructure could serve the development at full occupancy because it was designed to do so.

## 7. Alternatives to the Proposed Project

**Table 7-4 Service and Utility Demand: Proposed Project vs. No Project Alternative**

	Wastewater (gpd) <sup>3</sup>	Water (gpd) <sup>4</sup>	Solid Waste (pounds per day) <sup>5</sup>	Electricity (kWh/yr) <sup>6</sup>	Gas (kBTU/yr) <sup>6</sup>
<b>Existing Conditions<sup>1</sup></b>					
Total	454	1,090	109	710,805	2,984,775
<b>No Project Alternative (Full Occupancy)<sup>2</sup></b>					
Total	1,457	3,497	350	2,132,415 <sup>7</sup>	8,954,324 <sup>7</sup>
Net Change (No Project and Existing Condition)	1,003	2,407	241	1,421,610	5,969,549
<b>Proposed Project</b>					
Total	85,938	176,650	1,928	3,159,039	4,529,250
Net Change (Proposed Project and No Project Condition)	84,481	173,153	1,578	1,026,624	-4,425,074

Notes: gpd = gallons per day; kWh = kilowatt hours; kBTU = 1,000 British thermal units

<sup>1</sup> Assumes 18,163 sf of existing commercial space is occupied.

<sup>2</sup> Assumes 58,277 sf is occupied.

<sup>3</sup> Generation rate of 25gpd/1000sf used for commercial spaces, and 245 gpd/du for residences, per Appendix K.2.

<sup>4</sup> Generation rate of 60gpd/1000sf used for commercial/office spaces, 220 gpd/1000 sf for retail/commercial spaces, 3,400 gpd/acre for the park, and 500 gpd/du for residences, per Appendix K.2.

<sup>5</sup> Generation rate of 0.006 pounds/sf per day used for commercial spaces, 0.018 pounds/sf per day for restaurants, and 5.31 pounds/du per day for residences, per CalRecycle 2018.

<sup>6</sup> Generation rates shown in Table 9.1 and Table 9.2 of this EIR.

<sup>7</sup> Assumes consumption for the No Project scenario is 3x the amount of the Existing Conditions consumption.

Due to the increase in land use intensity under the proposed project, upgrades to existing utilities and service systems would be required, such as upgrading water, wastewater, and storm drain pipes and fixtures to tie into off-site connections. The proposed project would also increase demand for solid waste and electricity services. Relative to the No Project alternative, the proposed project would reduce the demand for natural gas. This is due to the high demand factor for restaurants and the square footage of restaurant uses assumed under full occupancy of the existing commercial center. As shown in Table 7-4, the anticipated the No Project alternative would reduce impacts to utility services, including water, wastewater, storm drains, solid waste, and electricity compared to the proposed project. Overall service and utility impacts would be less for this alternative.

### 7.5.17 Conclusion

#### 7.5.17.1 ABILITY TO REDUCE ENVIRONMENTAL IMPACTS

As summarized in Table 7-6, *Summary of Proposed Project and Alternative*, the No Project alternative would lessen environmental impacts in the areas of air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, public services, tribal cultural resources, and utilities and service systems. Compared to the proposed project, this alternative would have greater impacts related to aesthetics, hydrology and water quality, land use and planning, population and housing, and recreation. Overall, the No Project alternative would reduce impacts for nine environmental categories and increase impacts for six categories. Assuming full occupancy for the existing commercial buildings under the No Project alternative, this alternative could introduce a new significant impact for traffic. The inconsistency



## 7. Alternatives to the Proposed Project

with the goals of the General Plan vision for this area is an important land use consideration (impact greater than proposed project). Overall, the No Project alternative would result in a similar level of environmental impacts, but very different impacts. It would not be considered environmentally superior.

### 7.5.17.2 ABILITY TO ACHIEVE PROJECT OBJECTIVES

The No Project alternative would prevent redevelopment of the project site. Therefore, as shown in Table 7-7 at the end of this chapter, none of the project objectives would be achieved under this alternative. The No Project Alternative would not provide any of the project benefits that would occur with implementation of the proposed project, including enhancement of the site's character and design, dedication of publicly-accessible park space, sustainable development improvements (such as low-impact development, source control, site design, and treatment control best management practices that would improve drainage and water quality); economic revitalization, and affordable housing.

## 7.6 REDUCED HEIGHT AND DENSITY ALTERNATIVE

Under this alternative, the project's building height would be kept under 55 feet. As a result, the fifth floor of residential units (63 units), 7,995 square foot amenity deck, and top of parking structure would all be eliminated. The retail, park, and residential amenities would remain the same as the proposed project. As shown in Table 7-1, this alternative would include a total of 287 residential units, and the maximum structure height would be 55 feet.

Since the park acreage and layout would remain the same, the net acreage for the mixed use development (5.19 acres) would be the same as the proposed project. The number of affordable housing units, 78, would also be calculated in the same way as the project. These units are calculated as 30 percent of the base units for the site (5.19 acres x 50 units per acre, equals 259 base units). This alternative, like the proposed project, would include 7,500 square feet of retail/restaurant uses.

Since 287 units would exceed the base units of 259, this alternative would also rely on density bonus units (up to 35 percent of the base units). It would not, however, be using the full 91 units available through the density bonus (only 28 units would be density bonus units).

### 7.6.1 Aesthetics

Impacts associated with this alternative would be similar to those under the proposed project because it would result in a similar development footprint and would require compliance with the same plans, policies, and development standards implemented by the City of Newport Beach. Under both scenarios, the project site's existing low-scaled commercial center, which is visually dominated by surface parking, would be redeveloped to feature a dense, urban-scaled mixed-use building. For this reason, impacts to the surrounding visual character of the Airport Area would be similar as under the proposed project. This alternative would only have four stories, in comparison to the five stories under the proposed project. This would reduce the visual bulk of the proposed building. The proposed park and amenities would be the same as the proposed project, and lighting and landscaping improvements would be similar. Therefore, impacts would be less than significant, similar to the proposed project.



## 7. Alternatives to the Proposed Project

### 7.6.2 Air Quality

The Reduced Height and Density alternative would involve construction and operation of 63 fewer housing units than the proposed project. Because the building footprint and construction schedule would be largely the same as under the proposed project, construction-related air quality impacts would be expected to be substantially similar to those generated by the proposed project. However, the 18 percent reduction in the number of housing units would be expected to have a roughly proportional reduction in area sources (e.g., paints, consumer cleaning products, and fireplaces), energy usage (i.e., natural gas used for cooking), and resident vehicle trips generated when compared to the proposed project. Thus, it is assumed that the incremental increase in criteria air pollutant emissions generated by this alternative would be slightly less than the proposed project. However, operational phase air emissions of the proposed project were determined to be less than significant. Therefore, the incremental increase in emissions under this alternative would remain less than the SCAQMD thresholds. Overall, air quality impacts for this alternative would be slightly reduced in comparison to the proposed project.

### 7.6.3 Biological Impacts

This alternative would result in similar impacts to biological resources as the proposed project (less than significant after mitigation) since the development area would be the same. Because the project site would be entirely redeveloped under both scenarios, this alternative's reduction in development intensity would not reduce impacts related to removal and replacement of existing trees. As with the proposed project, impacts related to potential loss of migratory bird nesting habitat would be mitigated to less than significant upon implementation of Mitigation Measure BIO-1.

### 7.6.4 Cultural Resources

Implementation of this alternative would cover the same development area and would have the same potential for discovery of cultural resources during grading and excavation activities. Thus, impacts would be the same as the proposed project and be reduced to less than significant upon implementation of Mitigation Measures 5.4-1 and 5.4-2.

### 7.6.5 Geology and Soils

Under this alternative, like the proposed project, existing buildings would be removed and replaced with a mixed use building that would be required to comply with the most recent building and seismic codes and regulations. Geology and soils impacts of this alternative would be less than significant, similar to the proposed project.

### 7.6.6 Greenhouse Gas Emissions

The Reduced Height and Density alternative would reduce the number of housing units built on the project site from 350 units under the proposed project to 287 units. This would equate to an 18 percent reduction in dwelling units and a roughly proportional reduction in vehicle trips generated, building energy usage (i.e., electricity and natural gas), area sources, waste demand, wastewater generation, and solid waste generation

## 7. Alternatives to the Proposed Project

compared to the proposed project. However, because the building footprint, construction processes, and construction schedule would be largely the same as under the proposed project, the amount of construction-related GHG emissions generated would be similar to the proposed project. Overall, this alternative would result in a reduction in GHG emissions compared to the proposed project. As under the proposed project, this alternative would also be expected to generate annual net GHG emissions below the SCAQMD bright-line screening threshold, and GHG emission impacts would be less than significant. As with the proposed project, this alternative would be consistent with adopted plans to reduce GHG emissions. Overall, this alternative would reduce impacts to GHG impacts relative to the proposed project

### 7.6.7 Hazards and Hazardous Materials

Similar to the proposed project, buildout of this alternative would involve the use of hazardous materials during construction and could expose construction workers to hazardous materials during demolition from asbestos-containing materials or grading from contaminated soils. However, construction materials such as fuels, paints, and solvents would be used in limited quantities and would not pose a significant safety hazard. Any remediation and or demolition would be required to comply with the appropriate state standards, guidelines, and responsible agencies.

Similar to the proposed project, this alternative would introduce permanent residents to the project site. Due to the onsite presence of PCE at concentrations above the California Human Health Screening Level for residential land use, this alternative would also require implementation of Mitigation Measure 5.7-2. Similar to the proposed project, project operations under this alternative would still be subject to the regulations and guidelines of federal, state, and local agencies for the use, handling, storage, and transport of hazardous materials. Impacts would be similar to those of the proposed project, and impacts under both scenarios would be less than significant.

### 7.6.8 Hydrology and Water Quality

The project site is already developed, and runoff is conveyed by surface streets or local storm drains to regional storm drainage facilities. Like the proposed project, this alternative is anticipated to reduce peak flow rates by implementing low-impact development features and providing a treatment/infiltration system that reduces runoff volumes conveyed to the drainage system. Therefore, it is anticipated that this alternative and the proposed project would have a beneficial impact on area hydrology and water quality at completion. Similar to the proposed project, implementation of this alternative would result in compliance with the National Pollutant Discharge Elimination System Construction General Permit requirements (see RR-HYD-1 and RR-HYD-2) and implementation of various BMPs to reduce water quality impacts. Therefore, hydrology and water quality impacts of this alternative would be similar to the proposed project and would be less than significant.

### 7.6.9 Land Use and Relevant Planning

This alternative would allow for a similar mix of land uses, only with less development intensity than the proposed project. As with the project, this alternative would include a concession of the development

## 7. Alternatives to the Proposed Project

standards related to the mix of affordable housing unit sizes. Also, similar to the proposed project, this alternative would be consistent with the goals and policies of the City of Newport Beach General Plan and would therefore result in less than significant impacts. Land use and planning impacts would be similar to those of the proposed project.

### 7.6.10 Noise

Reduction in building development intensity could slightly reduce the length of project-related construction noise impacts but would not affect peak construction noise volumes. Due to similar peak construction noise volumes and generally similar length of construction activities, construction-related noise impacts would be less than significant.

The reduction in vehicle trips would slightly reduce the operational traffic-related noise impacts. However, no significant operational-related noise impacts were identified for the proposed project. Noise impacts of this alternative would be reduced compared to the proposed project and would remain less than significant.

### 7.6.11 Population and Housing

As with the proposed project, the Reduced Height and Density alternative would provide 78 affordable housing units. The overall reduction in housing units under this proposal, approximately 18 percent (or 63 units), however, would accommodate approximately 99 fewer residents than the proposed project. Therefore, implementation of this alternative would induce a smaller growth in the City's population. However, as discussed in Section 5.11, *Population and Housing*, of this DEIR, the proposed project improves the Airport Area and City's jobs-housing balance. This alternative would do this to a lesser degree than the proposed project; therefore, the housing and population impact of this alternative is considered slightly greater than for the proposed project.

### 7.6.12 Public Services

Like the proposed project, this alternative would comply with the California Fire Code, and implementation of existing regulations and standard conditions would ensure that impacts related to fire service are not substantially different from those of the proposed project. Because the residential component of Reduced Height and Density alternative would accommodate approximately 100 fewer residents than the proposed project, this alternative would reduce demand for fire, police, school, and other public services relative to the proposed project. However, as with the proposed project, impacts to fire and emergency protection services would be significant without mitigation.

### 7.6.13 Recreation

Under the Reduced Height and Density alternative, the demands on existing recreational facilities would be slightly reduced due to the reduction in overall population (i.e., approximately 99 fewer residents). Under this alternative, a 0.5-acre parcel on the project site would still be improved and dedicated as a public park to the City. However, the proposed 7,995 square-foot amenity deck would be eliminated. Overall, impacts to parks

## 7. Alternatives to the Proposed Project

and recreational facilities would be reduced in comparison to the proposed project, and less than significant as with the proposed project.

### 7.6.14 Transportation and Traffic

The Reduced Height and Density alternative would involve construction and operation of 63 fewer housing units than the proposed project. Because the building footprint and construction schedule would be largely the same as under the proposed project, construction-related traffic would be expected to be substantially similar to that generated by the proposed project. However, the reduction of 63 housing units under this alternative would generate 343 fewer daily vehicle trips than the proposed project. Traffic impacts of the proposed project were determined to be less than significant. Therefore, the decrease in traffic generated by this alternative would also result in less than significant impacts. This alternative would generate fewer trips than the proposed project. The traffic impacts of this alternative would, therefore, be less than for the proposed project.

### 7.6.15 Tribal Cultural Resources

Similar to the proposed project, this alternative would replace existing buildings with new buildings and result in ground disturbances due to grading. Therefore, potential tribal cultural resources impacts would be similar to the proposed project and less than significant after mitigation.

### 7.6.16 Utilities and Service Systems

Because the residential component of the Reduced Height and Density alternative would accommodate 63 fewer dwelling units than the proposed project, this alternative would generate reduced demand for water, wastewater, solid waste, electricity, and gas services, as shown in Table 7-5.

**Table 7-5 Service and Utility Demand: Proposed Project vs. Reduced Height and Density Alternative**

	Wastewater (gpd) <sup>2</sup>	Water (gpd) <sup>3</sup>	Solid Waste (pounds per day) <sup>4</sup>	Electricity (kWh/yr) <sup>5</sup>	Gas (kBTU/yr) <sup>5</sup>
<b>Reduced Height and Density<sup>1</sup></b>					
Total	70,503	29,800	335	2,908,594 <sup>6</sup>	3,809,320 <sup>6</sup>
<b>Proposed Project</b>					
Total	85,938	176,650	1,928	3,159,039	4,529,250
Net Change (Reduced Height and Density and proposed project)	-15,435	-146,850	-1,593	-250,455	-719,930

Notes: gpd = gallons per day; kWh = kilowatt hours; kBTU = 1,000 British thermal units

<sup>1</sup> Assumes 287 dwelling units instead of 350 dwelling units.

<sup>2</sup> Generation rate of 25gpd/1000sf used for commercial spaces, and 245 gpd/du for residences, per Appendix K.2.

<sup>3</sup> Generation rate of 60gpd/1000sf used for commercial/office spaces, 220 gpd/1000 sf for retail/commercial spaces, 3,400 gpd/acre for the park, and 500 gpd/du for residences, per Appendix K.2.

<sup>4</sup> Generation rate of 0.006 pounds/sf per day used for commercial spaces, 0.018 pounds/sf per day for restaurants, and 5.31 pounds/du per day for residences, per CalRecycle 2018.

<sup>5</sup> Source: CalEEMod, version 2016.3.2.

<sup>6</sup> Assumes consumption for the Reduced Height and Density scenario is associated with an 18% reduction in residential gas and electricity consumption.

## 7. Alternatives to the Proposed Project

The Reduced Height and Density alternative would reduce impacts to utility services, including water, wastewater, storm drains, solid waste, natural gas, and electricity compared to the proposed project.

As with the proposed project, utility and service impacts would be less than significant.

### 7.6.17 Conclusion

#### 7.6.17.1 ABILITY TO REDUCE ENVIRONMENTAL IMPACTS

The Reduced Height and Density alternative would lessen environmental impacts in the areas of air quality, greenhouse gas emissions, noise (operational), public services, recreation, transportation and traffic, and utilities and service systems. Impacts would be very similar for aesthetics, biological and cultural resources, geology and soils, hazards, hydrology and water quality, and land use and planning. This alternative would increase impacts to population and housing (jobs-housing balance). As with the proposed project, all impacts would be mitigated to less than significant. Overall, impacts under this alternative would be reduced in comparison to the proposed project.

#### 7.6.17.2 ABILITY TO ACHIEVE PROJECT OBJECTIVES

The Reduced Height and Density alternative would represent a similar project as the proposed project, only with fewer housing units and less overall development intensity. Accordingly, as shown in Table 7-7, several of the project objectives would be achieved, but to a lesser extent. These includes objectives related to provision of housing, local jobs-housing balance, and onsite private recreation amenities. In addition, the Reduced Height and Density alternative would not allow for the provision of the 91 density bonus units allowed under both the City's zoning code and Government Code Section 65915 for the project. Instead, only 28 units associated with this alternative would be density bonus units.

## 7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 7-6 summarizes the environmental impacts of each alternative compared to the proposed project, and Table 7-7 summarizes each alternative's ability to achieve the project objectives.

## 7. Alternatives to the Proposed Project

**Table 7-6 Summary of Proposed Project and Alternatives Impacts**

Topic	Proposed Project	No Project Alternative	Reduced Height and Density Alternative
Aesthetics	LTS	+	=
Air Quality			
<i>Construction</i>	LTS	-	-
<i>Operation</i>	LTS	-	-
Biological Resources	LTS/M	-	=
Cultural Resources	LTS/M	-	=
Geology and Soils	LTS	-	=
Greenhouse Gas Emissions	LTS	-	-
Hazards and Hazardous Materials	LTS/M	-	=
Hydrology and Water Quality	LTS	+	=
Land Use and Planning	LTS	+	=
Noise			
<i>Construction</i>	LTS	-	=
<i>Operation</i>	LTS	-	-
Population and Housing	LTS	+	+
Public Services	LTS	-	=
Recreation	LTS	-	-
Transportation and Traffic	LTS	-	-
Tribal Cultural Resources	LTS	-	=
Utilities and Service Systems	LTS	-	-

Notes: LTS = Less than Significant; LTS/M = Less than Significant with Mitigation Incorporated; S/U = Significant and Unavoidable  
 (-) The alternative would result in less of an impact than the proposed project.  
 (+) The alternative would result in greater impacts than the proposed project.  
 (=) The alternative would result in the same/similar impacts as the proposed project.

**Table 7-7 Ability of Each Alternative to Meet the Project Objectives**

Objective	Proposed Project	No Project Alternative	Reduced Height and Density Alternative
1. To develop a multiunit mixed-use project that includes affordable housing units that will serve the various populations of the City of Newport Beach.	Yes	No	Yes
2. To develop a mixed-use project that is consistent with and furthers the policies of the General Plan for the Airport Area without the need for a General Plan amendment.	Yes	No	Yes
3. To locate additional housing within an area identified by the General Plan as an opportunity area for future housing.	Yes	No	Yes, but to a lesser degree than the proposed project
4. To develop a mixed-use project that contributes to a walkable and pedestrian-friendly community.	Yes	No	Yes
5. To generate temporary employment in the construction industry.	Yes	No	Yes

## 7. Alternatives to the Proposed Project

**Table 7-7 Ability of Each Alternative to Meet the Project Objectives**

Objective	Proposed Project	No Project Alternative	Reduced Height and Density Alternative
6. To improve the jobs-housing balance in Newport Beach and to provide new housing within close proximity to jobs and services.	Yes	No	Yes, but to a lesser degree than the proposed project
7. To provide beneficial site and area improvements, including extensive on-site private recreation amenities and the dedication of a public park to the City of Newport Beach.	Yes	No	Yes, but to a lesser degree than the proposed project
8. To develop a project that implements and is consistent with the intent of the Newport Place Planned Community Residential Overlay and that takes advantage of the Density Bonus allowed under both the City's zoning code and Government Code Section 65915.	Yes	No	Yes, but to a lesser degree than the proposed project

CEQA requires a lead agency to identify the “environmentally superior alternative”; in cases where the “No Project” alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. In this case, the No Project alternative would not be considered environmentally superior. The Reduced Height and Density alternative is identified as “environmentally superior” to the proposed project.

As shown in Table 7-6, the Reduced Height and Density alternative would reduce impacts associated with air quality, greenhouse gas emissions, noise, public services, recreation, transportation and traffic, and utilities and service systems. Note that none of these topic areas were identified as significant and unavoidable under implementation of the proposed project. With the exception of Population and Housing, the remaining impacts would generally be similar to those under the proposed project.

## 7.8 REFERENCES

California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

California Department of Finance (DOF). 2018, May 1. Report E-5: Population and Housing Estimates for Cities, Counties, and the State. January 1, 2011-2018, with 2010 Benchmark. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

California Department of Resources Recycling and Recovery (CalRecycle). 2018, January 18. Estimated Solid Waste Generation Rates. <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.



## 7. Alternatives to the Proposed Project

Natelson Company, The. 2001, October 31. Employment Density Study Summary Report.  
[http://www.scag.ca.gov/pdfs/Employment\\_Density\\_Study.pdf](http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf).

South Coast Air Quality Management District (SCAQMD). 2009, November 19. GHG Meeting 14 Main Presentation. Greenhouse Gases (GHG) CEQA Significance Threshold Working Group.  
[http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).

## 8. Impacts Found Not to Be Significant

---

California Public Resources Code Section 21003 (f) states: "...it is the policy of the state that...[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the State California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15126.2(a), which states that "[a]n EIR [Environmental Impact Report] shall identify and focus on the significant environmental impacts of the proposed project" and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment."

This chapter includes an environmental analysis and finding of no impact or less than significant impact for the topics precluded from detailed discussion in Chapter 5, *Environmental Analysis*, of this Draft EIR. Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the DEIR.

### 8.1 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

---

**A. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

---

**No Impact.** CEQA considers impacts to three categories of important farmland: Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. According to the California Department of Conservation Important Farmland Finder, there are no significant agricultural resources in Newport Beach (DOC 2016). The project site is also completely built out with buildings and paved parking. Therefore, development of the proposed project would have no impact on important farmlands nor convert any farmland to nonagricultural use.

---

**B. Conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?**

---

**No Impact.** The City of Newport Beach does not have any land designated or zoned for agricultural use or subject to a Williamson Act contract. Therefore, development in accordance with the proposed project would not conflict with any existing agricultural zoning or impact any Williamson Act lands.

## 8. Impacts Found Not to Be Significant

---

**C. 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))?**

---

**No Impact.** The City does not have any land designated or zoned for forest land, timberland, or timberland production. No impact would occur.

---

**D. Result in the loss of forest land or conversion of forest land to non-forest use?**

---

**No Impact.** See response to Section 8.1(C), above.

---

**E. 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?**

---

**No Impact.** See responses to Sections 8.1(A) through (C), above.

## 8.2 BIOLOGICAL RESOURCES

Would the project:

---

**A. Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**

---

**No Impact.** Sensitive biological resources are habitats or species that have been recognized by federal, state, and/or local agencies as being endangered, threatened, rare, or in decline throughout all or part of their historical distribution. Sensitive natural communities are communities that are considered rare in the region by regulatory agencies; known to provide habitat for sensitive animal or plant species; or known to be important wildlife corridors. Riparian habitats are those occurring along the banks of rivers and streams.

As shown in Figure 3-3a, *Aerial Photograph: Airport Area*, the project site is fully developed and in a highly urbanized area of the City and is surrounded by a mix of commercial and office development. The existing landscaping throughout the project site consists of nonnative ornamental landscaping that is common in urban landscapes. The project site does not contain habitat or grasslands that would represent an important source of foraging for raptors and other sensitive or protected species, and no natural biological resources or communities exist on, adjacent to, or near the site.

Additionally, there is no riparian habitat or other sensitive natural community currently onsite or in proximity of the project site. The nearest areas to the project site that are known to provide functional riparian habitat are the Upper Newport Bay in Newport Beach, over one mile south/southwest of the site, and San Joaquin Marsh in Irvine, approximately 0.85 mile east of the site.

## 8. Impacts Found Not to Be Significant

Furthermore, Figure NR1 (Biological Resources) of the Newport General Plan Natural Resource Element does not identify any important or sensitive biological resources on or in the vicinity of the project site. Similarly, Figure NR2 (Environmental Study Areas) of the Natural Resources Element does not identify the project site as being within an environmental study area.

Based on the preceding, the proposed project would not result in an impact (either directly or indirectly) on any species identified as a candidate, sensitive, or special status species, or on any riparian habitat or other sensitive natural community.

---

**B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**

---

**No Impact.** No impact would occur, as substantiated under Section 8.2(A), above.

---

**C. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.**

---

**No Impact.** The project site is in the plan area of the NCCP/HCP for the Central and Coastal Subregion of Orange County. The NCCP/HCP plan area spans approximately 208,000 acres, including 37,378 acres of reserves, and protects 39 covered species in 12 natural communities (CDFW 2017; COEMA 1996). However, the project site is fully developed and in a highly urbanized area of the City (see Figure 3-3a, *Aerial Photograph: Airport Area*), and does not support any sensitive habitat and/or species that are protected by the NCCP/HCP. The project site is in an area designated for urban development and is not in a reserve designated under the NCCP/HCP—there are no survey requirements for the site pursuant to the NCCP/HCP. The nearest such reserve to the project site is the Upper Newport Bay Nature Preserve, approximately one mile to the south/southwest.

Further, the City of Newport Beach General Plan Natural Resources Element and Local Coastal Plan designate 28 Environmental Study Areas (ESA), which may support species and habitats that are sensitive and rare within the region or may function as a migration corridor for wildlife. As shown in Figure NR2, Environmental Study Areas, of the Newport Beach General Plan Natural Resources Element, the project site is not located within a designated ESA. The nearest ESA is San Diego Creek, which is approximately one mile south/southwest of the site.

Based on the preceding, project development would not result in a conflict, either directly or indirectly, with the established NCCP/HCP or ESAs.

## 8. Impacts Found Not to Be Significant

### 8.3 MINERAL RESOURCES

Would the project:

---

**A. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.**

---

**No Impact.** Based on the California Geological Survey, areas known as mineral resource zones (MRZs) are classified according to the presence or absence of mineral resources. All of Newport Beach is zoned either MRZ-1, areas with no significant mineral deposits, or MRZ-3, areas containing mineral deposits of undetermined significance (DOC 1994). MRZ-2 areas are defined as areas where adequate information indicates significant mineral deposits are present or where it is judged that a high likelihood exists for their presence. The entire project site is zoned MRZ-3; therefore, no impacts to known significant mineral resources would occur.

---

**B. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.**

---

**No Impact.** See response to Section 8.3(A), above.

There are no regional, state, or locally important mineral resource recovery sites in the City of Newport Beach. Consequently, there would be no impact on mineral resource recovery sites.

### 8.4 GEOLOGY AND SOILS

Would the project:

---

**A. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.**

---

**No Impact:** Sewer mains are present in Martingale Way, Scott Drive, and Dove Street (Fusco 2017). The project would include installation of sewer laterals connecting to existing mains and would not use septic tanks. No adverse impact would occur.

### 8.5 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

---

**A. Interfere with an emergency responder or evacuation plan.**

---

**No Impact:** All four roadways surrounding the project site are local streets. The City's Emergency Operations Plan (EOP) mentions eight major egress routes from the City—seven surface streets and the 55 freeway. MacArthur Boulevard south of the Airport Area is identified as a tsunami evacuation route in the EOP.

## 8. Impacts Found Not to Be Significant

Traffic from the project would not interfere with emergency responder times or evacuation plans. Additionally, project construction would not block emergency evacuation routes, such as by construction staging or stockpiling soil or other materials. No adverse impact would occur.

---

### **B. Be a designated fire hazard zone and expose people or structures to wildfire danger.**

---

**No impact:** The project site and surrounding land are built out with urban land uses; no wildland vegetation that could fuel wildfires is present. The nearest Very High Fire Hazard Severity Zone to the project site mapped by the California Department of Forestry and Fire Protection is about 1.9 miles to the south (CAL FIRE 2011). No adverse impact would occur.

## 8.6 HYDROLOGY AND WATER QUALITY

Would the project:

---

### **A. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map and/or place within a 100-year flood hazard area structures which would impede or redirect flood flows.**

---

**No Impact:** The project site is in FEMA Flood Zone X (FEMA 2018), that is, it is outside of 100-year and 500-year flood zones. Project development would not place housing, or structures that would change flood flows, into 100-year flood zones, and no impact would occur.

---

### **B. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**

---

**No Impact:** The project site is not in a dam inundation area (Cal OES 2016) or subject to flooding due to levee failure (FEMA 2018), and no impact would occur.

---

### **C. Be subject to inundation by seiche, tsunami, or mudflow.**

---

**No Impact:** Tsunamis would inundate primarily low-lying areas of the city's coastline, as reflected on Figure S1, Coastal Hazards, of the General Plan Safety Element. The Newport Crossings site is approximately five miles from the Pacific Ocean and between 48 to 53 feet above mean sea level. According to the Safety Element, the site is not within a tsunami inundation hazard zone and is not susceptible to potential tsunamis and/or wave run up.

No major water-retaining structures are immediately uphill from the project site, as indicated in Figure S3, Flood Hazards, of the Safety Element. Therefore, potential flooding from a seismically induced seiche is considered unlikely.

The project site and surrounding land are fully developed on flat and nearly level ground. Therefore, the project site is not susceptible to mud or debris flows.

## 8. Impacts Found Not to Be Significant

### 8.7 LAND USE AND PLANNING

Would the project:

---

**A. Conflict with any applicable habitat conservation plan or natural community conservation plan.**

---

**No Impact:** The project site is in the plan area of the NCCP/HCP for the Central and Coastal Subregion of Orange County. The NCCP/HCP plan area spans approximately 208,000 acres, including 37,378 acres of reserves, and protects 39 covered species in 12 natural communities (CDFW 2017; COEMA 1996). However, the project site is fully developed and in a highly urbanized of the City (see Figure 3-3a, *Aerial Photograph: Airport Area*) and does not support any sensitive habitat and/or species that are protected by the NCCP/HCP. The project site is in an area designated for urban development and is not in a reserve designated under the NCCP/HCP—there are no survey requirements for the site pursuant to the NCCP/HCP. The nearest such reserve to the project site is the Upper Newport Bay Nature Preserve, approximately one mile to the south/southwest. Therefore, no conflict with the NCCP/HCP would occur, and no impact would occur.

### 8.8 POPULATION AND HOUSING

---

**A. Project implementation would not result in displacing people and/or housing.**

---

**No Impact:** The project site is the existing MacArthur Square shopping plaza. Therefore, development of the proposed project would not displace existing housing or residents nor necessitate the need to construction replacement housing elsewhere. In fact, the project introduces housing in the project area and would allow up to 350 units, of which 78 units would be available to low-income households. Thus, no impacts would occur

### 8.9 REFERENCES

California Department of Conservation (DOC). 2016, July. Orange County Important Farmland 2014. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/ora14.pdf>.

California Department of Forestry and Fire Protection (CAL FIRE). 2011, October. Very High Fire Hazard Severity Zones in LRA: Newport Beach. [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps/FHSZ/orange/c30\\_NewportBeach\\_vhfhsz.pdf](http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/orange/c30_NewportBeach_vhfhsz.pdf).

California Department of Fish and Wildlife (CDFW). 2017, October 26. Summary of Natural Community Conservation Plans (NCCPs). <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=15329&inline>.

California Office of Emergency Services (Cal OES). 2016, February 23. DVD. Dam Inundation Maps.



## 8. Impacts Found Not to Be Significant

County of Orange Environmental Management Agency (COEMA). 1996, July 17. Natural Community Conservation Plan & Habitat Conservation Plan: County of Orange, Central & Coastal Subregion, Parts I & II: NCCP/HCP.

———. 1994. Generalized Mineral Land Classification of Orange County, California, Aggregate Resources Only. [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR\\_94-15/OFR\\_94-15\\_Plate\\_1.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Plate_1.pdf).

Federal Emergency Management Agency (FEMA). 2018, February 6. Flood Map Service Center. <https://msc.fema.gov/portal>.

## 8. Impacts Found Not to Be Significant

*This page intentionally left blank.*

## 9. Other CEQA Considerations

---

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project (including planning, acquisition, development, and operation) be considered when evaluating the project's impact on the environment. Section 15126 also sets forth general content requirements for environmental impact reports (EIRs). This section identifies (1) significant irreversible environmental changes that would result from implementing the proposed project; (2) growth-inducing impacts of the proposed project; and (3) potential energy impacts of the proposed project.

### 9.1 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT

Section 15126.2(c) of the CEQA Guidelines requires that an EIR describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented.

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following are the significant irreversible changes that would be caused by the proposed project, should it be implemented:

- Project development would include construction activities that would entail the commitment of nonrenewable and/or slowly renewable energy resources, human resources, and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Future development would also require the use of natural gas and electricity, petroleum-based fuels, fossil fuels, and water. The commitment of resources required for project construction and operation would limit the availability of such resources for future generations or for other uses during the life of the project.
- An increased commitment of social services and public maintenance services (e.g., police, fire, schools, libraries, and sewer and water services) would also be required. The energy and social services commitments would be long-term obligations in view of the low likelihood of returning the land to its original condition once it has been developed.

## 9. Other CEQA Considerations

- An increase in project-related vehicle trips would accompany population growth due to project development. Over the long term, emissions associated with such vehicle trips would continue to contribute to the South Coast Air Basin's nonattainment designation for ozone (O<sub>3</sub>) and particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) and nonattainment for nitrogen dioxide (NO<sub>2</sub>) under the California Ambient Air Quality Standards, but as discussed in Section 5.2, *Air Quality*, the project's contribution to nonattainment of the applicable AAQS would be less than cumulatively considerable. Over the long term, it is anticipated that electric vehicle penetration would increase and that electricity used by electric vehicles would be supplied by sources that result in less emissions.
- Project development is a long-term, irreversible commitment of land in the City of Newport Beach.

Given the low likelihood that the developed land would revert to lower intensity uses or to its current form, the proposed project would generally commit future generations to these environmental changes.

### 9.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

## 9. Other CEQA Considerations

**Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?**

Project development would not involve construction or extension of major infrastructure. Project construction would involve installation of utility connections to existing facilities next to the site. The proposed project would be consistent with City of Newport Beach zoning and General Plan land use designations for the project site, and the project would not change existing land use regulations.

**Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?**

Project development is not expected to have substantial adverse indirect environmental impacts. The project site is in a built-out urban area developed with commercial, residential, industrial, and transportation uses. Portions of the Airport Area and the Irvine Business Complex, in the City of Irvine next to the Airport Area, have been redeveloped from industrial and commercial to mixed use and residential land uses in recent years, and further such redevelopments are planned. Thus, the addition of 350 condominium units and the net decrease of about 50,777 square feet of commercial uses would not have economic effects that could have significant indirect environmental impacts.

**Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?**

The project does not propose a precedent-setting action that could cause significant indirect environmental impacts. The proposed land uses would conform with existing City land use regulations for the project site.

### 9.3 ENERGY IMPACTS OF THE PROPOSED PROJECT

Section 21100(b)(3) of the California Environmental Quality Act (CEQA) requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing any inefficient, wasteful, and unnecessary consumption of energy. Although energy thresholds are not specified in Appendix G of the CEQA Guidelines, Appendix F of the CEQA Guidelines states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal include 1) decreasing overall per capita energy consumption; 2) decreasing reliance on fossil fuels such as coal, natural gas and oil; and 3) increasing reliance on renewable energy sources.

#### Thresholds of Significance

To address this issue, project-related energy impacts will be examined through analysis of the following questions:

- Would the project increase demand for energy that requires expanded supplies or the construction of new infrastructure or expansion of existing facilities, the construction of which could cause significant environmental effects?

## 9. Other CEQA Considerations

- Would the project result in an inefficient, wasteful, and unnecessary consumption of energy?

### Regulatory Background

#### *State*

#### ***Building Energy Conservation Standards***

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and are updated every three years, with the 2016 update now in effect (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the California Energy Commission (CEC) adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which will take effect on January 1, 2020.

The 2016 Standards improved upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2016 Standards, residential buildings are 28 percent more energy efficient and nonresidential buildings are 5 percent more energy efficient than under the 2013 Standards (CEC 2015a). Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California.

The 2019 standards improve upon the 2016 Standards. Under the 2019 Title 24 standards, residential buildings will be about 7 percent more energy efficient, and when the required rooftop solar is factored in for low-rise residential construction, residential buildings that meet 2019 Title 24 standards will use about 53 percent less energy than those built to meet current standards. Nonresidential buildings and non-low-rise residential buildings will use about 30 percent less energy due mainly to lighting upgrades. (CEC 2018).

#### ***Title 20, California Code of Regulations, Sections 1601 et seq.: Appliance Efficiency Regulations***

The 2012 Appliance Efficiency Regulations took effect on February 13, 2013. The regulations include standards for both federally and non-federally regulated appliances. The regulations were most recently updated in July 2018.

#### ***Title 24, Part 11, Green Building Standards***

CALGreen (California Code of Regulations, Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials

## 9. Other CEQA Considerations

and energy, and reduce environmental impact during and after construction. CALGreen contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2017).

### ***Electric Utility Industry Restructuring Act: Assembly Bill 1890 (1996)***

The California Public Utilities Commission regulates investor-owned electric power and natural gas utility companies in California. AB 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that were under the control of investor-owned utilities (e.g., Southern California Edison) were decoupled.

### ***Renewable Portfolio Standard***

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the Renewable Portfolio Standard—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Senate Bill 100 was signed into law September 2018 and increased the required Renewable Portfolio Standards. Under SB 100, the total kilowatt hours of energy sold by electricity retailers to their end-use customers must consist of at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045.

The regulatory background for the Renewable Portfolio Standard is described further in Section 5.6, *Greenhouse Gas Emissions*, of this DEIR.

## **Existing Conditions**

### ***Electricity***

Southern California Edison (SCE) provides electricity to the project site. SCE's service area spans much of southern California—from Orange and Riverside counties on the south to Santa Barbara County on the west to Mono County on the north (CEC 2015b). Total electricity consumption in SCE's service area was 106,080 gigawatt-hours (GWh) in 2015 and is forecast to increase to 118,803 GWh in 2026 for the mid-demand scenario (CEC 2017). One GWh is equivalent to one million kilowatt-hours. Sources of electricity sold by SCE in 2016 were:

- 28 percent renewable (solar, wind, and geothermal)
- 6 percent large hydroelectric
- 19 percent natural gas
- 6 percent nuclear
- 41 percent unspecified sources—that is, not traceable to specific sources (SCE 2017)



## 9. Other CEQA Considerations

### *Natural Gas*

The Southern California Gas Company (SCGC) provides natural gas to the project site. SCGC's service area spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest to part of Fresno County on the north to Riverside County and most of San Bernardino County on the east (CEC 2015c). Total natural gas supplies available to SCGC are forecast to remain constant at 3.875 billion cubic feet per day (bcfd) from 2015 through 2035. Total natural gas consumption in SoCalGas's service area is forecast to be 2.681 bcfd in 2016 and 2.382 bcfd in 2035 (CGEU 2016).

### **Regulatory Requirements**

RR USS-5      New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building and Energy Efficiency Standards were effective starting January 1, 2017. The Building Energy and Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero energy for residential buildings by 2020 and nonresidential buildings by 2030.

### **Environmental Impacts**

---

**Impact 9.3.1: Existing and/or proposed facilities would be able to accommodate project-generated utility demands, and project development would not require expanded energy supplies or construction of new or expanded facilities.**

---

### *Impact Analysis*

#### *Electricity*

Project operation is expected to use approximately 3.16 million kilowatt hours (kWh) annually, as shown in Table 9-1. This is a net increase of about 1,026,625 kWh per year from the existing shopping center, which uses about 710,805 kWh per year. Total electricity demand in SCE's service area is forecast to increase by approximately 12,700 GWh—or 12.7 billion kWh—between 2015 and 2026. SCE forecasts that it will have sufficient electricity supplies to meet demands in its service area, and the estimated net increase in electricity demand due to the project is within the forecast increase in SCE's electricity demands. Project development would not require SCE to obtain new or expanded electricity supplies, and impacts would be less than significant.

## 9. Other CEQA Considerations

**Table 9-1 Estimated Project Electricity Demands**

Land Use	Quantity	Electricity Demands, kWh/yr	
		Per unit/square foot <sup>1</sup>	Total
<b>Proposed Project<sup>2</sup></b>			
Apartments	350 units	3,975.30	1,391,360
Enclosed Parking Structure with Elevator	278,377 square feet	5.9	1,631,050
Retail	5,500 square feet	11.4	62,920
Restaurant (casual)	2,000 square feet	36.5	72,960
Parking Lot	2,140 square feet	0.4	749
		<b>Total</b>	<b>3,159,039</b>
<b>Existing Land Use<sup>3</sup></b>			
Retail	6,932 square feet	13.4	93,166
Parking Lot	184,800 square feet	0.9	161,855
Restaurant	11,231 square feet	40.6	455,754
		<b>Total</b>	<b>710,805</b>
<b>Net Increase</b>			
Not applicable	Not applicable	Not applicable	1,026,625

<sup>1</sup> Sources: CalEEMod Version 2016-3-2; Appendix D.

<sup>2</sup> Assumes the proposed buildings would meet the 2016 Building Energy Efficiency Standards.

<sup>3</sup> Utilizes the CalEEMod historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

### *Natural Gas*

Project operation is estimated to use about 4.53 million kBTU per year. The existing shopping center is estimated to use about 2,984,775kBTU annually, for a net increase of approximately 1.54 million kBTU per year (see Table 9-2). SCGC's residual supplies were forecast to be about 1.19 bcf/d in 2016 and 1.49 bcf/d in 2035; 1 bcf/d is equivalent to about 1.03 billion kBTU. SCGC forecasts that it will have sufficient natural gas supplies to meet project gas demands, and project development would not require SCGC to obtain new or expanded gas supplies. Impacts would be less than significant.

### *Renewable Energy*

Project development would not interfere with achievement of the 60 percent Renewable Portfolio Standard set forth in SB 100 for 2030 or the 100 percent standard for 2045. These goals apply to SCE and other electricity retailers. As electricity retailers reach these goals, emissions from end user electricity use will decrease from current emission estimates.

## 9. Other CEQA Considerations

**Table 9-2 Estimated Project Natural Gas Demands**

Land Use	Quantity	Natural Gas Demands, kBTU/yr	
		Per unit/square foot <sup>1</sup>	Total
<b>Proposed Project<sup>2</sup></b>			
Apartments	350 units	11,427	3,999,610
Retail	5,500 square feet	2	11,000
Restaurant (casual)	2,000 square feet	259	518,640
		<b>Total</b>	<b>4,529,250</b>
<b>Existing Land Use<sup>3</sup></b>			
Retail	6,932 square feet	2	14,627
Restaurant	11,231 square feet	264	2,970,148
		<b>Total</b>	<b>2,984,775</b>
<b>Net Increase</b>			
Not applicable	Not applicable	Not applicable	<b>1,544,476</b>

<sup>1</sup> Sources: CAPCOA 2017; CalEEMod Version 2016-3-2; Appendix D.  
<sup>2</sup> Assumes the proposed buildings would meet the 2016 Building Energy Efficiency Standards.  
<sup>3</sup> Utilizes the CalEEMod historical energy rates, which are based on the 2005 Building Energy Efficiency Standards.

### *Level of Significance Before Mitigation*

With implementation of RR USS-5, Impact 5.16-6 would be less than significant.

### *Mitigation Measures*

No mitigation measures are required.

### *Level of Significance After Mitigation*

Impacts would be less than significant.

---

### **Impact 9.3.2: The project would not result in an inefficient, wasteful, and unnecessary consumption of energy.**

---

Project design and operation would comply with state Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Project development would not cause inefficient, wasteful and unnecessary energy consumption, and no adverse impact would occur.

## 9. Other CEQA Considerations

### 9.4 REFERENCES

- California Air Pollution Control Officers Association (CAPCOA). 2017, October. California Emissions Estimator Model (CalEEMod) Version 2016-3-2 Appendix D.
- California Building Standards Commission (CBSC). 2017, January. Guide to the 2016 California Green Building Standards Code: Nonresidential. <https://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2016-FINAL.pdf>.
- California Energy Commission (CEC). 2015a, June. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. <https://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf>.
- . 2015b, February 24. California Electric Utility Service Areas. [http://www.energy.ca.gov/maps/serviceareas/Electric\\_Service\\_Areas\\_Detail.pdf](http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf).
- . 2015c, February 24. California Natural Gas Utility Service Areas. [http://www.energy.ca.gov/maps/serviceareas/natural\\_gas\\_service\\_areas.pdf](http://www.energy.ca.gov/maps/serviceareas/natural_gas_service_areas.pdf).
- . 2016a, January. California Energy Demand 2016-2026 Revised Forecast. Volume 2: Electricity Demand by Utility Planning Area. [http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207438\\_20160115T152222\\_California\\_Energy\\_Demand\\_20162026\\_Revised\\_Electricity\\_Demand\\_Fo.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207438_20160115T152222_California_Energy_Demand_20162026_Revised_Electricity_Demand_Fo.pdf).
- . 2016b, January. California Energy Demand 2016-2026 Revised Forecast. Volume 1: Statewide Electricity Demand and Energy Efficiency. [http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439\\_20160115T152221\\_California\\_Energy\\_Demand\\_20162026\\_Revised\\_Electricity\\_Forecast.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439_20160115T152221_California_Energy_Demand_20162026_Revised_Electricity_Forecast.pdf).
- . 2017, January. California Energy Demand Updated Forecast, 2017-2027. <https://efiling.energy.ca.gov/getdocument.aspx?tn=215745>.
- . 2018, May. 2019 Building Energy Efficiency Standards Frequently Asked Questions. [http://www.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).
- California Gas and Electric Utilities (CGEU). 2016, July. 2016 California Gas Report. <https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf>.
- Southern California Edison (SCE). 2017, September. Power Content Label. [http://www.energy.ca.gov/pcl/labels/2016\\_labels/Southern\\_California\\_Edison-Default.pdf](http://www.energy.ca.gov/pcl/labels/2016_labels/Southern_California_Edison-Default.pdf).

## 9. Other CEQA Considerations

*This page intentionally left blank.*

## 10. Organizations and Persons Consulted

---

### **City of Newport Beach**

#### *Municipal Operations Department*

Keith Hinckley, Refuse Superintendent  
Steffen Catron, Acting Director (water response)

#### *Newport Beach Public Library*

Tim Hetherton, Library Services Director

#### *Newport Beach Fire Department*

Chip Duncan, Fire Chief

#### *Newport Beach Police Department*

Tom Fishbacher, Lieutenant, Traffic Division

#### *Recreation and Senior Services Department*

Sean Levin, Deputy Director

### **Regional/Other**

#### *Orange County Sanitation District*

Rudy Davila, Engineer

#### *Santa Ana Unified School District*

Jeremy Cogan, Director of Facilities Planning

## 10. Organizations and Persons Consulted

*This page intentionally left blank.*



# 11. Qualifications of Persons Preparing EIR

---

## PLACEWORKS

### **JoAnn C. Hadfield**

Principal, Environmental Services

- BS University of Utah, Urban Planning
- BS Engineering Coursework Completion, California State University, San Diego
- Engineer-in-Training Certificate

### **Nicole Vermilion**

Associate Principal, Air Quality/GHG & Noise

- BA, Environmental Studies, and BS, Ecology and Evolutionary Biology, University of California, Santa Cruz
- MURP, University of California, Irvine

### **Jorge Estrada**

Senior Associate

- BS, Urban & Regional Planning, California Polytechnic State University, Pomona
- Certificate in Engineering/ Architectural AutoCAD, California State University, Long Beach

### **Josh Carman**

Senior Associate, Noise

- BA, Environmental Studies, University of California, Santa Cruz

### **Fernando Sotelo PE, PTP**

Senior Associate, Transportation

- California Traffic Engineer No. 2770
- Professional Transportation Planner
- MS, Civil Engineering, University of Southern California
- BS, Naval Engineering, University of Sao Paulo, Brazil

### **Michael Milroy**

Associate

- BS, Biological Sciences, California State University Long Beach
- MS, Interdisciplinary Studies/Neuroscience, California State University Long Beach

## 11. Qualifications of Persons Preparing EIR

**Dina El Chammas Gass**  
Project Engineer/Planner

- Master of Engineering, Environmental and Water Resources Engineer, American University of Beirut, Lebanon
- Bachelor of Engineering, Civil Engineering, American University of Beirut, Lebanon
- MA, East Asian Studies, Maharishi University of Management, Fairfield, Iowa

**Michael Paul**  
Project Planner

- BS, City and Regional Planning, Minor in Sustainable Environments, California Polytechnic State University, San Luis Obispo

## 12. Bibliography

---

- Airnav.com. Airport Information. 2018, September 6. <http://www.airnav.com/airports/>.
- Airport Land Use Commission (ALUC). 2008, April 17. Airport Environs Land Use Plan for John Wayne Airport. [http://www.ocair.com/commissions/aluc/docs/JWA\\_AELUP-April-17-2008.pdf](http://www.ocair.com/commissions/aluc/docs/JWA_AELUP-April-17-2008.pdf).
- Alameda, City of. 2018, February 1. Executive Summary of Memorandum Regarding California Housing Laws.
- Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines.
- BBG Assessment. 2017, February 7. Phase I Environmental Site Assessment Performed on: MacArthur Square [8 addresses specified on Corinthian Way, Martingale Way, Scott Drive, and Dove Street], Newport Beach, California 92660.
- California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.
- California Air Resources Board (CARB). 1998, April 22. The Report on Diesel Exhaust. <http://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm>.
- . 1999. Final Staff Report: Update to the Toxic Air Contaminant List.
- . 2007, November. “1990–2004 Inventory by Economic Sector.” 1990 to 2004 Inventory Data and Documentation. <https://www.arb.ca.gov/cc/inventory/1990level/1990data.htm>.
- . 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.
- . 2010, August. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.
- . 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. <http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.
- . 2017, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.

## 12. Bibliography

- . 2017, June 6. 2017 Edition California Greenhouse Gas Inventory for 2000-2015: By Category as Defined in the 2008 Scoping Plan. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.
- . 2017, June 6. California Greenhouse Emissions for 2000 to 2015 – Trends of Emissions and Other Indicators. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.
- . 2017, November. California’s 2017 Climate Change Scoping Plan: The Strategy for Achieving California’s 2030 Greenhouse Gas Target. [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_pp\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf).
- . 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. [https://www.arb.ca.gov/cc/sb375/sb375\\_target\\_update\\_final\\_staff\\_report\\_feb2018.pdf](https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf).
- California Air Resources Board (CARB). 2013, October 23. Proposed 2013 Amendments to Area Designations for State Ambient Air Quality Standards. <http://www.arb.ca.gov/regact/2013/area13/area13isor.pdf>.
- . 2016, May 4. Ambient Air Quality Standards. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.
- . 2017, December 19. Area Designations Maps/State and National. <http://www.arb.ca.gov/desig/desig.htm>.
- . 2018. Air Pollution Data Monitoring Cards (2013, 2014, 2015, 2016, and 2017). Accessed July 25, 2018. <http://www.arb.ca.gov/adam/topfour/topfour1.php>.
- California Building Standards Commission (CBSC). 2017, January. Guide to the 2016 California Green Building Standards Code: Nonresidential. <https://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2016-FINAL.pdf>.
- California Climate Action Team (CAT). 2006, March. Climate Action Team Report to Governor Schwarzenegger and the Legislature.
- California Climate Change Center (CCCC). 2012, July. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California.
- California Department of Conservation (DOC). 1994. Generalized Mineral Land Classification of Orange County, California, Aggregate Resources Only. [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR\\_94-15/OFR\\_94-15\\_Plate\\_1.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Plate_1.pdf).
- . 2016, July. Orange County Important Farmland 2014. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/ora14.pdf>.
- California Department of Education (CDE). 2018, May 31. Dataquest. <http://dq.cde.ca.gov/dataquest/>.

## 13. Bibliography

- California Department of Finance (CDOF). 2018, March 8. Report P-1 (County): State and County Total Population Projections, 2010-2060 (1 -year increments).  
<http://www.dof.ca.gov/Forecasting/Demographics/Projections/>.
- . 2018, May 1. Report E-5: Population and Housing Estimates for Cities, Counties, and the State. January 1, 2011-2018, with 2010 Benchmark.  
<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.
- California Department of Fish and Wildlife (CDFW). 2017, October. California Regional Conservation Plans.  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.
- . 2017, October 26. Summary of Natural Community Conservation Plans (NCCPs).  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=15329&inline>.
- California Department of Forestry and Fire Protection (CAL FIRE). 2011, October. Very High Fire Hazard Severity Zones in LRA: Newport Beach. [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps/FHSZ/orange/c30\\_NewportBeach\\_vhfhsz.pdf](http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/orange/c30_NewportBeach_vhfhsz.pdf).
- California Department of Resources Recycling and Recovery (CalRecycle). 2018, January 19. Mandatory Commercial Organics Recycling (MORE): Frequently Asked Questions.  
<http://www.calrecycle.ca.gov/recycle/commercial/organics/FAQ.htm>.
- . 2018, January 18. Jurisdiction Disposal by Facility.  
<http://www.calrecycle.ca.gov/lgcentral/Reports/DRS/Destination/JurDspFa.aspx>.
- . 2018, January 19. Facility/Site Summary Details: Frank Bowerman Sanitary Landfill:  
<http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0360/Detail/>.
- . 2018, January 19. Facility/Site Summary Details: Prima Deshecha:  
<http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0019/Detail/>.
- . 2018, January 18. Landfill Tonnage Reports.  
<http://www.calrecycle.ca.gov/SWFacilities/Landfills/Tonnages/>.
- . 2018, January 18. Jurisdiction Diversion/Disposal Rate Summary (2007 - Current).  
<http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx>.
- . 2018, January 19. Facility Information Toolbox.  
<http://www.calrecycle.ca.gov/FacIT/Facility/Search.aspx#LIST>.
- . 2018, January 18. Estimated Solid Waste Generation Rates.  
<https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.

## 12. Bibliography

- California Department of Transportation (Caltrans). 2002, February. Transportation Related Earthborne Vibration (Caltrans Experiences). Technical Advisory, Vibration. TAV-02-01-R9601. Division of Environmental Analysis. Prepared by Rudy Hendricks.
- . 2013, September. Transportation- and Construction-Induced Vibration Guidance Manual. Prepared by ICF International.
- . 2017. Long-Term Socio-Economic Forecasts by County.  
[http://www.dot.ca.gov/hq/tpp/offices/eab/socio\\_economic.html](http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic.html).
- . 2018. Scenic Highways.  
[http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/scenic\\_hwy.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm).
- California Department of Water Resources (CDWR). 2003. California's Groundwater: Bulletin 118.
- California Energy Commission (CEC). 2006. Our Changing Climate: Assessing the Risks to California. 2006 Biennial Report. CEC-500-2006-077. California Climate Change Center.
- . 2009, May. The Future Is Now: An Update on Climate Change Science, Impacts, and Response Options for California. CEC-500-2008-0077.
- . 2015. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation.  
<http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/June10>.
- . 2015, February 24. California Electric Utility Service Areas.  
[http://www.energy.ca.gov/maps/serviceareas/Electric\\_Service\\_Areas\\_Detail.pdf](http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf).
- . 2015, February 24. California Natural Gas Utility Service Areas.  
[http://www.energy.ca.gov/maps/serviceareas/natural\\_gas\\_service\\_areas.pdf](http://www.energy.ca.gov/maps/serviceareas/natural_gas_service_areas.pdf).
- . 2016, January. California Energy Demand 2016-2026 Revised Forecast. Volume 2: Electricity Demand by Utility Planning Area. [http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207438\\_20160115T152222\\_California\\_Energy\\_Demand\\_20162026\\_Revised\\_Electricity\\_Demand\\_Fo.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207438_20160115T152222_California_Energy_Demand_20162026_Revised_Electricity_Demand_Fo.pdf).
- . 2016, January. California Energy Demand 2016-2026 Revised Forecast. Volume 1: Statewide Electricity Demand and Energy Efficiency.  
[http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439\\_20160115T152221\\_California\\_Energy\\_Demand\\_20162026\\_Revised\\_Electricity\\_Forecast.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439_20160115T152221_California_Energy_Demand_20162026_Revised_Electricity_Forecast.pdf).
- . 2017, January. California Energy Demand Updated Forecast, 2017-2027.  
<https://efiling.energy.ca.gov/getdocument.aspx?tn=215745>.

## 13. Bibliography

- . 2018. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. [http://www.energy.ca.gov/releases/2018\\_releases/2018-05-09\\_building\\_standards\\_adopted\\_nr.html](http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html).
- . 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. [http://www.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf). California Natural Resources Agency. 2014, July. Safeguarding California: Reducing Climate Risk, An Update to the 2009 California Climate Adaptation Strategy.
- California Gas and Electric Utilities (CGEU). 2016, July. 2016 California Gas Report. <https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf>.
- California Geological Survey (CGS). 2001, January 17. Earthquake Zones of Required Investigation: Tustin Quadrangle. [http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/TUSTIN\\_EZRIM.pdf](http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/TUSTIN_EZRIM.pdf).
- . 2002, December. Note 36: California Geomorphic Provinces. [http://www.conservation.ca.gov/cgs/information/publications/cgs\\_notes/Pages/index.aspx](http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/Pages/index.aspx).
- California Natural Resources Agency (CNRA). 2014, July. Safeguarding California: Reducing Climate Risk, An Update to the 2009 California Climate Adaptation Strategy.
- . 2018. CEQA: The California Environmental Quality Act. <http://resources.ca.gov/ceqa/>.
- California Stormwater Quality Association (CASQA). 2003, January. Stormwater Best Management Practice Handbook: Construction.
- Cogan, Jeremy (director of facilities planning). 2018, February 23. Written response to questionnaire. Santa Ana Unified School District. See Appendix I of this DEIR.
- Department of Toxic Substances Control (DTSC). 2018, February 5. Glossary of Environmental Terms. [http://www.dtsc.ca.gov/InformationResources/Glossary\\_of\\_Environmental\\_Terms.cfm](http://www.dtsc.ca.gov/InformationResources/Glossary_of_Environmental_Terms.cfm).
- Duncan, Chip (fire chief). 2017, May. Comment letter on the Koll Center Residences project. Newport Beach Fire Department.
- . 2018, February 13. Written response to questionnaire. Newport Beach Fire Department. See Appendix I of this DEIR.
- Edmonston, Richard M. 2009, March 10. Airport Area Residential & Mixed-Use Adjustment Factors for Traffic Analyses in Newport Beach.
- Federal Emergency Management Agency (FEMA). 2018, February 6. Flood Map Service Center. <https://msc.fema.gov/portal>.
- Federal Highway Administration (FHWA). 2006, January. FHWA Roadway Construction Noise Model (RCNM) User's Guide. FHWA-HEP-05-051. DOT-VNTSC-FHWA-05-01. Prepared by US



## 12. Bibliography

- Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center (Acoustics Facility).
- Federal Transit Administration (FTA). 2006, May. Transit Noise and Vibration Impact Assessment. United States Department of Transportation. FTA-VA-90-1003-06.
- Fishbacher, Tom (lieutenant). 2018, February 20. Written response to questionnaire. Newport Beach Police Department. See Appendix I of this DEIR.
- Fusco Engineers, Inc. 2017, December. Sewer Analysis Report, Newport Crossings, Newport Beach, CA.
- Geocon West, Inc. 2014, June 12. Geotechnical Investigation, Proposed Mixed-Use Multi-Family Residential Development, 5.6 Acre Area Bounded by Dove Street, Scott Drive, Corinthian Way, and Martingale Way, Newport Beach, California.
- . 2017, July. Updated Geotechnical Investigation.
- Governor's Office of Planning and Research (OPR). 2003, October. State of California General Plan Guidelines.
- . 2008, June. CEQA and Climate Change: Addressing Climate Change through CEQA Review. Technical Advisory. <http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>.
- Harris, Cyril M. 1998. *Handbook of Acoustical Measurements and Noise Control*. 3rd edition. Acoustical Society of America. Woodbury, NY.
- Hetherton, Tim (library services director). 2018, February 5. Written response to questionnaire. Newport Beach Public Library. See Appendix I of this DEIR.
- Institute of Transportation Engineers (ITE). 2017, September. *Trip Generation Manual*. 10th edition.
- Intergovernmental Panel on Climate Change (IPCC). 1995. *Second Assessment Report: Climate Change 1995*.
- . 2001. *Third Assessment Report: Climate Change 2001*. New York: Cambridge University Press.
- . 2007. *Fourth Assessment Report: Climate Change 2007*. New York: Cambridge University Press.
- . 2013. *Fifth Assessment Report: Climate Change 2013*. New York: Cambridge University Press.
- Landrum and Brown. 2018. John Wayne Airport 2017 Annual 60-75 (5 dB intervals) CNEL Noise Contours. <https://www.ocair.com/reportspublications/AccessNoise/cnelnoisecontours/2017.pdf>.
- LSA. 2018, July. Traffic Impact Analysis. Newport Crossings, Newport Beach, Orange County California.
- Mestre Greve Associates. 2014, April. Noise Analysis Technical Report. Appendix C of Draft Environmental Impact Report No. 617 John Wayne Airport Settlement Agreement Amendment. Division of Landrum and Brown.

## 13. Bibliography

- [http://www.newportbeachca.gov/pln/CEQA\\_REVIEW/John%20Wayne%20Airport%20DEIR/C%205A%20Appendices%20to%20FEIR%20617/Appendix%20C%20-%20Noise%20Analysis%20Technical%20Report.pdf](http://www.newportbeachca.gov/pln/CEQA_REVIEW/John%20Wayne%20Airport%20DEIR/C%205A%20Appendices%20to%20FEIR%20617/Appendix%20C%20-%20Noise%20Analysis%20Technical%20Report.pdf).
- Munoz, Elsa (head, support services). 2017, August 25. Written response to questionnaire for Connect Southwest LA TOD Specific Plan. Los Angeles County Public Library.
- Natelson Company, The. 2001, October 31. Employment Density Study Summary Report.  
[http://www.scag.ca.gov/pdfs/Employment\\_Density\\_Study.pdf](http://www.scag.ca.gov/pdfs/Employment_Density_Study.pdf).
- Newport Beach, City of. 2000. Storm Drain Master Plan.
- . 2002, April 23. Council Policy L-18: Protection of Water Quality: Drainage, Public Rights-of-Way.  
<http://www.city.newport-beach.ca.us/councilpolicies/L-18.pdf>.
- . 2003. City of Newport Beach General Plan. Figure S2: Seismic Hazards.  
[http://www.newportbeachca.gov/PLN/General\\_Plan/Figures/FigS2\\_SeismicHazards\\_17x11color\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/Figures/FigS2_SeismicHazards_17x11color_web.pdf).
- . 2003. Hazards Assessment Study.
- . 2006, July 25. City of Newport Beach General Plan.  
<http://www.newportbeachca.gov/government/departments/community-development/planning-division/general-plan-codes-and-regulations/general-plan>.
- . 2006. City of Newport Beach General Plan Update EIR.
- . 2016, June. 2015 Urban Water Management Plan.  
<http://www.newportbeachca.gov/home/showdocument?id=35677>
- . 2013, September. City of Newport Beach General Plan Housing Element.  
[http://www.newportbeachca.gov/PLN/General\\_Plan/06\\_Ch5\\_Housing\\_web.pdf](http://www.newportbeachca.gov/PLN/General_Plan/06_Ch5_Housing_web.pdf).
- . 2015, August 4. Register of Historical Property.  
[http://www.newportbeachca.gov/Pln/MAP\\_DOCUMENTS/Historical%20Register.pdf](http://www.newportbeachca.gov/Pln/MAP_DOCUMENTS/Historical%20Register.pdf). Cadre Environmental, 2018, February 27. Biological Resources Technical Memorandum.
- . 2016, July 26. Newport Beach City Council Staff Report Agenda Item No. 14.
- . 2016, July 26. City Council Meetings.
- . 2017, April 6. Fiscal Year 2017-18 Capital Improvement Program.  
<http://www.newportbeachca.gov/home/showdocument?id=54370>.
- . 2018. Council Policy Manual. <http://www.newportbeachca.gov/government/city-council/council-policy-manual>.

## 12. Bibliography

- . 2018. Demographics and Statistics. <https://www.newportbeachca.gov/i-am-a/visitor/about-newport-beach/demographics-and-statistics>.
- Office of Emergency Services (OES). 2018, February 6. MyHazards. <http://myhazards.caloes.ca.gov/>.
- Office of Environmental Health Hazard Assessment (OEHHA). 2015, February. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf).
- . 2018, May. Indicators of Climate Change in California. <https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf>.
- Orange, County of, Environmental Management Agency (COEMA). 1996, July 17. Natural Community Conservation Plan & Habitat Conservation Plan: County of Orange, Central & Coastal Subregion, Parts I & II: NCCP/HCP.
- Orange County Transportation Authority (OCTA). 2017, October. Congestion Management Program.
- Orange County Water District (OCWD). 2006. Groundwater Replenishment System. <http://www.gwrsystem.com>.
- . 2015, June 17. Ground Water Management Plan 2015 Update. [http://www.ocwd.com/media/3622/groundwatermanagementplan2015update\\_20150624.pdf](http://www.ocwd.com/media/3622/groundwatermanagementplan2015update_20150624.pdf).
- Orange County Sanitation District (OCSD). 2006, April. Strategic Plan Update.
- . 2013, July 24. Fact Sheet: Prohibitions Relating to Discharge of Fats, Oils, and Grease (FOG). <https://www.ocsd.com/home/showdocument?id=544>.
- . 2018, January 19. Service Area. <https://www.ocsd.com/about-us/general-information/service-area>.
- Santa Ana Unified School District (SAUSD). 2018, May 31. District Overview. <https://www.sausd.us/domain/3>.
- South Coast Air Quality Management District (SCAQMD). 1992. Federal Attainment Plan for Carbon Monoxide.
- . 1993. California Environmental Quality Act Air Quality Handbook.
- . 2003. Final 2003 Air Quality Management Plan. <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/2003-aqmp>.
- . 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/home/library/documents-support-material/planning-guidance/guidance-document>.

## 13. Bibliography

- . 2008, September. Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III). <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii>.
- . 2008, July. Final Localized Significance Threshold Methodology.
- . 2009, November 19. GHG Meeting 14 Main Presentation. Greenhouse Gases (GHG) CEQA Significance Threshold Working Group. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).
- . 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>.
- . 2012, May 4. Final 2012 Lead State Implementation Plan: Los Angeles County. <http://www.aqmd.gov/home/library/clean-air-plans/lead-state-implementation-plan>.
- . 2013, February. 2012 Final Air Quality Management Plan. <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.
- . 2015, October 3. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV). <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iv>.
- . 2015, March (revised). SCAQMD Air Quality Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
- . 2015. Health Effects of Air Pollution. <http://www.aqmd.gov/home/library/public-information/publications>.
- . 2015, October. “Blueprint for Clean Air: 2016 AQMP White Paper.” 2016 AQMP White Papers Web Page. <http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers>.
- . 2017, March 4. Final 2016 Air Quality Management Plan. <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>.
- South Coast Air Quality Management District (SCAQMD). 2009, November 19. GHG Meeting 14 Main Presentation. Greenhouse Gases (GHG) CEQA Significance Threshold Working Group. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).
- . 2010, September 28. Agenda for Meeting 15. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group. <http://www.aqmd.gov/docs/default->

## 12. Bibliography

- source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2.
- . 2010, September 28. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf).
- Southern California Association of Governments (SCAG). 2016, April 7. Final 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. <http://scagrtpsc.net/Pages/FINAL2016RTPSCS.aspx>.
- . 2016, April 7. Demographics & Growth Forecast. Appendix to 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. [http://scagrtpsc.net/Documents/2016/final/f2016RTPSCS\\_DemographicsGrowthForecast.pdf](http://scagrtpsc.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf).
- . Open Data. Accessed July 16, 2018. <https://maps.scag.ca.gov/scaggis/rest/services/OpenData/TPARTP2016Plan2040boundaryscag/MAPServer>.
- Southern California Earthquake Data Center (SCEDC). 2013, May 14. Significant Earthquakes and Faults: Chronological Earthquake Index. <http://scedc.caltech.edu/significant/>.
- Southern California Edison (SCE). 2017, September. Power Content Label. [http://www.energy.ca.gov/pcl/labels/2016\\_labels/Southern\\_California\\_Edison-Default.pdf](http://www.energy.ca.gov/pcl/labels/2016_labels/Southern_California_Edison-Default.pdf).
- State Water Resources Control Board (SWRCB). 2018, February 5. Impaired Water Bodies. [http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2012.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml).
- Transportation Resources Board (TRB). 2016. *Highway Capacity Manual*. 6th edition.
- US Census Bureau. 2000. Profile of General Demographic Characteristics: 2000. Census 2000 Summary File 1 (SF 1) 100-Percent Data. [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_00\\_SF1\\_DP1&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF1_DP1&prodType=table).
- . 2010. Profile of General Population and Housing Characteristics: 2010. 2010 Census Summary File 1. [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_SF1\\_SF1DP1&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_SF1DP1&prodType=table).
- . 2016. Industry by Occupation for the Civilian Employed Population 16 Years and Over. 2012-2016 American Community Survey 5-Year Estimates. [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_16\\_5YR\\_S2405&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_S2405&prodType=table).

## 13. Bibliography

- . 2017. Quick Facts Newport Beach, July 1, 2017.  
<https://www.census.gov/quickfacts/newportbeachcitycalifornia>.
- US Environmental Protection Agency (USEPA). 2009, March. Estimating 2003 Building-Related Construction and Demolition Materials Amounts.  
<http://www.epa.gov/osw/conserves/imr/cdm/pubs/cd-meas.pdf>.
- . 2009, December. EPA: Greenhouse Gases Threaten Public Health and the Environment: Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity.  
[https://archive.epa.gov/epapages/newsroom\\_archive/newsreleases/08d11a451131bca585257685005bf252.html](https://archive.epa.gov/epapages/newsroom_archive/newsreleases/08d11a451131bca585257685005bf252.html).
- . 2012, September 26. Water Permitting 101. <http://www.epa.gov/npdes/pubs/101pape.pdf>.
- . 2016, December 14. Urban Runoff: Low Impact Development. <https://www.epa.gov/nps/urban-runoff-low-impact-development>.
- . 2015, October 22. Newport Bay Watershed.  
<http://www3.epa.gov/region9/water/watershed/measurew/newport-bay/>.
- . 2018. Criteria Air Pollutants. Accessed July 25, 2018. <https://www.epa.gov/criteria-air-pollutants>.
- US Fish and Wildlife Service (USFWS). 2018. National Wetlands Mapper.  
<http://www.fws.gov/wetlands/Data/Mapper.html>.
- US Geological Survey (USGS). 2017, March 15. The Modified Mercalli Intensity Scale.  
<http://earthquake.usgs.gov/learn/topics/mercalli.php>.
- Wald, David J., et al. 1999, August. Relationships Between Peak Ground Acceleration, Peak Ground Velocity, and Modified Mercalli Intensity in California. *Earthquake Spectra* 15 No. 3.
- Weltz, Jerry. 2003. Planning Advisory Service Report Number 516: Jobs-Housing Balance. American Planning Association.
- Western Regional Climate Center (WRCC). 2017. Western U.S. Climate Historical Summaries: Newport Beach Harbor Monitoring Station (Station ID No. 046175). Accessed July 25, 2018.  
<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6175>.
- Wren Investment Group. 2012, August 19. Apartment Complex Site Staffing.  
<http://wreninvestment.com/2012/08/apartment-complex-site-staffing/>.

## 12. Bibliography

*This page intentionally left blank.*