

Draft Environmental Impact Report

SCH No. 2022090476

4665 Lampson Avenue

City of Los Alamitos, California

Lead Agency:

City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

April 2024

Draft Environmental Impact Report
SCH No. 2022090476

4665 Lampson Avenue
City of Los Alamitos, California

Lead Agency
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720

CEQA Consultant
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, CA 92602

Project Applicant
Lampson Park Place, LLC
119 E. St Joseph Street
Arcadia, CA 91006

Lead Agency Discretionary Approvals
Site Development Permit – Major
Tentative Parcel Map No. 2022-113
Vesting Tentative Tract Map No. 19263
Affordable Housing Unit Application–
for Density Bonus Law Request, Concessions, and a Waiver

April 24, 2024

TABLE OF CONTENTS

Section Name and Number **Page**

S.0 Executive Summary S-1
S.1 Introduction S-1
S.2 Proposed Project S-2
S.2.1 Location and Setting S-2
S.2.2 Project Objectives S-3
S.2.3 Project Description Summary S-3
S.3 Areas of Controversy and Issues to be Resolved S-3
S.3.1 Public Scoping Meeting S-4
S.4 Alternatives to the Proposed Project S-4
S.4.1 No Project/No Development Alternative S-4
S.4.2 Maximum Density Allowed Alternative S-4
S.4.3 Senior Housing Alternative S-5
S.5 Summary of Impact, Mitigation, and Levels of Impact S-5
S.6 Mitigation Monitoring S-5

1.0 Introduction 1-1
1.1 Purposes of CEQA and this Draft EIR 1-1
1.2 Summary of the Project Evaluated by this EIR 1-2
1.3 Prior CEQA Review 1-2
1.4 Legal Authority 1-3
1.5 EIR Scope, Format, and Content 1-4
1.5.1 EIR Scope 1-4
1.5.2 EIR Format and Content 1-33
1.5.3 Incorporation by Reference 1-35
1.5.4 Technical Reports 1-36
1.6 Responsible and Trustee Agencies 1-37
1.7 Areas of Controversy 1-38

2.0 Environmental Setting 2-1
2.1 Regional Setting and Location 2-1
2.2 Local Setting and Location 2-1
2.3 Surrounding Land Uses 2-1
2.4 Planning Context 2-2
2.4.1 City of Los Alamitos General Plan 2-2
2.4.2 Zoning 2-3
2.4.3 Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos 2-3
2.5 Existing Physical Site Conditions 2-6
2.5.1 Land Use 2-6

2.5.2 Aesthetics and Topographic Features 2-7
2.5.3 Air Quality and Climate 2-7
2.5.4 Cultural Resources & Tribal Cultural Resources 2-8
2.5.5 Geology 2-9
2.5.6 Hazards and Hazardous Materials 2-9
2.5.7 Hydrology 2-10
2.5.8 Noise 2-10
2.5.9 Transportation 2-11
2.5.10 Public Services, Utilities and Service Systems 2-11
2.5.11 Vegetation Communities 2-12
2.5.12 Rare and Unique Resources 2-12

3.0 Project Description 3-1

3.1 Project Location and Access 3-1
3.2 Statement of Objectives 3-1
3.3 Project Components 3-2
3.3.1 Site Plan 3-2
3.3.2 Parking and Circulation 3-4
3.3.3 Architectural Features 3-5
3.3.4 Landscaping and Open Space 3-7
3.3.5 Wall and Fence Plan 3-7
3.3.6 Lighting 3-8
3.3.7 Infrastructure Improvements 3-8
3.4 Project Entitlements 3-11
3.4.1 Site Development Permit – Major 3-11
3.4.2 Tentative Parcel Map No. 2022-133 and Vesting Tentative Tract Map No. 19263 3-11
3.4.3 Affordable Housing Unit Application 3-11
3.5 Technical Characteristics of the Project 3-14
3.5.1 Construction Characteristics of the Project 3-14
3.6 Operational Characteristics of the Project 3-16
3.7 Summary of Requested Actions 3-17

4.0 Environmental Analysis 4-1

4.0.1 Summary of EIR Scope 4-1
4.0.2 Organization of Environmental Analysis 4-2
4.0.3 Terminology Used in This EIR 4-3
4.0.4 Scope of Cumulative Effects Analysis 4-3
4.0.5 Related Projects 4-6
4.1 Aesthetics 4.1-1
4.1.1 Existing Conditions 4.1-1
4.1.2 Regulatory Framework 4.1-5
4.1.3 Methodology 4.1-7

4.1.4 Basis for Determining Significance *4.1-7*
4.1.5 Impact Analysis *4.1-8*
4.1.6 Cumulative Impact Analysis *4.1-19*
4.1.7 Significance of Impacts Before Mitigation *4.1-20*
4.1.8 Mitigation *4.1-20*
4.1.9 Significance of Impacts After Mitigation *4.1-20*
4.2 Air Quality 4.2-1
4.2.1 Existing Conditions *4.2-1*
4.2.2 Regulatory Framework *4.2-9*
4.2.3 Methodology *4.2-12*
4.2.4 Basis for Determining Significance *4.2-21*
4.2.5 Project Design Features *4.2-21*
4.2.6 Impact Analysis *4.2-22*
4.2.7 Cumulative Impact Analysis *4.2-29*
4.2.8 Significance of Impacts Before Mitigation *4.2-30*
4.2.9 Mitigation *4.2-31*
4.2.10 Significance of Impacts After Mitigation *4.2-31*
4.3 Biological Resources 4.3-1
4.3.1 Methodology *4.3-1*
4.3.2 Existing Conditions *4.3-3*
4.3.3 Regulatory Framework *4.3-21*
4.3.4 Basis for Determining Significance *4.3-27*
4.3.5 Project Design Features *4.3-28*
4.3.6 Impact Analysis *4.3-29*
4.3.7 Cumulative Impact Analysis *4.3-34*
4.3.8 Significance of Impacts Before Mitigation *4.3-37*
4.3.9 Mitigation *4.3-37*
4.3.10 Significant of Impacts After Mitigation *4.3-38*
4.4 Cultural Resources 4.4-1
4.4.1 Existing Conditions *4.4-1*
4.4.2 Regulatory Framework *4.4-7*
4.4.3 Methodology *4.4-14*
4.4.4 Basis for Determining Significance *4.4-14*
4.4.5 Impact Analysis *4.4-14*
4.4.6 Cumulative Impact Analysis *4.4-17*
4.4.7 Significance of Impacts Before Mitigation *4.4-18*
4.4.8 Mitigation *4.4-18*
4.4.9 Significance of Impacts After Mitigation *4.4-20*
4.5 Energy 4.5-1
4.5.1 Existing Conditions *4.5-1*
4.5.2 Regulatory Framework *4.5-1*
4.5.3 Methodology *4.5-5*

4.5.4 Basis for Determining Significance *4.5-5*
4.5.5 Project Design Features *4.5-6*
4.5.6 Impact Analysis *4.5-7*
4.5.7 Cumulative Impact Analysis *4.5-14*
4.5.8 Significance of Impacts Before Mitigation *4.5-15*
4.5.9 Mitigation *4.5-15*
4.5.10 Significance of Impacts After Mitigation *4.5-15*
4.6 Geology and Soils 4.6-1
4.6.1 Existing Conditions *4.6-1*
4.6.2 Regulatory Framework *4.6-3*
4.6.3 Methodology *4.6-7*
4.6.4 Basis for Determining Significance *4.6-7*
4.6.5 Impact Analysis *4.6-8*
4.6.6 Cumulative Impact Analysis *4.6-13*
4.6.7 Significance of Impacts Before Mitigation *4.6-14*
4.6.8 Mitigation *4.6-15*
4.6.9 Significance of Impacts After Mitigation *4.6-16*
4.7 Greenhouse Gas Emissions 4.7-1
4.7.1 Existing Conditions *4.7-1*
4.7.2 Regulatory Framework *4.7-8*
4.7.3 Methodology *4.7-22*
4.7.4 Basis for Determining Significance *4.7-24*
4.7.5 Project Design Features *4.7-25*
4.7.6 Impact Analysis *4.7-26*
4.7.7 Cumulative Impact Analysis *4.7-31*
4.7.8 Significance of Impacts Before Mitigation *4.7-31*
4.7.9 Mitigation *4.7-31*
4.7.10 Significance of Impacts After Mitigation *4.7-31*
4.8 Hazards and Hazardous Materials 4.8-1
4.8.1 Existing Conditions *4.8-2*
4.8.2 Regulatory Framework *4.8-6*
4.8.3 Methodology *4.8-14*
4.8.4 Basis for Determining Significance *4.8-15*
4.8.5 Impact Analysis *4.8-15*
4.8.6 Cumulative Impact Analysis *4.8-22*
4.8.7 Significance of Impacts Before Mitigation *4.8-24*
4.8.8 Mitigation *4.8-25*
4.8.9 Significance of Impacts After Mitigation *4.8-25*
4.9 Hydrology and Water Quality 4.9-1
4.9.1 Existing Conditions *4.9-1*
4.9.2 Regulatory Framework *4.9-6*
4.9.3 Methodology *4.9-13*

4.9.4 Basis for Determining Significance *4.9-13*
4.9.5 Project Design Features *4.9-14*
4.9.6 Impact Analysis *4.9-14*
4.9.7 Cumulative Impact Analysis *4.9-26*
4.9.8 Significance of Impacts Before Mitigation *4.9-27*
4.9.9 Mitigation *4.9-28*
4.9.10 Significance of Impacts After Mitigation *4.9-28*
4.10 Land Use and Planning 4.10-1
4.10.1 Existing Conditions *4.10-1*
4.10.2 Regulatory Framework *4.10-2*
4.10.3 Methodology *4.10-9*
4.10.4 Basis for Determining Significance *4.10-9*
4.10.5 Impact Analysis *4.10-9*
4.10.6 Cumulative Impact Analysis *4.10-33*
4.10.7 Significance of Impacts Before Mitigation *4.10-33*
4.10.8 Mitigation *4.10-33*
4.10.9 Significance of Impacts After Mitigation *4.10-33*
4.11 Noise 4.11-1
4.11.1 Acoustical Fundamentals *4.11-1*
4.11.2 Existing Conditions *4.11-3*
4.11.3 Regulatory Framework *4.11-7*
4.11.4 Methodology *4.11-14*
4.11.5 Basis for Determining Significance *4.11-19*
4.11.6 Project Design Features *4.11-22*
4.11.7 Impact Analysis *4.11-23*
4.11.8 Cumulative Impact Analysis *4.11-34*
4.11.9 Significance of Impacts Before Mitigation *4.11-36*
4.11.10 Mitigation *4.11-36*
4.11.11 Significance of Impacts After Mitigation *4.11-36*
4.12 Population and Housing 4.12-1
4.12.1 Existing Conditions *4.12-1*
4.12.2 Regulatory Framework *4.12-4*
4.12.3 Methodology *4.12-7*
4.12.4 Basis for Determining Significance *4.12-8*
4.12.5 Impact Analysis *4.12-8*
4.12.6 Cumulative Impact Analysis *4.12-11*
4.12.7 Significance of Impacts Before Mitigation *4.12-12*
4.12.8 Mitigation *4.12-12*
4.12.9 Significance of Impacts After Mitigation *4.12-12*
4.13 Public Services 4.13-1
4.13.1 Existing Conditions *4.13-1*
4.13.2 Regulatory Framework *4.13-5*

4.13.3 Methodology *4.13-8*
4.13.4 Basis for Determining Significance *4.13-8*
4.13.5 Impact Analysis *4.13-8*
4.13.6 Cumulative Impact Analysis *4.13-12*
4.13.7 Significance of Impacts Before Mitigation *4.13-16*
4.13.8 Mitigation *4.13-16*
4.13.9 Significance of Impacts After Mitigation *4.13-16*
4.14 Recreation 4.14-1
4.14.1 Existing Conditions *4.14-1*
4.14.2 Regulatory Framework *4.14-6*
4.14.3 Methodology *4.14-7*
4.14.4 Basis for Determining Significance *4.14-7*
4.14.5 Impact Analysis *4.14-8*
4.14.6 Cumulative Impact Analysis *4.14-10*
4.14.7 Significance of Impacts Before Mitigation *4.14-11*
4.14.8 Mitigation *4.14-11*
4.14.9 Significance of Impacts After Mitigation *4.14-11*
4.15 Transportation 4.15-1
4.15.1 Existing Conditions *4.15-1*
4.15.2 Regulatory Framework *4.15-3*
4.15.3 Methodology *4.15-7*
4.15.4 Basis for Determining Significance *4.15-8*
4.15.5 Impact Analysis *4.15-9*
4.15.6 Cumulative Impact Analysis *4.15-18*
4.15.7 Significance of Impacts Before Mitigation *4.15-18*
4.15.8 Mitigation *4.15-19*
4.15.9 Significance of Impacts After Mitigation *4.15-20*
4.16 Tribal Cultural Resources 4.16-1
4.16.1 Existing Conditions *4.16-1*
4.16.2 Regulatory Framework *4.16-2*
4.16.3 Methodology *4.16-6*
4.16.4 Basis for Determining Significance *4.16-6*
4.16.5 Impact Analysis *4.16-7*
4.16.6 Cumulative Impact Analysis *4.16-8*
4.16.7 Significance of Impacts Before Mitigation *4.16-8*
4.16.8 Mitigation *4.16-9*
4.16.9 Significance of Impacts After Mitigation *4.16-12*
4.17 Utilities and Service Systems 4.17-1
4.17.1 Existing Conditions *4.17-1*
4.17.2 Regulatory Framework *4.17-3*
4.17.3 Methodology *4.17-11*
4.17.4 Basis for Determining Significance *4.17-12*

4.17.5 Impact Analysis *4.17-13*
4.17.6 Cumulative Impact Analysis *4.17-21*
4.17.7 Significance of Impacts Before Mitigation *4.17-22*
4.17.8 Mitigation *4.17-23*
4.17.9 Significance of Impacts After Mitigation *4.17-23*

5.0 Other CEQA Considerations 5-1

5.1 Significant Effects Which Cannot be Avoided if the Proposed Project is Implemented 5-1
5.2 Significant Irreversible Environmental Changes 5-1
5.3 Growth Inducing Impacts 5-3
5.4 Impacts Considered Less than Significant 5-7
5.4.1 Agriculture and Forestry Resources *5-7*
5.4.2 Mineral Resources *5-8*
5.4.3 Wildfire *5-9*

6.0 Alternatives 6-1

6.1 Introduction 6-1
6.1.1 Project Objectives *6-1*
6.1.2 Summary of the Proposed Project's Significant Impacts *6-2*
6.2 Alternatives Under Consideration 6-2
6.2.1 No Project/No Development Alternative *6-2*
6.2.2 Maximum Density Allowed Alternative *6-3*
6.2.3 Senior Housing Alternative *6-3*
6.3 Alternatives Considered and Rejected 6-3
6.3.1 Alternative Sites *6-4*
6.3.2 Alternatives to Eliminate or Lessen VMT Impacts *6-5*
6.3.3 Reduced Density Alternative *6-6*
6.3.4 Mixed Use Alterative *6-7*
6.4 Analysis of Alternatives 6-8
6.4.1 No Project/No Development Alternative *6-8*
6.4.2 Maximum Density Allowed Alternative *6-13*
6.4.3 Senior Housing Alternative *6-18*
6.5 Environmentally Superior Alternative 6-24

7.0 Organizations and Persons Consulted 7-1

7.1 Persons Contributing to EIR Preparation 7-1
7.1.1 City of Los Alamitos *7-1*
7.1.2 T&B Planning, Inc *7-1*
7.1.3 Technical Report Preparation *7-2*
7.2 Persons Consulted/Written or Verbal Communication 7-3
7.2.1 Public Service Correspondence *7-3*
7.2.2 Tribal Cultural Consultations *7-4*

8.0 References.....8-1
8.1 Documents Appended to this EIR.....8-1
8.2 References and Documents Incorporated by Reference 8-1

LIST OF FIGURES

Figure Number and Name **Page**

Figure 2-1 Existing General Plan Land Use Designations 2-4
Figure 2-2 Existing Zoning Classifications 2-5
Figure 3-1 Regional Map 3-19
Figure 3-2 Vicinity Map 3-20
Figure 3-3 Aerial Photograph 3-21
Figure 3-4 Site Plan 3-22
Figure 3-5 Typical Single Family Dwelling Plan 1 Floor Plans 3-23
Figure 3-6 Typical Single Family Dwelling Plan 2 Floor Plans 3-24
Figure 3-7 Typical Single Family Dwelling Plan 3 Floor Plans 3-25
Figure 3-8 Typical Single Family Dwelling Plan 3X Floor Plans 3-26
Figure 3-9 Typical Townhome Units Plan 1/1X/1Y Floor Plans 3-27
Figure 3-10 Typical Townhome Units Plan 2/2X/3 Floor Plans 3-28
Figure 3-11 Typical Apartment Units Floor Plans 3-29
Figure 3-12 Typical Single Family Dwelling Elevations 3-30
Figure 3-13 Typical Townhouse Elevations 3-31
Figure 3-14 Typical Multi-Family Elevations 3-32
Figure 3-15 Lampson Street Scene 3-33
Figure 3-16 Cluster Homes Street Scene 3-34
Figure 3-17 Townhomes Street Scene 3-35
Figure 3-18 Landscape Plan 3-36
Figure 3-19 Open Space Plan 3-37
Figure 3-20 Wall and Fence Plan 3-38
Figure 3-21 Lighting Plan 3-39
Figure 3-22 Circulation Plan 3-40
Figure 3-23 Utility Plan 3-41
Figure 3-24 Tentative Parcel Map 2022-133 3-42
Figure 3-25 Vesting Tentative Tract Map 3-43
Figure 3-26 Grading Plan 3-44
Figure 3-27 Physical Disturbance Area 3-45
Figure 4.0-1 Cumulative Development Location Map 4-8
Figure 4.1-1 Site Photographs 1-4 ..... 4.1-4
Figure 4.1-2 Visual Renderings on Lampson Looking Northeast 4.1-11
Figure 4.1-3 Visual Renderings on Lampson Looking Northwest 4.1-12
Figure 4.2-1 Sensitive Receptor Locations 4.2-18
Figure 4.2-2 Modeled Construction Emission Source 4.2-20
Figure 4.3-1 Vegetation and Land Cover Types 4.3-4
Figure 4.8-1 JFTB Impact Zones 4.8-7
Figure 4.8-2 Los Alamitos JFTB Flight Patterns 4.8-20

Figure 4.8-3 Fire Master Plan....4.8-23
Figure 4.9-1 Existing Conditions Hydrology Map....4.9-3
Figure 4.9-2 Existing Offsite Conditions Hydrology Map....4.9-4
Figure 4.9-3 Existing Flood Hazard Zone....4.9-5
Figure 4.9-4 Proposed Conditions Hydrology Map....4.9-18
Figure 4.9-5 Proposed Alternate Conditions Hydrology Map....4.9-20
Figure 4.11-1 Ambient Noise Measurement Locations....4.11-5
Figure 4.11-2 Noise Receiver Locations–Operations....4.11-16
Figure 4.11-3 Construction Activity and Receiver Locations....4.11-17
Figure 4.11-4 APHC 2020 Airport Noise Level Contour Boundaries....4.11-32
Figure 4.11-5 On-Site Aircraft Noise Level Contours....4.11-33
Figure 4.14-1 Existing Parks and Recreation Facilities....4.14-3
Figure 4.15-1 Existing Transit Routes....4.15-2
Figure 4.15-2 City of Los Alamitos Existing and Planned Bicycle Network....4.15-4
Figure 4.15-3 City of Seal Beach Existing and Planned Bicycle Network....4.15-5
Figure 4.15-4 Existing Pedestrian Facilities....4.15-6
Figure 6-1 Conceptual Site Plan - Senior Housing Alternative....6-19

LIST OF TABLES

Table Number and Name **Page**

Table S-1	Summary of Impact, Mitigation, and Levels of Impact	S-6
Table 1-1	Summary of NOP Comments	1-5
Table 1-2	Summary of Scoping Meeting Comments	1-32
Table 1-3	Location of CEQA Required Topics	1-33
Table 2-1	Surrounding Land Uses	2-1
Table 3-1	Single Family Detached Unit Plan Type Summary	3-3
Table 3-2	Townhome Unit Plan Type Summary	3-3
Table 3-3	Apartment Unit Plan Type Summary	3-3
Table 3-4	Estimated Construction Schedule	3-14
Table 3-5	Project Construction Equipment	3-15
Table 3-6	Project-Related Approvals/Permits	3-18
Table 4.0-1	Cumulative Development Land Use Summary	4-7
Table 4.1-1	Zoning Development Standards Consistency Analysis	4.1-13
Table 4.2-1	Ambient Air Quality Standards	4.2-6
Table 4.2-2	Attainment Status of Criteria Pollutants in the South Coast Air Basin	4.2-8
Table 4.2-3	Project Area Quality Monitoring Summary 2019-2021	4.2-8
Table 4.2-4	Maximum Daily Regional Emissions Thresholds	4.2-21
Table 4.2-5	Overall Construction Emission Summary	4.2-24
Table 4.2-6	Summary of Peak Operational Emissions	4.2-25
Table 4.2-7	Localized Construction-Source Emissions	4.2-26
Table 4.3-1	Summary of Biological Surveys for the Project Site	4.3-1
Table 4.3-2	Special-Status Plants Evaluated for the Project Site	4.3-5
Table 4.3-3	Special Status Animals Evaluated for the Project Site	4.3-10
Table 4.5-1	Total Project-Generated Traffic Annual Fuel Consumption	4.5-8
Table 4.5-2	Project Annual Operational Energy Demand Summary	4.5-10
Table 4.5-3	CEQA Guidelines Appendix F Energy Analysis	4.5-11
Table 4.5-4	General Plan Consistency Analysis	4.5-14
Table 4.7-1	GWP and Atmospheric Lifetime of Select GHGs	4.7-2
Table 4.7-2	Top GHG-Producing Countries and the European Union	4.7-4
Table 4.7-3	Amortized Annual Construction Emissions	4.7-26
Table 4.7-4	Project GHG Emissions	4.7-27
Table 4.7-5	Project Consistency With 2022 Scoping Plan Key Residential And Mixed-Use Project Attributes That Reduce GHGs	4.7-28
Table 4.10-1	SCAG Connect SoCal Goal Consistency Analysis	4.10-10
Table 4.10-2	General Plan Consistency Analysis	4.10-20
Table 4.11-1	Existing Conditions Roadway Noise Levels	4.11-6
Table 4.11-2	Land Use and Noise Compatibility Matrix	4.11-12
Table 4.11-3	Limitations on Land Use due to Aircraft Noise	4.11-14

Table 4.11-4 Summary of Noise Significance Criteria 4.11-21
Table 4.11-5 Construction Equipment Noise Level Summary 4.11-24
Table 4.11-6 Project Daytime and Nighttime Operational Noise Levels 4.11-24
Table 4.11-7 Existing Off-Site Project-Related Traffic Noise Impacts 4.11-27
Table 4.11-8 Opening Year Off-Site Project-Related Traffic Noise Impacts 4.11-28
Table 4.11-9 General Plan Buildout Off-Site Project-Related Traffic Noise Impacts 4.11-29
Table 4.11-10 Project Construction Vibration Levels 4.11-30
Table 4.11-11 Cumulative Project Traffic Noise Increases 4.11-35
Table 4.12-1 SCAG Population, Households and Employment Projections 4.12-1
Table 4.12-2 Jobs-Housing Ratio 4.12-2
Table 4.12-3 City of Los Alamitos General Plan Population, Households, and Employment Projections vs. SCAG 4.12-3
Table 4.12-4 City of Los Alamitos Regional Housing Needs Allocation 4.12-4
Table 4.12-5 Estimated Population and Housing in Los Alamitos with Project 4.12-9
Table 4.12-6 Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos 4.12-11
Table 4.13-1 Orange County Fire Authority Station 4.13-1
Table 4.13-2 LAUSD Annual Enrollment 4.13-3
Table 4.13-3 Existing School Capacity 4.13-4
Table 4.13-4 Projected Student Populations 4.13-11
Table 4.13-5 Projected School Capacity at Project Buildout 4.13-11
Table 4.13-6 Projected Cumulative Student Populations 4.13-14
Table 4.14-1 Existing Parks and Recreation Facilities 4.14-1
Table 4.15-1 Consistency with the General Plan Mobility and Circulation Element 4.15-10
Table 4.15-2 Project-Generated VMT Results 4.15-15
Table 4.17-1 Total Supplies Available to GSWC West Orange through 2045 (AFY) 4.17-16
Table 4.17-2 GSWC West Orange Projected Water Demands through 2045 ..... 4.17-16
Table 4.17-3 GSWC West Orange Projected Water Supply and Demand through 2045 ..... 4.17-16
Table 5-1 City of Los Alamitos Top Employers 5-6
Table 6-1 Comparison of Alternatives and Project-related Environmental Impacts 6-25
Table 6-2 Alternatives Attainment of Project Objectives 6-26

TECHNICAL APPENDICES (PROVIDED ON USB)

Appendix A	Notice of Preparation and Written Comments during the NOP
Appendix B1	Air Quality Impact Analysis
Appendix B2	Health Risk Assessment
Appendix C1	Biological Resources Report
Appendix C2	Jurisdictional Delineation
Appendix D1	Phase I Cultural Resources Study
Appendix D2	Historic Resources Evaluation
Appendix E	Energy Analysis
Appendix F1	Geotechnical Report
Appendix F2	Paleontological Assessment
Appendix G	Greenhouse Gas Analysis
Appendix H1	Phase I Environmental Site Assessment
Appendix H2	Phase II Environmental Site Assessment
Appendix I1	Preliminary Hydrology Report
Appendix I2	Preliminary Water Quality Management Plan
Appendix I3	Alternate Preliminary Hydrology Study
Appendix J1	Airport Land Use Assessment
Appendix J2	FAA's Determination of No Hazard to Air Navigation
Appendix K	Noise Impact Analysis
Appendix L	Public Service Correspondence
Appendix M	Parks Impact Analysis
Appendix N1	Traffic Analysis
Appendix N2	Vehicle Miles Traveled Analysis
Appendix O	Sanitary Sewer Analysis
Appendix P	Onsite Parking Analysis
Appendix Q	Arbor Park Parking Study and Layout
Appendix R	Senior Housing Alternative Analyses

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
>	greater than
≥	greater than or equal to
%	percent
a.m.	Ante Meridiem (between the hours of midnight and noon)
AB	Assembly Bill
AC	Acres
ACC	Advanced Clean Cars
ACHP	Advisory Council on Historic Preservation
ACM	Alternative Calculation Method
ACMs	Asbestos Containing Materials
ACS	American Community Survey
AELUP	Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos
AERMOD	Air Quality Dispersion Modeling
AES	Advanced Engineering Software
AFY	Acre Feet per Year
AIA	Airport Influence Area
AICUZ	Air Installation Compatible Use Zone
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMSL	Above Mean Sea Level
A-P Act	Alquist-Priolo Earthquake Fault Zoning Act
APN	Assessor Parcel Number
APZ	accident potential zone
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ASTM	American Society of Testing and Materials
ASTs	Above ground storage tanks
ATP	Active Transportation Plan
AV	autonomous vehicle
AYSO	American Youth Soccer Organization
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
BFSA	BFSA Environmental Services
bgs	Below ground surface

Blvd.	Boulevard
BMPs	Best Management Practices
BPP	Basin Production Percentage
Btu/hr	British thermal units per hour
°C	degrees Celsius
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
C_2H_3Cl	vinyl chloride
CA	California
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CadnaA	Computer Aided Noise Abatement
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise
CANG	California Army National Guard
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CD	Consistency Determination
CDC	California Department of Conservation
CDE	California Department of Education
CDFA	Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
C-F	Community Facilities
Cf	cubic feet
CFC	California Fire Code
CF_4	Tetraflouromethane
CFCs	chlorofluorocarbons
CFGC	California Fish and Game Code

CFR	Code of Federal Regulations
Cfs	cubic feet per second
CGC	California Government Code
CH_4	Methane
CHMIRS	California Hazardous Materials Information Reporting System
City	City of Los Alamitos
CIWMB	California Integrated Waste Management Board
CMP	corrugated metal pipe
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
COG	Council of Governments
COHb	carboxyhemoglobin
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COP	Conference of the Parties
CPUC	California Public Utilities Commission
CREC	controlled recognized environmental conditions
CRHR	California Register of Historical Resources
CSU	California State University
CSU Fullerton	California State University, Fullerton
CTC	California Transportation Commission
CTR	California Toxics Rule
C&V	C&V Consulting, Inc.
CWA	Clean Water Act
CWC	California Water Code
CZ	Clear Zone
dB	Decibel
dBA	A-weighted Decibels
d/D	flow depth to pipe diameter ratio
DDT	Dichloro-Diphenyl-Trichloroethane
DMA	drainage management areas
DMV	Department of Motor Vehicles
DOD	Department of Defense
DOE	Determination of Eligibilty
DOF	Department of Finance
DOSH	Division of Occupational Safety and Health
DPM	Diesel Particulate Matter
DPR	Department of Parks and Recreation

DSCA	Defense Support of Civil Authorities
DTSC	Department of Toxic Substances Control
DTSC-SL	Department of Toxic Substances Control screening level
DU	Dwelling Unit
DUA	Dwelling units per acre
DWQ	Division of Water Quality
DWR	Department of Water Resources
e/o	East of
ECHO	Enforcement and Compliance History Online
EFI	EFI Global, Inc
e.g.	for example
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EMFAC	Emission Factor Model
EMS	Emergency Medical Service
EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-To-Know Act
ESA	Environmental Site Assessment
ESA	Endangered Species Act
et seq.	et sequentia, meaning "and the following”
EV	Electric Vehicle
EVSE	electric vehicle supply equipment
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FAR	floor area ratio
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FIMA	Federal Insurance and Mitigation Administration
FINDS	Facility Index System/Facility Registry System
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FMMP	Farmland Mapping and Monitoring Program
FRAP	Fire and Resources Assessment Program
FTA	Federal Transit Association
FYI	For Your Information
GCC	Global Climate Change

Gg	Gigagrams
GHG	Greenhouse Gas
GIS	Geographic Information System
GLA	Glen Lukos Associates, Inc.
GPA	General Plan Amendment
gpd	Gallons per Day
GPU	General Plan Update
GSA	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plans
GSWC	Golden State Water Company
GWP	Global Warming Potential
H_2S	hydrogen sulfide
HAZNET	Facility and Manifest Data
HB	home-based
HCD	State Housing and Community Development Department
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
HMTA	Hazardous Materials Transportation Act
HMTAUSA	Hazardous Materials Transportation Uniform Safety Act
Hp	horsepower
HRA	Health Risk Assessment
HREC	historical recognized environmental conditions
HSC	Health and Safety Code
HSWA	Federal Hazardous and Solid Waste Amendments
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
HWCL	Hazardous Waste Control Law
HWTS	Hazardous Waste Tracking System
I	Interstate
I-405	Interstate 405
i.e.	that is
ICAO	International Civil Aviation Organization
IEPR	Integrated Energy Policy Report
In/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
ITP	Incidental Take Permits
IWMA	Integrated Waste Management Act

IWMP	Integrated Waste Management Plan
JFTB	Los Alamitos Joint Forces Training Base
JRSOI	Joint Reception Staging Onward Movement and Integration
kg	kilogram
kWh	kilowatt-hour
LAMC	Los Alamitos Municipal Code
LAUSD	Los Alamitos Unified School District
LAYB	Los Alamitos Youth Baseball
LBP	Lead based paint
lbs	pounds
lbs/day	pounds per day
LCFS	low carbon fuel standard
LEA	Lead Enforcement Agency
L_{eq}	equivalent continuous sound level
LEV III	Low-Emission Vehicle Program
LGC	LGC Geotechnical, Inc.
L_{max}	Maximum level measured over the time interval
LOS	Level of Service
LRA	Local Responsibility Area
LSA	LSA Associates
LSA	Lake and Streambed Alteration
LSTs	Localized Significance Thresholds
LTS	Less than Significant
LTS/M	Less than Significant with Mitigation
M^3	Cubic Meter
MBTA	Migratory Bird Treaty Act
MEIR	maximally exposed individual receptor
mg	milligrams
mg/kg	milligram per kilogram
MGD	million gallons per day
MLD	Most Likely Descendant
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMTs	million metric tons
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
Mpg	miles per gallon
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone

MT	metric ton
MT/yr	metric tons per year
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalent
MWD	Metropolitan Water District
MWDOC	Municipal Water District of Orange County
MWELO	California Department of Water Resource Model Water Efficient Landscape Ordinance
N/A	Not Applicable
n/o	North of
n.d.	no date
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NALs	Numeric Action Levels
NCI	National Comfort Institute, Inc.
NCCP	Natural Community Conservation Planning
NDC	nationally determined contributions
NDP	New Development Project Management
NF_3	Nitrogen Trifluoride
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NHL	National Historic Landmarks
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
No.	Number
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
N_2	Nitrogen
N_2O	Nitrous Oxide
NOP	Notice of Preparation
n.p.	No page
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	non-point source
NPS	National Park Service
NR	Noise Reduction
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule

NVIA	Noise and Vibration Impact Assessment
NWS	Naval Weapons Station
OAL	Office of Administrative Law
OC	Orange County
OCEHD	Orange County Environmental Health Department
OCFA	Orange County Fire Authority
OCFCD	Orange County Flood Control District
OCGB	Orange County Groundwater Basin
OCPs	organochlorine pesticides
OCPL	Orange County Public Libraries
OCPW	Orange County Public Works
OCSD	Orange County Sanitation District
OCTA	Orange County Transit Authority
OCTAM	Orange County Transportation Model
OCWD	Orange County Water District
OHWM	Ordinary High-Water Mark
OPR	Office of Planning and Research
OSHA	Occupational and Safety Health Act
OSHA	Occupational Safety and Health Administration
O_2	Oxygen
O_3	Ozone
PA	Production/Attraction
Pb	Lead
PCBs	Polychlorinated biphenyls
PDF	Project Design Feature
PFCs	Perfluorocarbons
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (2.5 microns or smaller)
PM_{10}	Fine Particulate Matter (10 microns or smaller)
pp.	pages
ppb	parts per billion
ppm	parts per million
ppt	parts per trillion
PPV	peak particle velocity
PRC	Public Resources Code
PRPA	Paleontological Resources Preservation Act
PTP/O	Permit to Construct/Operate
PUC	Public Utilities Code
PV	photovoltaic

RCPG	Regional Comprehensive Plan and Guide
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCRA NonGen/NLR	Resource Conservation and Recovery Act - Non Generator/No Longer Regulated
REC	Recognized Environmental Condition
RECLAIM	Regional Clean Air Incentives Market
REMEL	Reference Mean Emission Level
R-3	Multi-Family Residential-25 Zone
R-4	Multi-Family Residential - 36 Zone
RHNA	Regional Housing Needs Allocation
RLD-9	Residential Low Density-9
ROGs	Reactive Organic Gasses
ROW	Right-of-Way
RPS	Renewable Portfolio Standards
RRM	RRM Design Group
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RV	Recreational Vehicle
RWQCB	Regional Water Quality Control Board
SF/s.f.	square foot or square feet
SARA	Superfund Amendments and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Southbound
SB	Senate Bill
SBPD	Seal Beach Police Department
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	Southern Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCH	California State Clearinghouse (Office of Planning and Research)
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SFB	School Facilities Program
SF_6	Sulfur Hexafluoride
SLF	Sacred Lands File
SGMA	Sustainable Groundwater Management Act
SHA	Safe Harbor Agreement
SHMA	Seismic Hazards Mapping Act

SHPO	State Historic Preservation Officers
SIP	State Implementation Plan
SMARA	Surface Mining Reclamation Act
SNUR	Significant New Use Rule
SoCalGas	Southern California Gas Company
s/o	south of
SO_4	Sulfates
SOI	Sphere of Influence
SO_2	Sulfur Dioxide
SO_X	Sulfur Oxides
SOM	Skidmore, Owings & Merrill
SP	Service population
SR	State Route
SR-1	State Route 1
SR-22	State Route 22
SRA	Source Receptor Area
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
SSC	Species of Special Concern
St.	Street
STC	Sound Transmission Class
SU	Significant and Unavoidable
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
SWRL	Southwest Regional Laboratory
TAZ	transportation analysis zone
TDM	transportation demand management
TEA-21	Transportation Equality Act for 21st Century
TMDL	Total Maximum Daily Loads
TPA	Transit Priority Area
TPH	Total Petroleum Hydrocarbons
TPHd	Total Petroleum Hydrocarbons as diesel
TPHg	Total Petroleum Hydrocarbons as gasoline
TPHo	Total Petroleum Hydrocarbons as oil
TSCA	Toxic Substance Control Act
TSF	Thousand Square Feet
TTCP	traditional tribal cultural places
µg	microgram
$\mu g/m^3$	microgram per cubic meter
U.N.	United Nations
UNFCCC	United Nations' Framework Convention on Climate Change

U.S.	United States
USACE	United States Army Corps of Engineers
USCB	United States Census Bureau
USFWS	United States Fish and Wildlife Service
USTs	Underground storage tanks
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
UWS	Universal Waste Systems, Inc
VdB	vibration decibels
VFR	visual flight rule
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VPH	Vehicles per Hour
WBWG	Western Bat Working Group
WDR	Water discharge requirements
WMI	Watershed Management Initiative
WQMP	Water Quality Management Plan
WRRA	Water Reuse and Recycle Act
WW	World War
YBP	Years before Present
Yr	year
ZORI	Zones of Required Investigation

S.0 EXECUTIVE SUMMARY

S.1 INTRODUCTION

As stated by California Environmental Quality Act (CEQA) Guidelines §15002, the basic purpose of CEQA is to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities involving discretionary government actions (including the approval of development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An Environmental Impact Report (EIR) is an informational document prepared in compliance with CEQA that informs government decision-makers and the public in general about potentially significant environmental impacts that could result from a project. This EIR represents the independent judgment of the City of Los Alamitos (as the CEQA Lead Agency) and presents an objective evaluation of the physical environmental effects that could result from construction and operation of the proposed 4665 Lampson Avenue Project (the "Project").

Hereafter when the term "Project" is used in this EIR with the initial letter capitalized, the term shall mean all aspects of the 4665 Lampson Avenue Project's planning, construction, and operation; and all associated discretionary, and administrative approvals and permits required by law of public agencies. When the term "Project Applicant" is used with the initial letters capitalized, the term shall mean Lampson Park Place, LLC, which is the entity that submitted applications to the City of Los Alamitos to entitle the Project site as proposed and as evaluated in this EIR.

Governmental approvals requested from the City of Los Alamitos by the Project Applicant to implement the Project include a Site Development Permit – Major, Tentative Parcel Map 2022-133 (for Finance and Conveyance Purposes), Vesting Tentative Tract Map No. 19263 (for Condominium Purposes), and an Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions and a Waiver. All other related discretionary and administrative actions that are required of the City of Los Alamitos and other public agencies and entities to construct and operate the Project described in this EIR also are considered part of the Project evaluated herein. Approvals and permits

required of other agencies that are currently known to be needed in order to implement the Project are listed in Section 3.0, *Project Description*.

The City of Los Alamitos has determined that an EIR is required for this Project. Pursuant to CEQA Guidelines § 15063(a), when a lead agency can determine that an EIR will be required for a project, an Initial Study is not required. The City of Los Alamitos determined that implementation of the Project has the potential to result in significant environmental effects, and a Project EIR, as defined by CEQA Guidelines §15161, is required. On this basis, an Initial Study was not prepared for this Project. As stated in CEQA Guidelines §15161, a Project EIR should "…focus primarily on the changes in the environment that would result from the development project," and "…examine all phases of the project including planning, construction, and operation."

Accordingly, and in conformance with CEQA Guidelines §15121(a), the purpose of this EIR is to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

S.2 PROPOSED PROJECT

S.2.1 LOCATION AND SETTING

The approximately 12.3-acre Project site is located at 4665 Lampson Avenue in the City of Los Alamitos, Orange County, California. The City of Los Alamitos (City) is in the northwestern corner of Orange County, bordering the county lines of Orange and Los Angeles. The City is located east of the city of Long Beach, southwest of the city of Cypress, west of the city of Garden Grove, and north of the city of Seal Beach. The Project site is located approximately 0.47-mile north of I-405/State Route 22 (SR-22), approximately 0.83-mile northwest of SR-22, and approximately 2.36 miles east of I-605. Regional access to the Project site is provided from Seal Beach Boulevard via I-405, I-605, and SR-22 Freeways and Valley View Steet via I-405 and SR-22.

At the local scale, the 12.3-acre Project site is located north of and adjacent to Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street (see Figure 3-2, *Vicinity Map*, and Figure 3-3, *Aerial Photograph*). The legal address for the Project site is 4665 Lampson Avenue, Los Alamitos, CA 90720, and the Project site's Assessor Parcel Number (APN) is 130-012-35. Access to the Project site is currently provided by two driveways off of Lampson Avenue.

Refer to EIR Section 2.0, *Environmental Setting*, for more information related to the regional and local setting of the Project site.

S.2.2 PROJECT OBJECTIVES

The underlying purpose of the Project is to redevelop the site with a residential community that will serve the City of Los Alamitos. The following is a list of specific objectives that the proposed Project is intended to achieve.

A. Provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement.

B. Provide a variety of housing types and affordability (for lower income, moderate, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing.

C. Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.

D. Improve the City's jobs housing balance to support reduced commute distances consistent with the Southern California Association of Governments' Connect SoCal.

E. Create a residential character that provides for a high quality architectural design.

S.2.3 PROJECT DESCRIPTION SUMMARY

The Project Applicant, Lampson Park Place, LLC, proposes to redevelop the Project site with a residential development consisting of a variety of housing product types, including single family detached homes, townhomes, and apartments. The unit mix proposes 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes. The Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 440 parking spaces that would be required pursuant to the State's Density Bonus Law. Refer to EIR Section 3.0, *Project Description*, for a detailed description of the Project.

S.3 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines § 15123(b)(2) requires that areas of controversy known to the Lead Agency (City of Los Alamitos), including issues raised by agencies and the public, be identified in the Executive Summary. After consideration of all comments received in response to the Notice of Preparation (NOP) and during the Project's scoping meeting, the Lead Agency has identified environmental issues of concern relating to all topical issues with the exceptions of Agriculture and Forestry Resources, Mineral Resources, and Wildfire. Key issues brought forth during the NOP period and the Project's scoping meeting are provided in Table 1-1, *Summary of NOP Comments*, and include traffic congestion

on Lampson Avenue, Seal Beach Boulevard, Valley View Street, Heather Street, and Rose Street; parking issues within the proposed Project site, Arbor Park and the neighborhood south of the Project site; air quality, GHG and noise impacts from Project construction; and impacts on public services (e.g. increased need for services on fire, police, schools and parks).

Regarding issues to be resolved, the EIR addresses the environmental issues associated with the Project that are known by the City, that are identified in the comment letters that the City of Los Alamitos received for this EIR's NOP which was circulated for a 30-day public review period from October 3, 2022, to November 2, 2023 (refer to *Technical Appendix A*). Environmental topics raised in written comments to the NOP are summarized in Section 1.0, *Introduction*, Table 1-1, *Summary of the NOP Comments*, to this EIR.

S.3.1 Public Scoping Meeting

An EIR Scoping Meeting was held on October 20, 2023. The Scoping Meeting was held at City Council Chambers. Refer to Table 1-1, *Summary of the NOP Comments*, for comments received during the scoping meeting.

S.4 Alternatives to the Proposed Project

In compliance with CEQA Guidelines § 15126.6, an EIR must describe a range of reasonable alternatives to the Project or to the location of the Project. Each alternative must be able to feasibly attain most of the Project's objectives and avoid or substantially lessen the Project's significant effects on the environment. A detailed description of each alternative evaluated in this EIR, as well as an analysis of the potential environmental impacts associated with each alternative, is provided in EIR Section 6.0, *Alternatives*. Also described in Section 6.3 is a list of alternatives that were considered but rejected from further analysis. The alternatives considered by this EIR are listed below.

S.4.1 No Project/No Development Alternative

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the existing vacant two-story, 88,000 sf commercial office building would remain on the 12.3-acre site. No vehicle trips would be associated with this alternative. Under this Alternative, no improvements would be made to the Project site. This alternative is required by CEQA Guidelines Section 15126.6(e)(3)(B) to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition (as described in EIR Section 2.0).

S.4.2 Maximum Density Allowed Alternative

The Maximum Density Allowed Alternative considers the development of the Project site consistent with maximum density allowed under the Multi-Family Residential (R-3) zoning designation, which allows for a maximum permitted density of 25 dwelling units per net acre. Under this alternative, a total of 307 dwelling units would be constructed on the 12.3-acre Project site, resulting in an increase of 61 units. Additionally, no single family detached homes would be constructed under this alternative

and the Project would consist, instead, of townhomes and multi-family units. The development area and access to the Project site would be the same, with a proportional increase in the number of parking spaces. The Maximum Density Allowed Alternative would generate 1,921 daily trips, including 120 AM peak hour, and 153 PM peak hour trips[1], resulting in an increase of 263 daily, 8 AM peak hour, and 7 PM peak hour trips compared to the Project.

S.4.3 Senior Housing Alternative

The Senior Housing Alternative considers the development of the Project site with 55 single family detached homes, 114 townhomes, and 77 age-restricted multi-family apartment homes. In other words, this alternative would replace the Project's affordable multi-family units with senior housing. Access to the site would be the same as the Project. The Senior Housing Alternative would provide a total of 594 parking spaces, an increase of 20 spaces compared to the Project. Assuming all senior housing for the multi-family component of the Project, the Senior Housing Alternative would generate 1,538 daily trips, including 99 AM peak hour, and 130 PM peak hour trips, resulting in a decrease of 120 daily, 13 AM peak hour, and 10 PM peak hour trips compared to the Project.

S.5 Summary of Impact, Mitigation, and Levels of Impact

Table S-1, *Summary of Impact, Mitigation, and Levels of Impact*, a summary of the environmental impacts resulting from the Project. The potential direct, indirect impacts, and cumulative impacts for all environmental topical areas are addressed in Section 4.1 through 4.17 of this EIR. Growth inducing impacts and significant irreversible environmental changes are addressed in Section 5.0, *Other CEQA Considerations.*

S.6 Mitigation Monitoring

State law requires the preparation of a mitigation monitoring and reporting program (MMRP) to ensure that measures that would avoid or lessen significant environmental effects of the project are adopted as conditions of approval for the project. The mitigation measures identified in this EIR have been described in sufficient detail to provide the necessary information to identify the party or parties responsible for carrying out the mitigation, when the mitigation will be implemented, and why the mitigation has been required. An MMRP would be adopted by the City at the time that the Project is considered for approval.

[1] Based on ITE Trip Generation Manual 11th Edition for Multifamily (Low-Rise) and Affordable Housing, and specifically ITE Code 220 (230 multi-family units) and ITE Code 223 (77 affordable units).

Table S-1 Summary of Impact, Mitigation, and Levels of Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Aesthetics			
Threshold a: Would the Project have a substantial adverse effect on a scenic vista?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact	No mitigation is required.	No Impact
Threshold c: In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.2 Air Quality			
Threshold a: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project 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?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold c: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold d: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.3 Biological Resources			
Threshold a: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact	**MM 4.3-1** Vegetation clearing should be conducted outside of the nesting season (February 1 through September 15). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a pre-construction nesting bird survey within three days prior to any disturbance to the Project site. Site disturbance includes disking, demolition activities, vegetation removal and grading. If active nests are identified, the biologist shall establish appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer occupied (through routine nest monitoring by the qualified biologist) and the juvenile birds can survive independently from their nest(s). In addition, if portions of the Project site have not been disturbed within three days after the initial nesting bird survey, additional nesting bird surveys will be conducted (within the nesting bird season, February 1 to September 15) until all portions of the Project site have been disturbed appropriately (as determined by a qualified biologist) as to not provide potential nesting habitat. **MM 4.3-2** If tree removal or ground disturbance occurs during the raptor nesting season (from approximately January 1 to July 31), pre-removal/disturbance surveys shall be conducted by a qualified biologist. The surveys shall include areas of suitable nesting trees within 300-feet from the limits of disturbance (to the extent that access is available). The survey shall be conducted no more than three days prior to disturbance. Should nesting raptors be detected either onsite or offsite, work would be delayed until fledglings have left the nest and area no longer dependent on the nest at which time, work could proceed. **MM 4.3-3** A qualified biologist shall conduct a pre-construction bat roost survey for roosting bats no more than 14 days prior to site disturbance. The pre-construction bat roost survey will consist of a minimum of two bat surveys (conducted consecutively or as determined by the biologist). If roosting bats are detected onsite outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. This may include using mechanical equipment to gently nudge the tree trunk multiple times prior to removal or for palm trees and other species, to de-frond or de-branch the tree using a mechanical lift and gently lower the cut fronds or branches to the ground. Regardless of the method, the fallen tree and/or material will be left undisturbed overnight until at least the next morning to give roosting bats time to exit before site disturbance.	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		If roosting bats are detected onsite during the maternity season, the Project shall avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. Once the qualified biologist approves removal of the subject roost tree(s), the same tree removal procedures as outlined above shall be implemented prior to tree removal.	
Threshold b: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	No Impact	No mitigation is required.	No Impact
Threshold c: Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact	No mitigation is required.	No Impact
Threshold d: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant Impact	MM 4.3-1 would apply.	Less-than-Significant Impact with Mitigation Incorporated
Threshold e: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact	No mitigation is required.	No Impact
Threshold f: Would the Project 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	No mitigation is required.	No Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.4 Cultural Resources			
Threshold a: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	No Impact	No mitigation is required.	No Impact
Threshold b: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Potentially Significant Impact	**MM 4.4-1** Discovery of Inadvertent Resources. Prior to the issuance of any grading permits, the Project Applicant/Developer shall submit proof that a qualified consulting archaeologist meeting the Secretary of Interior's (36 CFR 61) Professional Qualifications Standards has been retained to conduct periodic spot checks during ground disturbing activities. Spot check should occur at initial ground exposure within the project; upon a 50 percent completion milestone of ground disturbance; upon an 80 percent milestone of ground disturbance; or at any other time determined necessary by the consulting archaeologist. If any potentially historic or archaeological resources are encountered during ground-disturbing activities, the archaeologist shall halt construction work within 50 feet of the find and assess the nature of the find for importance. a. If the discovery is determined to not be important by the archaeologist (e.g. isolates and clearly non-significant deposits), work will be permitted to continue in the area. If a find is determined to be potentially important by the archaeologist, the Lead Agency shall be notified, and additional investigation by the archaeologist would be required. Additional investigation work would include scientific recordation and excavation. b. At the conclusion of ground disturbing activities, the archaeologist shall draft a report detailing the monitoring process and summarize any additional field study and analysis of resources, should any be discovered. The completed report shall be approved by the Planning Department prior to the issuance of an occupancy permit. c. Excavated finds shall be curated at a repository determined by the archaeologist and approved by the City with verification of curation provided to the City prior to the issuance of an occupancy permit.	Less-than-Significant Impact with Mitigation Incorporated
Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant Impact	**MM 4.4-2** Discovery of Human Remains. If human burial or skeletal remains are identified during excavation or construction, work in that location shall stop immediately until the find can be properly treated. The construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 “Disturbance of Human Remains.” The County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Once the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.	
4.5 Energy			
Threshold a: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.6 Geology and Soils			
Threshold a: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides?	Potentially Significant Impact	**MM 4.6-1** Prior to the issuance of grading permits, the City of Los Alamitos Public Works & Engineering Department shall verify that all of the recommendations provided in Section 4.0 of the Project's December 21, 2021 "Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California," prepared by LGC Geotechnical, Inc. and included as Technical Appendix F1 to the Project's EIR, are incorporated into the Project's grading and building plans. These recommendations include but are not limited to a) Site Earthwork Considerations; b) Preliminary Foundation Recommendations; c) Site Grading Recommendations; d) Soil Bearing and Lateral Resistance Considerations; e) Lateral Earth Pressures for Retaining Walls Considerations; f) Nonstructural Concrete Flatwork Recommendations; and g) Preliminary Asphalt Concrete Pavement Design Parameters . Alternatively, the Project shall comply with the findings and recommendations of any geotechnical studies that may be required in association with future grading and/or building permits.	Less-than-Significant Impact with Mitigation Incorporated
Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold c: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant Impact	MM 4.6-1 would apply.	Less-than-Significant Impact with Mitigation Incorporated
Threshold d: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Potentially Significant Impact	MM 4.6-1 would apply.	Less-than-Significant Impact with Mitigation Incorporated
Threshold e: Would the Project 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	No mitigation is required.	No Impact
Threshold f: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant Impact	**MM 4.6-2** If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 50-foot radius buffer so as to protect the discovery from further potential damage, and an Orange County Certified Professional Paleontologist shall be consulted to assess the discovery.	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		MM 4.6-3 If the discovery is determined to be significant by the paleontologist based on the Society of Vertebrate Paleontology guidelines, a monitoring and recovery plan shall be initiated, which will include notification of appropriate personnel involved and monitoring of earth disturbance activities. a. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist. Monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments of alluvial deposits. b. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of fossils in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery. c. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated and the fossils are removed to a safe place. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location. d. Recovered specimens will be prepared to a point of identification and permanent preservation, including screen-washing sediments to recover small invertebrates and vertebrates. e. Recovered specimens shall be identified and curated of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., Orange County [OC] Parks).	

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		The paleontological curation program should include a written repository agreement prior to the initiation of monitoring activities. Prior to curation, the lead agency (e.g., the City of Los Alamitos Planning Division) will be consulted on the repository/museum to receive the fossil material. f. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, will signify satisfactory completion of the project program to reduce impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.	
4.7 Greenhouse Gas Emissions			
Threshold a: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.8 Hazards and Hazardous Materials			
Threshold a: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project 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?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold c: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact	No mitigation is required.	No Impact
Threshold d: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section	No Impact	No mitigation is required.	No Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
65962.5 and, as a result, would it create a significant hazard to the public or the environment?			
Threshold e: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold f: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold g: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	No Impact	No mitigation is required.	No Impact
4.9 Hydrology and Water Quality			
Threshold a: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold c: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold d: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold e: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.10 Land Use Planning			
Threshold a: Would the Project physically divide an established community?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.11 Noise			
Threshold a: Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project generate excessive groundborne vibration or groundborne noise levels?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.12 Population and Housing			
Threshold a: Would the Project induce substantial unplanned 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)?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold b: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	No mitigation is required.	No Impact
4.13 Public Services			
Threshold a: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: i. Fire Protection Services; ii. Police Protection Services; iii. School Services; iv. Parks; or v. Other Public Facilities	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.14 Recreation			
Threshold a: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.15 Transportation			
Threshold a: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Threshold b: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Potentially Significant Impact	**MM 4.15-1** Prior to the issuance of certificate of occupancy, the Project Applicant shall provide documentation that it has implemented the CAPCOA strategies identified below. Verification that the CAPCOA strategies were completed shall be verified by the City's Public Works Director. 1. Provide pedestrian and bicycle network improvements within the development connecting to existing off-site facilities, as detailed in Section 3.3.2 of this EIR. 2. Confirm with the OCTA whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards. 3. Install broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission.	Significant and Unavoidable Direct and Cumulatively Considerable Impact
Threshold c: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold d: Would the Project result in inadequate emergency access?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
4.16 Tribal Cultural Resources			
Threshold 1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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: 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 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	Potentially Significant Impact	**MM 4.16-1** Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities. 1. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.	Less-than-Significant Impact with Mitigation Incorporated

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
(c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		2. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. 3. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe. 4. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs. 5. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes **MM 4.16-2** Unanticipated Discovery of Human Remains and Associated Funerary Object. 1. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary	

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. 2. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed. 3. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2). 4. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).) 5. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. 6. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance **MM 4.16-3** Procedures for Burials and Funerary Remains.	

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		1. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. 2. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. 3. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials. 4. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. 5. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. 6. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon	

THRESHOLD	LEVEL OF SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES (MMS)	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. 7. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.	
4.17 Utilities and Service Systems			
Threshold a: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold c: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold d: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact
Threshold e: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less-than-Significant Impact	No mitigation is required.	Less-than-Significant Impact

1.0 INTRODUCTION

This Draft Environmental Impact Report ("Draft EIR" or "EIR") is an informational document that represents the independent judgement of the City of Los Alamitos, acting as the Lead Agency pursuant to the California Environmental Quality Act ("CEQA"), and evaluates the physical environmental effects that could result from construction and operation of the proposed 4665 Lampson Avenue Project (hereinafter the "Project"). Discretionary and other related ministerial actions that are required to construct and operate the Project are also described in this EIR.

When the term "Project" is used in this EIR with the initial letter capitalized, the term shall mean all aspects of the planning, construction, and operation of the 4665 Lampson Avenue Project, including all discretionary and administrative approvals and permits required for its implementation. When the term "Project Applicant" or "Applicant" are used with the initial letters capitalized, the terms shall mean Lampson Park Place, LLC, which is the entity that submitted applications for the Project as proposed and as evaluated in this EIR.

1.1 PURPOSES OF CEQA AND THIS DRAFT EIR

This Draft EIR has been prepared in compliance with CEQA, as amended, and the CEQA State Guidelines (Title 14 California Code of Regulations § 15000 et. seq.) ("CEQA Guidelines"), as amended. As stated by CEQA Guidelines Section 15002(a), the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed development activities involving discretionary government approvals (including the approval of private development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why the governmental agency approved the project in the manner the agency chose (if the project involves significant environmental effects).

Following a preliminary review of the Project's application materials, the City concluded that the Project and its associated implementation actions clearly have the *potential* to result in significant environmental effects; as such, the City proceeded with preparation of this EIR pursuant to CEQA Guidelines Section 15060(d). The City determined that a Project EIR, as described in CEQA Guidelines Section 15161, would be required.

Pursuant to CEQA Guidelines Section 15161, this Project EIR shall "… focus primarily on the changes in the environment that would result from the development project," and "…examine all phases of the project including planning, construction, and operation." Also, pursuant to CEQA Guidelines Section

15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

1.2 SUMMARY OF THE PROJECT EVALUATED BY THIS EIR

The Project Applicant proposes to demolish the existing office building and surface parking lot on the 12.3-acre property (hereinafter the "Project site") and redevelop the Project site with 246 residential units consisting of a variety of different product types, including: single family courtyard homes, townhomes, and apartments and construction of associated site improvements. The unit mix would include 55 single family courtyard homes, 114 townhomes, and 77 affordable multi-family apartment homes. The Project site is located at 4665 Lampson Avenue, in the City of Los Alamitos, County of Orange (Assessor Parcel Number [APN] 130-012-35). Specifically, the Project site is north of Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street.

The Project Applicant has filed applications for the following discretionary actions, which are under consideration by the City of Los Alamitos:

- Site Development Permit – Major
- Tentative Parcel Map (for finance and conveyance purposes)
- Vesting Tentative Tract Map (for Condominium Purposes)
- Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions pursuant to the State's Density Bonus Law (Government Code Section 65915) and the City's Municipal Code Section 17.28.050.

All components of the Project are described in detail in EIR Section 3.0, *Project Description*.

1.3 PRIOR CEQA REVIEW

The Project site is located within the geographical limits of the City of Los Alamitos and is covered by the City's 2035 General Plan Update (GPU), which provides the fundamental basis for the City's land use and development policies. The City's GPU was the subject of review under CEQA (State Clearinghouse [SCH] Number 2013121055). The City of Los Alamitos approved the GPU and certified its Final Program EIR on March 23, 2015. The Program EIR contains information relevant to the Project site. Thus, the Program EIR for the City's GPU is herein incorporated by reference pursuant to CEQA Guidelines Section 15150 and is available for public review at the City of Los Alamitos, Planning Division, 3191 Katella Avenue, Los Alamitos, CA 90720.

On February 21, 2023, Los Alamitos City Council adopted the comprehensive update of the City's Housing Element for the reporting period of 2021-2029 (Resolution No. 2023-02). Upon adoption of

the City's 2021-2029 Housing Element Update, City Council adopted Resolution No. 2023-01 approving General Plan Amendment (GPA) 22-02 to ensure that the zoning code updates in Ordinance 2023-1 will maintain internal consistency with the actions, goals, objectives, and policies of the General Plan and will not create any inconsistencies therein. A Negative Declaration was prepared for the 2021-2029 Housing Element Update pursuant to the provisions of CEQA and the record of the approval is available to the general public at the address stated above. On March 20, 2023, City Council adopted Ordinance 2023-01 which approved a Multi-Family Residential - 36 Zone (R-4) Zoning District in the City, amended the Town Center Mixed Use Zone, and rezoned certain properties to the R-3 and new R-4 Districts. Following adoption of the resolution and ordinance in connection with the 2021–2029 Housing Element update, the Project site land use designation was changed from General Office to Multi-Family Residential-25 and was rezoned from C-F (Community Facilities) to Multi-Family Residential-25 Zone (R-3).

1.4 LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 *et seq.*).

Pursuant to Public Resources Code Section 21067 and CEQA Guidelines Article 4 and Section 15367, the City is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City's independent judgement; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this EIR are infeasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (CEQA Guidelines Section 15090 through 15093).

Pursuant to CEQA Guidelines Sections 15040 through 15043, and upon completion of the CEQA review process, the City will have the legal authority to do any of the following:

- Approve the Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Subject to the Project's protections provided by the Housing Accountability Act (Government Code Section 65589.5) and the Density Bonus Law (Government Code Section 65915), deny approval of the Project in order to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or

- Approve the Project even though the Project could cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for the proposed Site Development Permit – Major, Vesting Tentative Tract Map (for Condominium Purposes), Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions, and all other governmental discretionary and administrative actions related to the Project.

1.5 EIR Scope, Format, and Content

1.5.1 EIR Scope

The City filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to Responsible Agencies, Trustee Agencies, and other interested parties on October 3, 2022, for a 30-day public review period. The NOP was distributed for public review to solicit responses that would help the City identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR.

In addition, a publicly noticed EIR Scoping Meeting was held on October 20, 2022. The EIR Scoping Meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of environmental concerns to be addressed in this EIR.

The NOP, public review distribution list, and written comments received by the City during the NOP public review period are provided in *Technical Appendix A* to this EIR. Substantive issues raised in response to the NOP and during the Scoping Meeting are summarized below in Table 1-1, *Summary of NOP Comments*, and Table 1-2, *Summary of Scoping Meeting Comments*. The purpose of these tables is to present a summary of the key environmental topics that were expressed by public agencies, interested parties, and members of the general public to be of primary interest. All comments received in response to the NOP and during the EIR Scoping Meeting are addressed in this EIR.

Table 1-1 Summary of NOP Comments

Commenter	Comment	Location In EIR Where Comment Is Addressed
Agencies & Organizations		
Airport Land Use Commission for Orange County (ALUC)	• EIR should discuss whether the proposed Project penetrates the Federal Aviation Regulation (FAR) Part 77 Horizontal Imaginary Surface • Noise regulations for the Project	Section 4.8, *Hazards and Hazardous Materials*, Section 4.10, *Land Use and Planning*, and Section 4.11, *Noise*
American Youth Soccer Organization (AYSO) Region 159	• Requests analysis of parking utilization at Arbor Park, Project site, and impacts to current parking uses • Concerns with lack of signal control and requests analysis of driveway on the east side of the Project site • Evaluate prescriptive easement • Requests analysis of overflow parking into College Park East and Arbor Park • Requests EIR to include listing of existing parks with 1/2 mile of the Project site and evaluation of any planned recreational facilities • Concerns with noise impacts from soccer and Dog Park	Section 3.0, *Project Description*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
California Department of Transportation (CalTrans)	• Consider including long-term bicycle parking facilities for the multi-family apartment units and look at opportunities to include Complete Streets improvements • Ensure appropriate temporary detours to maintain safe bicycle access on Lampson Avenue • Coordinate with CalTrans System Planning Unit regarding the existing Park and Ride facility agreement • Submit copies of all traffic related documents for review • Ensure that truck parking, ingress and egress, and staging will not interfere with vehicle parking, pedestrian paths, or bicycle lanes/parking • Establish freight pick up and drop off times that do not coincide with peak commute hours to reduce passenger vehicle conflicts and congestion for freight • Consider amazon lockers or an equivalent shared drop off location depending on number of packages • Work with local partners and community representatives to mitigate truck traffic routing onto residential streets or conflicting with other road users	Section 3.0, *Project Description* and Section 4.15, *Transportation*
City of Seal Beach	• Requests the Project Applicant to enter into a reimbursement agreement for access and utilities	Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Requests traffic impacts to be evaluated utilizing Seal Beach's Transportation Analysis Guidelines • Requests a full analysis of Arbor Park • Project Applicant will need to coordinate with the City for water and sewer service • Recommends undergrounding of existing overhead utilities fronting the Project site • City of Seal Beach has the right to review and approve/reject any on and off-site improvements that can potentially impact Seal Beach • Project Applicant shall dedicate any and all necessary easements to the City • Requires consultation with the Seal Beach Police Department (SBPD)	4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Earthjustice	• Recommends Project to incorporate an all-electric Project design that is not connected to the gas system	Section 3.0, *Project Description*
Native American Heritage Commission (NAHC)	• Provides information regarding required Native American consultation pursuant to Senate Bill 18 and Assembly Bill 52	Section 4.4, *Cultural Resources*, and Section 4.16, *Tribal Cultural Resources*
Orange County Fire Authority (OCFA)	• Project is subject to review by the City and OCFA for applicable fire life safety codes and regulation as well as California Building Code (CBC), California Fire Code (CFC), and other related codes • Requests traffic signals on public access ways should include optical preemption devices • Requires the Project to include automatic fire sprinkler systems designed per National Fire Protection Association (NFPA) 13 as required in the current CBC, CFC • Requires the Project to include a water system to supply fire hydrants and automatic fire sprinkler systems • New hydrants installed during the Project will be public fire hydrants. • Fire Department Accessibility around the Project site • OCFA and City building department to conduct final inspection and signoff before occupancy of the Project • Requires a Secured Fire Protection Agreement with the Project Applicant	Section 4.13, *Public Services*
Southern California Edison (SCE)	• SCE Local Planning was not able to respond directly; reach out to SCE Tract or New Development Project Management (NDP) Planning if you have a project in-progress	N/A

Commenter	Comment	Location In EIR Where Comment Is Addressed
Individuals		
Anthony Aboseif	• Expresses concerns related to pedestrian safety and number of proposed parking spaces • Requests EIR to include listing of existing parks within a 1/2 mile of the Project site and analysis of any planned recreational facilities • Requests an analysis of noise impacts at Arbor Park during weekends	Section 3.0, *Project Description*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Dave Avila	• Concerns with construction noise, road closure during construction, overflow parking, road impacts from usage of heavy construction equipment, traffic safety, noise pollution, and Heather Park usage	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Dara Baddeley	• Concerns with increase in traffic congestion, noise, pollution, decrease in safety as well as a reduction in property values of the existing community	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Samantha Baksic	• Concerns with traffic impacts and public safety on Lampson Avenue • Concerns with Arbor Park impacts • Concerns with Greenhouse Gas (GHG) emissions and removal of open space • Concerns with air quality impacts due to increased cars	Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Dennis and Kathleen Barnes	• Concerns with air quality, water supply, parking, and capacity of parks	Section 3.0, *Project Description*, Section 4.2, *Air Quality*, Section 4.14, *Recreation*, and Section 4.17, *Utilities and Service Systems*
Michelle Beck	• Concerns with traffic impacts on Lampson Avenue and road closures • Concerns with Arbor Park, Dog Park, and AYSO impacts • Concerns with impacts to College Park East parks and any planned recreational facilities	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Marie Ben-Sabat	• Concerns with pedestrian and bicycle safety, and increase in traffic	Section 4.15, *Transportation*
Derek Berger	• Concerns with increase in traffic on Lampson Ave • Concerns with parking overflow into College Park East Neighborhood and AYSO parking	Section 4.15, *Transportation*
Ryan La Bounty	• Concerns with removal of existing parking lot and AYSO soccer • Concerns with noise impacts for new residents • Concerns with loss of Arbor Park and use of parks and facilities by new residents • Concerns with Traffic flow on Lampson Ave • Concerns with increased calls for police and fire services • Concerns with dust and pollution	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Dustin Boyce	• Concerns with traffic impacts • Concerns with impacts to Arbor Park and AYSO	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Barbara Boyer	• Concerns with traffic accidents • Concerns with high density	Section 3.0, *Project Description* and Section 4.15, *Transportation*
Timothy Brady	• Concerns with cut-through traffic and traffic impacts on Lampson Avenue • Concerns with the proposed density • Concerns with inadequate parking • Concerns with increase of police and fire services and sources of funding • Concerns with the CA Surplus Land Act	Section 3.0, *Project Description*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Justin Bragg	• Concerns with traffic on Lampson Avenue • Concerns with pollution • Concerns with increase in noises • Concerns with loss of AYSO parking • Concerns with no playground for new residents	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Daniel Brandt	• Concerns with traffic impacts on Lampson Avenue, additional congestion traveling to the 405 freeway • Requests study to address any additional traffic control signal devices, traffic signal times, foot traffic, and roadway improvements for Lampson Avenue and surrounding streets • Requests study on how the developer would manage demolition, removal of debris, and transportation of construction equipment and materials • Concerns with lack of parking and impacts to College Park East roads • Concerns with impact of parking at Arbor Park and impacts to Arbor Park • Requests technical study on impact of additional residents and response times/increase of services for police and fire • Requests technical study on glare impacts and visual impacts of the 3-story building • Requests visual simulation between 4509 Ironwood Ave and 4701 Ironwood Ave • Requests technical study on street lighting in the area • Requests technical study on wildlife impacts related to coyote and rabbit	Section 3.0, *Project Description*, Section 4.1, *Aesthetics*, Section 4.3, *Biological Resources*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Mica Brandt	• Concerns with increase in traffic • Concerns with increase in calls to Los Alamitos Police Department and Seal Beach Police Department	Section 4.11, *Noise*, Section 4.13, *Public Services*, and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with parking for AYSO and Arbor Park Dog Park • Concerns with increase in noise for neighboring homes	
Jeff Branson	• Concerns with sufficient parking • Concerns with foot traffic and unsafe street crossings • Concerns with crime and safety • Concerns with use of College Park East parks	Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Rebecca Branson	• Concerns with increased traffic and foot traffic on Lampson Ave, insufficient parking, views from backyard, noise impacts, and impacts to recreational facilities	Section 4.1, *Aesthetics*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Rich Brown	• Concerns with impacts to the school district, police and fire responses, increased use of recreational facilities, understaffed hospital services, insufficient youth, summer camps, taxes and reduction to quality of life	Section 4.13, *Public Services* and Section 4.14, *Recreation*
Edward Bushman	• Concerns with traffic on Lampson Avenue and the intersection of Heather and Rose, parking space capacity for new tenants, use of Heather Park and any park improvements, and proposed density	Section 3.0, *Project Description*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Cheryl Campbell	• Increase in traffic on Seal Beach Blvd, Heather, Elder, Ironwood, Candleberry, and Lampson • Impacts to Arbor Park and school facilities	Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Patricia E. Campbell	• Concerns with traffic on Lampson Avenue and lack of traffic light for the entrances of the Project site • Concerns with noise impacts • Concerns with inadequate parking and AYSO parking • Consider impacts from the proposed development of Old Ranch Golf Course and other housing developments	Section 4.0, *Environmental Analysis*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Brian and Mimi Cannizzaro	• Concerns with increased traffic on Lampson Ave, Seal Beach Blvd, and Valley View Blvd • Concerns with increase in population • Concerns with insufficient parking	Section 4.12, *Population and Housing*, and Section 4.15, *Transportation*
Barbara Carroll	• Concerns with impacts to AYSO and Arbor Park	Section 4.14, *Recreation*
Castillo	• Requests analysis of environmental topics and parking	Section 4.0, *Environmental Analysis*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Ashley Cecala	• Concerns with overflow of parking into College Park East • Concerns with traffic impacts on Lampson Ave	Section 4.15, *Transportation*
Megan Cecala	• Concerns with overflow of parking into College Park East • Concerns with traffic impacts on Lampson Ave	Section 4.15, *Transportation*
Mercedes Cecala	• Concerns with overflow of parking into College Park East • Concerns with traffic impacts on Lampson Ave	Section 4.15, *Transportation*
Lesley Chappell	• Concerns with congestion on Lampson Ave and no proposed traffic light • Concerns with pollution • Concerns with noise impacts	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Daniel and Danielle Chen	• Concerns with impacts to AYSO and Arbor Park	Section 4.14, *Recreation*
Pin Chen	• Concerns with traffic congestion • Concerns with pollution • Concerns with noise impacts • Concerns with overflow of parking into College Park East	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Karole Chesser	• Concerns with higher volume of traffic • Concerns with increase in noise • Concerns with air quality impacts	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Mark and Julia Chow	• Opposes the Project	N/A
Lorna Cloke	• Concerns with traffic • Concerns with increase in noise • Concerns with utilities and service systems • Concerns with the aesthetic views of mixed area housing	Section 4.1, *Aesthetics*, Section 4.11, *Noise*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Jill Cohen-Doron	• Concerns with congestion Impacts from increased traffic • Concerns with noise impacts from traffic	Section 4.11, *Noise* and Section 4.15, *Transportation*
Elizabeth Cortez	• Concerns with impacts to school district, police services, hospital and community • Concerns with water supply and electricity supply	Section 4.13, *Public Services* and Section 4.17, *Utilities and Service Systems*
Katie Coughlin	• Opposes the Project and concerns with EIR topics • Concerns with traffic congestion, pollution, and proposed density	Section 4.0, *Environmental Analysis*, Section 4.2, *Air Quality*, and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Travis Covey	• Concerns with impacts to Arbor Park and AYSO	Section 4.14, *Recreation*
Heath Creighton	• Concerns with increased traffic and traffic impacts on Lampson Avenue • Requests environmental study for emissions impacts	Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, and Section 4.15, *Transportation*
Pauline Creighton	• Concerns with air quality impacts • Concerns with noise pollution • Concerns with traffic congestion and accidents • Concerns with dust and hazardous materials • Concerns with housing plan • Concerns with insufficient parking spaces • Concerns with low-income housing	Section 4.2, *Air Quality*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, Section 4.12, *Population and Housing*, and Section 4.15, *Transportation*
Joe Croce	• Concerns with construction noise and road closures • Concerns with fire, police, and emergency response • Concerns with increased traffic on Lampson Ave, parking in College Park East, and traffic safety • Concerns with impacts to utilities and service systems • Concerns with impacts to local parks and city services	Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Chrysanthi & Nick Davilas	• Concerns with traffic impacts on Lampson Ave • Concerns with parking on Ironwood from new residents	Section 4.15, *Transportation*
Kevin A. Day	• Concerns with increased light pollution • Concerns with sound pollution and vibration above roadway standards • Concerns with increased traffic and unsafe road conditions • Concerns with public transit on Lampson Avenue • Concerns with loss of park space utility • Concerns with impacts to recreational facilities in College Park East • Concerns with insufficient parking and parking in College Park East	Section 4.1, *Aesthetics*, Section 4.11, *Noise*, Section 4.14. *Recreation*, and Section 4.15, *Transportation*
Dr. Nancy Dayne	• Concerns with lack of traffic signal and accidents • Concerns with Arbor Park impacts • Concerns with noise impacts to Arbor Park	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Alan De La Vara	• Concerns with traffic impacts on Lampson Avenue	Section 4.2, *Air Quality*, Section 4.9, *Hydrology and Water Quality*,

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with drainage to handle increased homes • Concerns with privacy for backyards from residents in the new construction • Concerns with pollution and noise from additional residences • Concerns with pollution and noise impacts to pets • Concerns with noise impacts due to increased traffic on Lampson Avenue	Section 4.11, *Noise*, and Section 4.15, *Transportation*
Diane Delaterre	• Concerns with water supply for the Project • Concerns with traffic on Lampson Avenue • Concerns with police patrol in the vicinity of the Project site • Concerns with parking in the College Park East neighborhood and use of parks and playgrounds	Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Christopher Derry	• Concerns with Project density • Concerns with access to and from the Project site • Concerns with lack of recreational facilities • Concerns with Project demolition and construction • Concerns with land use and zoning changes • Concerns with construction noise, pollution, road closure, and parking	Section 4.2, *Air Quality*, Section 4.10, *Land Use and Planning*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Jenni DeSelm	• Concerns with impacts to Arbor Park and any improvements to recreational facilities • Concerns with sufficient parking • Concerns with noise impacts for residents	Section 4.11, *Noise* and Section 4.14, *Recreation*
Larry Ditchkus	• Concerns with inadequate parking • Concerns with inadequate open space and lack of proposed recreational facilities • Concerns with lack of traffic signal which impacts the ingress and egress • Concerns with 3-story elevations and visual impacts to College Park East	Section 4.1, *Aesthetics*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Kellie DuRose	• Concerns with insufficient parking • Concerns with traffic impacts on Lampson Ave, Seal Beach Blvd, and Valley View Blvd • Concerns with construction noise impacts • Concerns with infrastructure improvements	Section 4.11, *Noise*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Chris Eble	• Concerns with Project-related traffic impacts on Lampson Avenue • Concerns with parking and AYSO parking • Concerns with proposed density	Section 3.0, *Project Description* and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Sean Fagan	• Concerns with the location of the Project	N/A
Stephen Freeland	• Concerns with traffic increase on Lampson Avenue • Concerns with noise complaints from new residents for Arbor Park • Concerns with lack of playground	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Nan Funbuyre	• Concerns with student athletic track which will be impacted given increase in traffic on Lampson Ave • Concerns with pressure from development in Cypress will impact Lampson Ave • Concerns with impacts from increase in emissions • Concerns with Los Al School bus traffic flow (pick up - drop off)	Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, and Section 4.15, *Transportation*
Mauricio Furtado	• Concerns with new recreational areas • Concerns with existing bicycle lane on Lampson Ave and traffic conditions on North Seal beach Boulevard	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Mariane H. Gabriel	• Concerns with loss of open space for wildlife • Concerns with traffic impacts with no proposed alternative route	Section 4.3, *Biological Resources* and Section 4.15, *Transportation*
Daniel Garcia	• Concerns with technical studies for the EIR	Section 4.0, *Environmental Analysis*
Victor Garcia	• Concerns with impacts to AYSO and Arbor Park	Section 4.14, *Recreation*
Osama Gayed	• Concerns with increase in traffic • Concerns with crime	Section 4.13, *Public Services* and Section 4.15, *Transportation*
John Geraghty	• Concerns with loss of parking lot and CalTrans park and ride	N/A
Lisa Gilbertson	• Concerns with additional traffic	Section 4.15, *Transportation*
Carlye Glonchak	• Concerns with aesthetic impacts • Concerns with increased emissions • Concerns with impacts to community culture • Concerns with construction noise, road closure, and noise pollution • Concerns with increase in fire/police/medical calls and increase in crime • Concerns with GHG emissions • Concerns with building material waste and disposal of hazardous waste • Concerns with Project density • Concerns with increase in population and parking	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.4, *Cultural Resources*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, Section 4.12, *Population and Housing*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section 4.15,

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with removing a recreational area • Concerns with impacts to schools and libraries • Concerns with cut-through traffic and safety issues due to increased traffic • Concerns with water supply, electricity, trash service	*Transportation*, and Section 4.17, *Utilities and Service Systems*
Ellen Goldenberg	• Opposes the Project and requests to scale back the Project	Section 6.0, *Alternatives*
Melanie Gotto	• Concerns with noise impacts • Concerns with overcrowding of Heather Park • Concerns with traffic safety on Lampson Ave • Concerns with impacts to AYSO	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Michael R. Gotto	• Concerns with traffic, GHG emissions, Hazardous Materials, Air Quality, and noise pollution	Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Jennifer Graham	• Concerns with increase in traffic, traffic signal timing • 1)Are additional traffic signals being planned? • 2)Is the overflow parking expected to be College Park East? If so, is Seal Beach planning overnight permit parking only in College Park East? • 3)Is Los Alamitos planning to compensate Seal Beach for increased use of its Public Services (i.e. police who patrol and investigate accidents on Lampson)? Will the Los Al police/fire departments be responsible for responding to incidents in the proposed neighborhood, and will potential tenants be informed on potentially longer response times due to distance from the rest of Los Al? • 4)How will this affect public utilities (especially in summer months)? Is the proposed project on the Los Al grid or Seal Beach electrical grid?	Section 4.15, *Transportation*
Crystal Greeley	• Concerns with removal of parking lot and impacts to AYSO	Section 4.14, *Recreation*
Jeff Grgas	• Concerns with loss of parking for AYSO and Arbor Park activities • Concerns with inadequate parking and overflow of parking into College Park East • Concerns with traffic safety and increased traffic on Lampson Avenue • Concerns with inadequate recreational facilities and use of College Park East parks	Section 4.14, *Recreation* and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
CK Gulec	• Concerns with traffic impacts to Lampson Ave • Concerns with parking issues for surrounding neighborhoods • Recommends reconsidering the location of the Project site	Section 4.15, *Transportation* and Section 6.0, *Alternatives*
Gizem Gulec	• Opposes the Project • Concerns with poor aesthetics, worsening Air Quality and GHG emissions, hazards and hazardous materials, noise and population and housing	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, and Section 4.12, *Population and Housing*
Jennifer Halls	• Concerns with additional traffic • Concerns with air quality impacts • Concerns with noise pollution on Lampson Avenue • Concerns with loss of parking • Concerns with impacts to school district	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, and Section 4.15, *Transportation*
Holly Harris	• Consider impacts of wildfire • Concerns with noise impacts from animals, rat population • Concerns with impacts to biological resources • Concerns with impacts to water supply • Concerns with impacts to traffic on Lampson Avenue • Concerns with impacts to waste services	Section 4.3, *Biological Resources*, Section 4.15, *Transportation*, Section 4.17, *Utilities and Service Systems*, and Section 5.0, *Other CEQA Considerations*
Joan and Walt Horne	• Concerns with traffic congestion on Lampson Avenue and noise impacts from JFTB	Section 4.11, *Noise* and Section 4.15, *Transportation*
Ryan Howley	• Concerns with traffic impacts • Concerns with air quality impacts • Concerns with loss of parking for AYSO and Arbor Park	Section 4.2, *Air Quality*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Terri Hubert	• Requests proper environmental impact studies prepared and reviewed	Section 4.0, *Environmental Analysis*
Bret Hudzietz	• Concerns with insufficient parking and close proximity to College Park East • Concerns with increase in traffic	Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Jaclyn Power Hudzietz	• Concerns with construction air quality impacts • Concerns with traffic impacts • Concerns with fire protection services and police services • Concerns with impacts to Heather and Arbor Park	Section 4.2, *Air Quality*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Hector Huffington	• Concerns with tree removal • Concerns with automobile pollution • Concern about the one driveway for the apartments	Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, and Section 4.15, *Transportation*
Grace Hughes	• Concerns with traffic during school drop off and pick up times around Rossmoor • Concerns with overflow/guest parking • Concerns with safe air quality during demolition of the existing building	Section 4.2, *Air Quality* and Section 4.15, *Transportation*
Kat Hyatt	• Concerns with traffic impacts and congestion on Lampson Avenue and Seal Beach Blvd • Concerns with Electric Vehicle (EV) charging stations and electricity demand • Concerns with police services, fire protection services, school services • Concerns with AYSO parking impacts at Arbor Park	Section 4.5, *Energy*, Section 4.13, *Public Services*, and Section 4.15, *Transportation*
Cindy Ivandic	• Concerns with impacts to Arbor Park • Concerns with noise impacts to surrounding neighborhoods	Section 4.11, *Noise* and Section 4.14, *Recreation*
Karen Iwakoshi	• Concerns with traffic on Lampson Avenue, Seal Beach Boulevard, and Valley View	Section 4.15, *Transportation*
Maren Jackson	• Concerns with technical studies, rodent problem, traffic, noise, hazardous materials, and recreation	Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
John Jacobs	• Requests technical studies for traffic safety, parking, population, and recreation • Concerns with parking, site design, lack of traffic signals, and recreation space • Concerns with traffic	Section 4.0, *Environmental Analysis*, Section 4.12, *Population and Housing*, Section 4.14, Recreation, and Section 4.15, *Transportation*
Shanna Jacobs	• Concerns with traffic congestion • Concerns with loss of parking for sporting events at Arbor Park • Concerns with accidents and safety	Section 4.15, *Transportation*
Somi Jayasinghe	• Support of AYSO, Concerns with loss of parking and impacts to Arbor Park	Section 4.14, *Recreation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Tiffany Joyner	• Concerns with increase in traffic and safety • Concerns with run down parks in College Park East • Concerns with parking	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Michael and Karen Kadletz	• Concerns with the Project due to traffic, homeless people, schools	Section 4.13, *Public Services* and Section 4.15, *Transportation*
David Kalish	• Concerns with traffic on Lampson Avenue and Seal Beach Boulevard, • Concerns with inadequate parking, • Concerns with new residents using Seal Beach recreational facilities	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Sarah Kennedy	• Concerns with traffic congestion on Lampson Ave • Concerns with noise impacts to the surrounding area • Concerns with park usage • Concerns with wildlife and rodents	Section 4.3, *Biological Resources*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Julie and William King	• Concerns with low income housing • Concerns with road closure on Lampson Ave during construction • Concerns with police, fire, and medical response due to increased homes • Concerns with air quality and GHG impacts • Concerns with increased use on schools and parks • Concerns with sanitation during construction	Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Julianna (Fusco) Kirby	• Concerns with Traffic • Concerns with parking • Concerns with construction noise • Concerns with Air Quality • Concerns with overuse of parks in College Park East • Concerns with increase in population that will affect surrounding areas	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.12, *Population and Housing*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Bruce Klein	• Opposes the Project	N/A
Dennis Knisley	• Concerns with traffic impacts on Lampson Avenue • Concerns with proposed driveways and lack of traffic light • Concerns with school bus service on Lampson Avenue • Consider installing a turnout lane for school bus and OCTA bus • Concerns with pedestrian safety on Lampson Avenue	Section 4.15, *Transportation* and Section 6.0, *Alternatives*

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with insufficient parking • Concerns with the proposed open space/common area • Concerns with the architectural elevation renderings	
Helen Knisley	• Concerns with traffic and safety issues on Lampson Avenue • Concerns with limited accessibility into and out of the Project site • Concerns with lack of parking within the Project site • Concerns with parking during weekends, specifically soccer games • Concerns with the renderings and large number of proposed homes	Section 4.15, *Transportation*
Gene Kochevar	• Concerns with traffic impacts on Lampson Ave • Opposes the Project • Concerns with EIR analysis and recipients and requests copy of EIR before decision making process	Section 1.0, *Introduction*, Section 4.0, Environmental Analysis, and Section 4.15, *Transportation*
Elizabeth Krusic	• Concerns with the size of the Project, affordable housing, and infrastructure to accommodate the Project	Section 3.0, *Project Description* and Section 4.17, *Utilities and Service Systems*
Anjanette Kupfer	• Concerns with existing aesthetic views of the mountains, trees, and wildlife • Concerns with Project lighting • Concerns with increase in traffic and accessibility on Lampson Avenue • Concerns with increase in noise, existing noise from the airport • Concerns with pollution • Concerns with wildlife impacts • Concerns with lack of infrastructure to support the Project	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, Section 4.11, *Noise*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Karen Kupfer	• Concerns with air quality, noise, and additional traffic on Lampson and Seal Beach • Concerns with AYSO parking • Concerns with removal of wildlife and trees • Concerns with aesthetic views from development • Concerns with water supply • Concerns with increase in traffic to Lampson Ave and Seal Beach Blvd • Concerns with Project construction • Concerns with Emergency access	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, Section 4.11, *Noise*, Section 4.14, *Recreation*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with use of Seal Beach parks	
Owen Kupfer	• Requests an unbiased review/full assessment of the Project	Section 4.13, *Public Services* and Section 4.15, *Transportation*
Owen E. Kupfer, Jr.	• Concerns with traffic on Lampson Ave and emergency access • Concerns with impacts to school district	Section 4.13, *Public Services* and Section 4.15, *Transportation*
Reid Kupfer	• Concerns with congestion and more pollution on Lampson Avenue • Concerns with lack of traffic light and cut-through traffic • Concerns with safety issues for pedestrians and children • Concerns with use of Seal Beach and Garden Grove recreational facilities • Concerns with overcrowding, excessive noise, pollution, parking issues, and wear & tear to facilities/equipment • Consider adding a traffic light, reducing apartments down to two stories and adding a playground	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Barbara Ledterman	• Concerns with Project parking and AYSO Parking • Concerns with access to Arbor Park • Concerns with traffic impacts on Lampson Ave and any traffic improvements	Section 4.15, *Transportation*
Jarnette Lee	• Concerns with increase in traffic • Concerns with impacts to school district • Concerns with impacts to parks	Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Jeremy Lewis	• Concerns with AYSO parking and impacts to Arbor Park soccer fields • Concerns with transportation impacts	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Linsei Lingo	• Opposes the Project and concerns with impacts to Arbor Park	Section 4.14, *Recreation*
Julianna Linn	• Supports the Project	N/A
Lawrence Lipana	• Concerns with loss of parking and impacts to Arbor Park and AYSO • Requests analysis of existing parks and any planned park space • Requests analysis of noise impacts on weekends as well	Section 4.11, *Noise* and Section 4.14, *Recreation*
Angela Lyons	• Concerns with wildlife and elimination of open space along Lampson Avenue • Concerns with AYSO Parking • Concerns with increase In traffic	Section 4.3, *Biological Resources* and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Tamee MacKay	• Concerns with traffic issues on Lampson Avenue and accessibility issues to Arbor Park and Dog Park • Concerns with overflow parking into College Park East	Section 4.15, *Transportation*
Steve Marinoff	• Concerns with impacts to AYSO parking and use of Arbor Park	Section 4.14, *Recreation*
Ken Markman	• Concerns with the public notice radius for the scoping meeting in Garden Grove	The radius was expanded to 1,000 feet and every house within College Park East and Parkwood regardless of distance.
Kelly Marshall	• Concerns with overcrowding of Los Alamitos Unified School District • Concerns with increase in traffic on Seal Beach/ Los Al Blvd	Section 4.13, *Public Services*, and Section 4.15, *Transportation*
Richard B. Martin	• Concerns with emergency access given an earthquake • Concerns with ingress and egress on Lampson Ave	Section 4.15, *Transportation*
Cathy Mathews	• Concerns with noise, pollution, and traffic • Concerns with insufficient infrastructure to support 246 units	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Robbi Maurer	• Requests analysis of environmental topics and parking	Section 4.0, *Environmental Analysis*
Meredith Mayosky	• Concerns with traffic impacts on Lampson Avenue • Concerns with what parks the new residents will use • Concerns with lack of parking and AYSO parking loss	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Jo Melis	• Concerns with traffic impacts on Lampson Avenue • Concerns about water supply	Section 4.15, *Transportation* and Section 4.17, *Utilities and Service Systems*
Yvette Meneses	• Concerns with traffic congestion on main streets, traffic noise, pedestrian and bicycle safety, longer traffic delays getting onto the freeway, difficulty of access to parks, increase in smog and pollution • Concerns with another housing development in Cypress that will affect Katella Ave	Section 4.0, *Environmental Analysis*, Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Amira Michael	• Opposes the Project, lists EIR topics as areas that will be impacted	
Chad Millan	• Estimated timeframe of the Project	Section 3.0, *Project Description*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Soo Min	• Concerns with traffic impacts • Concerns with technical studies related to hazards	Section 4.8, *Hazards and Hazardous Materials* and Section 4.15, *Transportation*
Bob Moehling	• Concerns with site access • Concerns with land use adjacent to Los Alamitos Joint Forces Training Base (JFTB) and ALUC regulations • Concerns with police and fire protection services • Concerns with Statewide Community Infrastructure Program and/or other subsidies to build homes and address the City's Regional Housing Needs Allocation (RHNA) requirements • Concerns with Mello Roos Act • Concerns with tree ordinance • Concerns with impervious surface area for the Project site and water quality requirements • Concerns with parking for the affordable housing area • Concerns with the significance of GHG emissions for the change in land use designation	Section 4.3, *Biological Resources*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.9, *Hydrology and Water Quality*, Section 4.10, *Land Use and Planning*, Section 4.12, *Population and Housing*, Section 4.13, *Public Services*, and Section 4.15, *Transportation*
Suzy Mokhtari	• Concerns with parking plan, open space, and traffic	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Marjorie Morley	• Concerns with change in aesthetic setting • Concerns with bad air quality and pollution • Concerns with noise pollution • Concerned with emergency response and if these services will be in Los Alamitos • Concerns with GHG emissions • Concerns with hazardous waste • Concerns with setbacks from Lampson Avenue • Concerns with future tenants and the noise from JFTB • Concerns with parking in College Park East and use of existing parks • Concerns with recreational facilities within the Project site • Concerns with location of utilities for the Project site (undergrounding or off-site) • Concerns with traffic conditions on Lampson and Valley view	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Onur Mudanyali	• Concerns with aesthetic impacts • Concerns with air quality impacts	Section 4.1, *Aesthetics* and Section 4.2, *Air Quality*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Valerie and Don Munro	• Concerns with aesthetics impacts of the 3-story development • Concerns with traffic impacts on Lampson Ave • Concerns with parking impacts • Concerns with lack of recreational facilities and additional foot traffic and park use	Section 4.1, *Aesthetics*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Ben Newhouse	• Concerns with impacts to wildlife species and habitat loss	Section 4.3, *Biological Resources*
Joseph Nieblas	• Concerns with overflow parking into College Park East • Concerns with traffic impacts at the Heather Street crosswalk	Section 4.15, *Transportation*
Loan Nolan	• Opposes the Project	N/A
Bart and Alice O'Brien	• Concerns with traffic impacts on Lampson Avenue • Concerns with crime and lack of police presence • Concerns with aesthetic impacts • Concerns with construction air quality impacts in addition to traffic • Concerns with construction noise and road closure • Concerns with impacts to public services • Concerns with increase in GHG emission • Concerns with speeding and increased traffic • Concerns with development adjacent to JFTB • Concerns with parking and surrounding neighborhoods • Concerns with increased use of parks and equipment • Concerns with impacts to infrastructure	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Adam Offenberg	• Concerns with increase in traffic • Concerns with insufficient parking • Concerns with use of Seal Beach parks • Concerns with restriction of trucks over 3 tons on Lampson Ave	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Justin Osburn	• Concerns with traffic impacts on Lampson Ave • Concerns with air quality impacts • Concerns with increased noise • Concerns with no planned park development • Concerns with limited parking and overflow into surrounding neighborhoods • Concerns with emergency response	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Sophia Osburn	• Concerns with traffic impacts on Lampson Ave • Concerns with air quality impacts • concerns with increased noise • Concerns with no planned park development • Concerns with limited parking and overflow into surrounding neighborhoods • Concerns with emergency response	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Enea Ostrich	• Concerns with impacts to wildlife within Arbor Park • Concerns with AYSO parking, Dog park • Concerns with Lampson Ave traffic impacts	Section 4.3, *Biological Resources* and Section 4.15, *Transportation*
Matt Owens	• Concerns with traffic impacts and congestion • Concerns with relocation of gophers	Section 4.3, *Biological Resources* and Section 4.15, *Transportation*
Nick Papadakis	• Requests analysis of environmental topics and parking	Section 4.0, *Environmental Analysis*
Bobby Papoulias	• Concerns with increase in traffic, accessibility at Heather Park • Concerns with parking issues • Concerns with overcrowding of parks	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Tom Papoulias	• Review of EIR topics	Section 4.0, *Environmental Analysis*
Terry Pederson	• Concerns with traffic impacts • Concerns with increase in Noise • Concerns with air quality impacts • Concerns with no planned parks • Concerns with overflow parking into College Park East	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
L. Pellegrini	• Concerns with impacts to wildlife • Concerns with water supply and impacts to wetlands • Concerns with police protection services	Section 4.3, Biological Resources, Section 4.13, *Public Services*, and Section 4.17, *Utilities and Service Systems*
Mike and Jessica Polye	• Concerns with noise impacts • Concerns with traffic impacts • Concerns with aesthetic impacts • Concerns with biology impacts	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, Section 4.9, *Hydrology and Water Quality*,

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with runoff and drainage • Concerns with impacts to public services • Concern with no planned parks • Concerns with air quality impacts	Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Christina Pottios	• Concerns with parking for AYSO	Section 3.0, *Project Description*
Charles and Shannon Powell	• Concerns with traffic impacts • Concerns with construction and traffic noise • Concerns with pollution • Concerns with wildlife impacts	Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Tom Power	• Concerns with traffic impacts on Lampson Ave • Concerns with loss of parking lot and parking in College Park East from new tenants • Concerns with car break ins, increase in classroom size, and police services • Concerns with air quality impacts • Concerns with noise impacts • Concerns with use of College Park East parks	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Laramie Price	• Concerns with traffic impacts on Lampson Avenue • Requests technical studies for the following topics: Aesthetics Air Quality Cultural Resources Construction Noise and road closure fire / police / Medical Response Greenhouse Gas Emissions Hazards & Hazardous Materials Land Use & Planning Noise Pollution (vehicles on Lampson) Population & Housing Parking in our neighborhood Public Services Recreation Road impacts from heavy equipment Rodents Schools / Libraries Traffic Safety (U-turns at heather, left / right turns at Seal Beach Blvd and Valley View, cut through traffic, etc.) Utilities & Service Systems	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.4, *Cultural Resources*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.10, *Land Use and Planning*, Section 4.11, *Noise*, Section 4.12, *Population and Housing*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section 4.15, *Transportation*, Section 4.17, *Utilities and Service Systems*
Mary Ramsden Saenz	• Concerns with inadequate parking • Concerns with increased traffic and traffic hazards • Concerns with use of Seal Beach recreational facilities	Section 4.2, *Air Quality*, Section 4.14, *Recreation*, Section 4.15,

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with impacts to school district • Concerns with construction of new utility infrastructure • Concerns with drought conditions and water supply • Concerns with air pollution from vehicles	*Transportation*, and Section 4.17, *Utilities and Service Systems*
Debbie Ramsey	• Concerns with traffic impacts • Concerns with impacts to schools in Rossmoor	Section 4.13, *Public Services* and Section 4.15, *Transportation*
Ana Reed	• Opposes the Project, lists EIR topics that will be impacted	Section 4.0, *Environmental Analysis*
Amy Reid	• Concerns with construction noise impacts • Concerns with traffic impacts on Lampson Ave and College Park East • Concerns with overpopulation in the area • Concerns with construction air quality impacts	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.12, *Population and Housing*, and Section 4.15, *Transportation*
Brent Rider	• Concerns with wildlife impacts • Concerns with air pollution • Concerns with traffic	Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, and Section 4.15, *Transportation*
Christian Rieger	• Opposes the Project	N/A
Marilyn Riordan	• Opposes the Project • Concerns with EIR topics and parking	Section 4.0, *Environmental Analysis*
Gary Roberts	• Asks about the choice of location for the Project • Concerns with alternative sites	Section 6.0, *Alternatives*
Luie Rodriguez	• Opposes the Project	N/A
Matthew Rush/The Rush Family	• Concerns with traffic impacts on Lampson Avenue • Concerns with the proposed open space and impacts to existing recreational facilities (Heather Park) • Concerns with parking impacts	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Abraam & Mirna Saad	• Concerns with increase in greenhouse gas emissions within a local area of the Project • Concerns with hazardous waste during construction, including soil disturbance resulting in Aerially Deposited Lead and toxic dust	Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, and Section 4.8, *Hazards and Hazardous Materials*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Tommy Salas	• Concerns with traffic safety impacts on Lampson Ave • Concerns with Arbor Park parking and overflow of parking into College Park East • Requests listing of existing parks within a ½ mile of the Project site and evaluation of any planned recreational facilities • Concerns with noise impacts from soccer and the Dog Park	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Tim Sams	• Opposes the Project, overpopulation, overuse of resources, and traffic issues	Section 4.12, *Population and Housing* and Section 4.15, *Transportation*
Brittney Sanderson	• Concerns with traffic safety impacts on Lampson Ave • Concerns with Arbor Park parking and overflow of parking into College Park East • Requests listing of existing parks within a ½ mile of the Project site and evaluation of any planned recreational facilities • Concerns with noise impacts from soccer and the Dog Park	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Pam Sasuga	• Concerns with traffic on Lampson Ave • Concerns with noise pollution • Concerns with air quality impacts • Concerns with crowded parks • Concerns with crime to vehicles and homes	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Kari Scheer-Stachowiak	• Concerns with aesthetic impacts and disruption of open space • Concerns with air quality impacts • Concerns with construction noise and road closures • Concerns with traffic • Concerns with Los Alamitos emergency response time • Concerns with increase in GHG emissions • Concerns with runoff and flooding • Concerns with Arbor Park and AYSO impacts • Concerns with school district impacts • Concerns with insufficient infrastructure to support new residents	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.9, *Hydrology and Water Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Fred Schutz	• Concerns with traffic impacts on Lampson and accessibility • Concerns with air quality impacts • Concerns with noise impacts	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public*

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with impacts to College Park East parks • Concerns with fire and police services • Concerns with impacts to parking	*Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Scott Schwartz	• Requests technical studies for traffic, noise, air quality, parking, drainage, recreation, and aesthetics	Section 1.0, *Introduction*, Section 3.0, *Project Description*, and Section 4.0, *Environmental Analysis*
Marc Serlin	• Concerns with lack of adequate recreation space • Concerns with inadequate parking and overflow of parking into College Park East • Concerns with traffic impacts on Lampson Avenue and cut-through traffic in College Park East	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Shannon Shondeff	• Opposes the Project, Concerns with EIR topics and increased traffic • Concerns with impacts to Arbor Park and Dog Park	Section 4.0, *Environmental Analysis*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Julia and James Shores	• Opposes the Project • Concerns with traffic	Section 4.15, *Transportation*
Catherine Showalter	• Concerns with mixed use density, AYSO, and parking • Concerns with safety regarding access via the two proposed driveways and crossing Lampson Ave to access Heather Park • Recommends Project open space area be converted into a recreational park • Concerns with VMT increase • Concerns with lack of any proposed solar roof panels/EV charging infrastructure	Section 3.0, *Project Description*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Justin Silva	• Concerns with infrastructure and telecommunications grid • Concerns with increase in traffic, noise, and parking	Section 4.11, *Noise*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Mr. Simmons	• Concerns with AYSO and Arbor Park impacts	Section 4.14, *Recreation*
Abhaijeet (A.J.) Singh	• Concerns with AYSO parking on weekends and weekly practice days • Concerns with traffic impacts on Lampson Avenue • Concerns with use of parks for new residents • Concerns with AYSO noise impacts for new residents	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Denise Sklar	• Opposes the Project	N/A

Commenter	Comment	Location In EIR Where Comment Is Addressed
Glenn Smith	• Concerns with traffic impacts on Lampson, Valley View, and Seal Beach • Concerns with noise and pollution • Requests traffic, wildlife, and safety studies	Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Jeff Smith	• Concerns with traffic impacts, accessibility and emergency response • Concerns with insufficient parking • Concerns with use of Heather Park and planned recreational improvements • Concerns with construction noise and road closure	Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Rebekah Smith	• Concerns with traffic and pollution	Section 4.2, *Air Quality* and Section 4.15, *Transportation*
Traci Smith	• Concerns with increased traffic and impacts on surrounding streets • Concerns with rezoning Arbor Park for residential development	Section 4.10, *Land Use and Planning* and Section 4.15, *Transportation*
Marty Sprong	• Concerns with traffic impacts on Lampson Avenue, traffic safety, and parking in College Park East • Concerns with impacts to Arbor Park	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Matthew Stachowiak	• Concerns with traffic congestion and parking • Concerns with noise pollution • Concerns with increased need for fire/police services	Section 4.11, *Noise*, Section 4.13, *Public Services*, and Section 4.15, *Transportation*
Dora Stathopoulos	• Opposes the Project	N/A
Michelle Stohler	• Concerns with traffic impacts on Lampson Avenue • Concerns with open space and parks	Section 4.14, *Recreation* and Section 4.15, *Transportation*
Christine Stone	• Concerns with traffic impacts on Lampson Ave and surrounding streets	Section 4.15, *Transportation*
Gregg Stone	• Concerns with traffic on Lampson Ave • Concerns with no proposed parks and reduction of open space • Concerns with fire and police services	Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Tony Sun	• Concerns with traffic impacts when Arbor Park is in full operation • Concerns with noise impacts from park activities and JFTB aircraft • Concerns with coordination with the FAA and military	Section 4.10, *Land Use and Planning*, Section 4.11, *Noise*, and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Schelly Sustarsic	• Concerns with VMT increase and cumulative increase on traffic on Lampson Avenue • Concerns with traffic safety on Lampson Avenue and U-turn at Heather Street • Concerns with lack of school bus stop • Concerns with inadequate parking and overflow of parking into College Park East • Concerns with recreation and loss of parking for soccer at Arbor Park • Concerns with run-off and flooding • Concerns with EV charging stations in the apartments • Concerns with impacts to air quality, GHG emissions, and noise due to VMT increase	Section 4.2, *Air Quality*, Section 4.5, *Energy*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.9, *Hydrology and Water Quality*, Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Kara Tardivel	• Concerns with loss of parking for Arbor Park and overflow of parking into College Park East • Concerns with lack of traffic signal and traffic safety impacts • Requests evaluation of any planned recreational facilities and listing of existing parks within a 1/2 mile of the Project site • Concerns with noise impacts for new residents due to soccer and the Dog Park	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Nimfa Taylor	• Concerns with EIR topics and parking	Section 4.0, *Environmental Analysis*
Sarah Tello	• Concerns with increase in traffic	Section 4.15, *Transportation*
Pamela Thames	• Concerns with the proposed density and parking impacts	Section 3.0, *Project Description*
Thomas and Elizabeth Thomas	• Concerns with limited parking • Concerns with lack of parks/recreation area • Concerns with school district impacts and overcrowding • Concerns with emergency service providers - fire, medical, and police • Concerns with water supply and water quality during construction • Concerns with 2 and 3-story building impacts to aesthetics • Concerns with construction impacts	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, Section 4.15, *Transportation*, and Section 4.17, *Utilities and Service Systems*
Alison Toda	• Concerns with noise from freeway and overhead from JFTB • Concerns with increased air pollution • Concerns with roadway impacts due to trucks and additional cars • Concerns with traffic on Lampson Ave, Seal Beach Blvd, and Valley View • Concerns with safety due to increased traffic • Concerns with parking in College Park East	Section 4.2, *Air Quality*, Section 4.11, *Noise*, Section 4.13, *Public Services*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*

Commenter	Comment	Location In EIR Where Comment Is Addressed
	• Concerns with overcrowding of College Park East parks • Concerns with increased crime due to affordable apartments	
Stephanie Valenzuela	• Concerns with traffic and limited parking at Arbor Park	Section 4.15, *Transportation*
Ryan Vergara	• Concerns with pollution • Concerns with traffic congestion and safety • Concerns with school district impacts	Section 4.2, *Air Quality*, Section 4.13, *Public Services*, and Section 4.15, *Transportation*
David Vititow	• Concerns with parking impacts • Concerns with traffic impacts on Lampson Ave • Concerns with construction noise • Concerns with air quality impacts	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Shanna Vititow	• Concerns with noise impacts • Concerns with parking impacts • Concerns with traffic and safety • Concerns with College Park East parks impacts	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*
Teresa Werner	• Concerns with traffic impacts on Lampson Ave • Concerns with school district impacts • Concerns with impacts to public services	Section 4.13, *Public Services* and Section 4.15, *Transportation*
Jonny West	• Concerns with traffic impacts on Lampson Ave and within College Park East • Concerns with insufficient parking	Section 4.15, *Transportation*
Claudia Wilderman	• Concerns with air quality, construction noise and road closure, GHG emissions, hazards and hazardous materials, land use and planning, noise pollution, parking in College Park East, rodents, traffic safety, and aesthetics	Section 4.1, *Aesthetics*, Section 4.2, *Air Quality*, Section 4.7, *Greenhouse Gas Emissions*, Section 4.8, *Hazards and Hazardous Materials*, Section 4.10, *Land Use and Planning*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Ksatria Williams	• Requests parking study for residents to avoid impacts to College Park East and other neighborhoods • Requests environmental study for traffic, noise, and pollution	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Ryan Winkleman	• Requests significance analysis for wildlife species	Section 4.3, *Biological Resources*

Commenter	Comment	Location In EIR Where Comment Is Addressed
Mark and Leslie Wintheiser	• Concerns with the proposed density and parking impacts	Section 3.0, *Project Description*
Frank Yang	• Concerns with traffic on Lampson Ave • Concerns with pollution and noise	Section 4.2, *Air Quality*, Section 4.11, *Noise*, and Section 4.15, *Transportation*
Christina Zandi	• Concerns with insufficient parking and overflow of parking into College Park East and Arbor Park • Requests evaluation of any planned recreational facilities and listing of existing parks with a 1/2 mile of the Project site • Concerns with noise impacts due to soccer and the Dog Park	Section 4.11, *Noise*, Section 4.14, *Recreation*, and Section 4.15, *Transportation*

.

Table 1-2 Summary of Scoping Meeting Comments

Environmental Topic	Comment	Location In EIR Where Comment Is Addressed
EIR Analysis	• How is the EIR analysis different from the Phase I Environmental Site Assessment (ESA) prepared in May 2016? • Concerns with impacts to parking	Section 4.8, *Hazards and Hazardous Materials*
Public Notice Radius	• Concerns with the public notice radius requirement of 500 feet	The radius was expanded to 1,000 feet and every house within College Park East and Parkwood regardless of distance.
Traffic	• Concerns with the increase in traffic on Lampson Avenue • Consider traffic impacts from other projects nearby • Concerns with the increase in Vehicle Miles Traveled (VMT) • Concerns with traffic pattern and accessibility for the Project site	Section 4.15, *Transportation*
Noise	• Concerns with Project and Airport noise	Section 4.11, *Noise*
School Services	• Concerns with impacts to the Los Alamitos School District	Section 4.13, *Public Services*
Project	• Concerns about Affordable Housing, Individual Lots, Estimated Timeframe for the Project, Site Plan, Solar and EV Charging Stations, and Home Ownership	Section 3.0, *Project Description*

Upon consideration of all comments received by the City in response to the NOP and during the EIR Scoping Meeting, this EIR provides a detailed analysis of the Project's potential to cause adverse effects under the following topics:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- 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
- Tribal Cultural Resources
- Utilities and Service Systems

The topics listed above are evaluated in EIR Section 4.0, *Environmental Analysis*.

During the course of conducting research of the Project's potential environmental effects and preparing this EIR, the City concluded that the Project would clearly result in either (1) no impacts or (2) less-than-significant impacts under three environmental topic areas, including: Agriculture and Forestry Resources, Mineral Resources, and Wildfire. Potential effects to these topic areas are summarized in EIR Section 5.0, *Other CEQA Considerations*.

1.5.2 EIR Format and Content

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statue and Guidelines (California Public Resources Code Section 21000 *et seq.* and California Code of Regulations, Title 14, Chapter 5). Table 1-3, *Location of CEQA Required Topics* provides a quick reference guide for locating the CEQA-required sections within this EIR.

Table 1-3 Location of CEQA Required Topics

CEQA Required Topic	CEQA Guidelines Reference	Location in this EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	§ 15126.2(c)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Impacts Which Would be Involved in the Proposed Action Should it be Implemented	§ 15126.2(d)	Subsection 5.2
Growth-Inducing Impacts of the Proposed Project	§ 15126.2(e)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Subsection 5.4
Organizations and Persons Consulted and References	§ 15129	Section 7.0, Section 8.0 & Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Energy Conservation	§ 15126.2(b) & Appendix F	Subsection 4.5

In Summary, the content of this EIR is as follows:

- **Section S.0, Executive Summary**, provides an overview of the EIR and CEQA process and provides a brief description of the Project, including its objectives, the location and regional setting of the Project site, and potential alternatives to the Project as required by CEQA. The Executive

Summary provides a summary of the Project's impacts, mitigation measures, and conclusions, in a table that forms the basis of the Project's Mitigation Monitoring and Reporting Program (MMRP).

- **Section 1.0, Introduction** provides introductory information about the CEQA process and the responsibilities of the City in its role as Lead Agency, a brief description of the Project, the purpose of the EIR, and an overview of the EIR format.

- **Section 2.0, Environmental Setting** describes the environmental setting, including descriptions of the Project site's physical conditions and surrounding context used as the baseline for analysis in this EIR.

- **Section 3.0, Project Description** includes a detailed Project Description that identifies the precise location and boundaries of the Project, a map showing the Project's location in a regional perspective, a statement of the Project's objectives, a general description of the Project's technical, economic, and environmental characteristics, and a statement describing the intended uses of the EIR, including a list of agencies expected to use the EIR, and a list of approvals for which the EIR will be used. The Project Description contains a level of specificity commensurate with the level of detail proposed by the Project.

- **Section 4.0, Environmental Analysis** provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the Project. A determination concerning the significance of each impact is addressed and mitigation measures are presented when warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. CEQA Guidelines Section 15358 describes the terms "effects" and "impacts" as being synonymous.

  In each subsection of Section 4.0, the existing conditions pertaining to the subject area being analyzed are discussed accompanied by a specific analysis of physical impacts that may be caused by implementing the Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in CEQA Guidelines Section 15355 as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

  The analysis in Section 4.0 is based in part upon technical reports that are included in this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the Project and are cited in Section 8.0, *References*.

  Where the analysis identifies a significant environmental effect, feasible mitigation measures are recommended. Pursuant to CEQA and the CEQA Guidelines, an EIR must propose and describe

mitigation measures to minimize the significant environmental effects identified in the EIR. The requirement that EIRs identify mitigation measures realizes CEQA's policy that Lead Agencies adopt feasible measures when approving a project to reduce or avoid its significant environmental effects. Per Public Resources Code Section 21081.6 and CEQA Guidelines Section 15126.4, mitigation measures must be enforceable through conditions of approval, contracts or other means that are legally binding. Pursuant to Public Resources Code Section 21081.6, incorporating mitigation measures into conditions of approval is sufficient to demonstrate that the measures are enforceable. This requirement is designed to ensure that mitigation measures will actually be implemented, not merely adopted and then ignored. In light of the foregoing, the identified mitigation measures are analyzed to determine whether they would effectively reduce or avoid any significant environmental effects. In most cases, implementation of the mitigation measures would reduce an identified significant environmental effect to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations would need to be adopted by the Lead Agency pursuant to CEQA Guidelines Section 15093.

- **Section 5.0, Other CEQA Considerations** includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not to be significant during preparation of this EIR.

- **Section 6.0, Project Alternatives** describes and evaluates alternatives to the Project that could reduce or avoid the Project's adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives, including a "No Project" alternative, that will foster informed decision making and public participation.

- **Section 7.0, Organization and Persons Consulted** lists the agencies and persons that were consulted in preparing this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

- **Section 8.0, References** cites all reference sources used in preparing this EIR.

1.5.3 Incorporation by Reference

CEQA Guidelines Section 15147 states that the "information contained in an EIR shall include summarized…information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "[p]lacement of highly technical and specialized analysis and data in the body of an EIR shall be avoided through the inclusion of supporting information and analyses as appendices to the main body of the EIR." CEQA Guidelines Section 15150

allows for the incorporation "by reference all or portions of another document… [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR. All references cited in this EIR are available at the website address provided in Section 8.0, References, and/or at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720.

The following documents are incorporated by reference and cited in this EIR as appropriate:

- City of Los Alamitos Active Transportation Plan, February 2021.
- City of Los Alamitos General Plan Draft Environmental Impact Report, August 2014
- City of Los Alamitos General Plan, March 2015.
- City of Los Alamitos General Plan Update Revised Final Environmental Impact Report, February 2015.
- City of Los Alamitos 2021-2029 Housing Element, February 2023.
- City of Los Alamitos Municipal Code (various chapters), January 2023.

1.5.4 Technical Reports

This EIR relies on a number of Project-specific technical appendices that are bound separately as *Technical Appendices*. The *Technical Appendices* are available for review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720, during the City's regular business hours or can be requested in electronic form on the City's website at http://cityoflosalamitos.org/203/Planning-Commission-Projects or by contacting the City's Development Services Department – Planning Division. The individual technical studies, reports, and supporting documentation that comprise the *Technical Appendices* are as follows:

A: Notice of Preparation and Written Comments during the NOP
B1: Air Quality Impact Analysis
B2: Health Risk Assessment
C1: Biological Resources Report
C2: Jurisdictional Delineation
D1: Phase I Cultural Resources Study
D2: Historic Resources Evaluation
E: Energy Analysis
F1: Geotechnical Report
F2: Paleontological Assessment

G: Greenhouse Gas Analysis
H1: Phase I Environmental Site Assessment
H2: Phase II Environmental Site Assessment
I1: Preliminary Hydrology Report
I2: Preliminary Water Quality Management Plan
I3: Alternate Preliminary Hydrology Study
J1: Airport Land Use Assessment
J2: FAA's Determination of No Hazard to Air Navigation
K: Noise Impact Analysis
L: Public Service Correspondences
M: Parks Impact Analysis
N1: Traffic Analysis
N2: Vehicle Miles Traveled Analysis
O: Sanitary Sewer Analysis
P: Onsite Parking Analysis
Q: Arbor Park Parking Study and Layout
R: Senior Housing Alternative Analyses

Other reference sources that are incorporated into this EIR by reference are listed in Section 8.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's *Technical Appendices* are cited by a link to the online location where the document/website can be reviewed. References relied upon by this EIR will be available for public review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720.

1.6 RESPONSIBLE AND TRUSTEE AGENCIES

California Public Resource Code Section 21104 requires that all EIRs be reviewed by responsible and trustee agencies (see also CEQA Guidelines Section 15082 and Section 15086(a)). As defined by CEQA Guidelines Section 15381, "the term 'Responsible Agency' includes all public agencies other than the Lead Agency that have discretionary approval over the project." A "Trustee Agency" is defined in CEQA Guidelines Section 15386 as a "State agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California."

For the Project, the Orange County Airport Land Use Commission (ALUC), Regional Water Quality Control Board (RWQCB), Orange County Sanitation District (OCSD), Southern California Gas Company (SoCalGas), Southern California Edison (SCE), and the South Coast Air Quality Management District (SCAQMD) are identified as Responsible Agencies. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether identified in this EIR or not, as part of their decision-making processes in relation to the proposed Project.

1.7 AREAS OF CONTROVERSY

Environmental topics raised in written comments to the NOP are summarized in Table 1-1, *Summary of NOP Comments*, and Table 1-2, *Summary of Scoping Meeting Comments*. After consideration of all comments received in response to the NOP and during the Project's scoping meeting, the Lead Agency has identified environmental issues of concern relating to all topical issues apart from Agriculture and Forestry Resources, Mineral Resources, and Wildfire. Key issues brought forth during the NOP period and the Project's scoping meeting include traffic congestion on Lampson Avenue, Seal Beach Boulevard, Valley View Street, Heather Street, and Rose Street; parking issues within the proposed Project site, Arbor Park and the neighborhood south of the Project site; air quality, GHG, and noise impacts from Project construction; and public services.

2.0 Environmental Setting

2.1 Regional Setting and Location

The approximately 12.3-acre Project site is within the City of Los Alamitos, which is located in the northwestern portion of Orange County, California. The City and sphere of influence (SOI) are surrounded by the cities of Long Beach to the west, Seal Beach to the south, Cypress to the north, and Garden Grove to the east.

The Project site is located approximately 0.47-mile north of Interstate 405 (I-405), approximately 0.83-mile northwest of State Route 22 (SR-22), and approximately 2.36 miles east of I-605. The site's location in a regional context is shown on Figure 3-1, *Regional Map*.

2.2 Local Setting and Location

At the local scale, the 12.3-acre Project site is located north of and adjacent to Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street (see Figure 3-2, *Vicinity Map*). The legal address for the Project site is 4665 Lampson Avenue, Los Alamitos, CA 90720 and the Project site's Assessor Parcel Number (APN) is 130-012-35.

2.3 Surrounding Land Uses

Existing land uses in the immediate vicinity of the Project site are illustrated on Figure 3-3, *Aerial Photograph*, and are described below in Table 2-1, *Surrounding Land Uses*.

Table 2-1 Surrounding Land Uses

Direction from Project Site	Existing Land Use and Jurisdiction	General Plan Land Use Designation	Zoning
North	Arbor Park, Los Alamitos Joint Forces Training Base (JFTB), including runways and associated structures	Community & Institutional/JFTB	C-F (Community Facilities)
South	Residential Neighborhood (College Park East), City of Seal Beach	Residential Low Density	RLD-9 (Residential Low Density-9)
West	JFTB, including runways and associated structures	Community & Institutional/JFTB	C-F (Community Facilities)
East	Navy Golf Course, JFTB	Community & Institutional/JFTB	C-F (Community Facilities)

Arbor Park, which is operated by the City of Seal Beach, is immediately north of the Project site. Further north and west is undeveloped land associated with the Los Alamitos Joint Forces Training Base (JFTB).

Arbor Park includes baseball fields leased by Los Alamitos Youth Baseball (LAYB), a dog park, and soccer fields prioritized for use by American Youth Soccer Organization (AYSO) Region 159. AYSO Region 159 uses Arbor Park for soccer practices on weeknights and soccer games on weekends.

The JFTB supports Component Commands. JFTB provides the California Army National Guard (CANG) units and other Department of Defense (DoD) entities the capabilities and capacities to improve and maintain readiness. JFTB facilitates the infrastructure and support for City, State, and Federal agencies to train and coordinate for the support of Defense Support of Civil Authorities (DSCA) requirements, and to become a Joint Reception Staging Onward Movement and Integration (JRSOI) site in response to a DSCA event. (CAL GUARD, 2023)

Undeveloped land associated with the JFTB is immediately west of the Project site. JFTB Los Alamitos has entered a 30-year lease with Bright Canyon Energy for the development of a solar project on a 100-acre segment of the base, which will be located to the west and northwest of the Project site. The 26-megawatt solar project is being constructed by and will be owned and operated by Bright Canyon Energy. The project will provide power to the base with the JFTB emergency response mission in mind. The system includes a 20MW/40 megawatt-hour battery, 3 MW backup generators and a microgrid control system that allows the project to disconnect from the traditional power grid and operate autonomously, when necessary. The system will ensure that the JFTB has power under any condition with the battery and generators providing power for up to a minimum of 14 days. During normal operations, the system will put carbon-free power back into the grid. The system began operation in 2023. The solar project would be independent from the Project and energy from this solar project would not be used for the Project site.

Lampson Avenue is immediately south of the Project site. The City classifies Lampson Avenue as a Secondary Arterial (right-of-way is 80-feet, typically 4-lane undivided roadway). Approximately 80 feet south of the Project site, on the opposite side of Lampson Avenue and within the City of Seal Beach, is a residential neighborhood (College Park East) consisting of low-density single-family residential dwelling units.

The Navy Golf Course is located immediately east of the Project site. The Navy Golf Course is open to the public and consists of a 27-hole complex including a driving range, putting and chipping greens, club rental, golf and push carts, pro shop (Navy Life SW, n.d.). Further east, beyond the Navy Golf Course, is a residential neighborhood (Park Wood Los Alamitos, consisting of single-family residential dwelling units) and single-family residential neighborhoods within the City of Garden Grove.

2.4 PLANNING CONTEXT

2.4.1 CITY OF LOS ALAMITOS GENERAL PLAN

The City of Los Alamitos's prevailing planning document is its General Plan, dated March 23, 2015. On February 21, 2023, Los Alamitos City Council adopted the comprehensive update of the City's Housing Element for the reporting period of 2021-2029 (Resolution No. 2023-02). Upon adoption of

the City's 2021-2029 Housing Element Update, City Council adopted Resolution No. 2023-01 approving General Plan Amendment (GPA) 22-02 to ensure that the zoning code updates in Ordinance 2023-1 will maintain internal consistency with the actions, goals, objectives, and policies of the General Plan and will not create any inconsistencies therein.

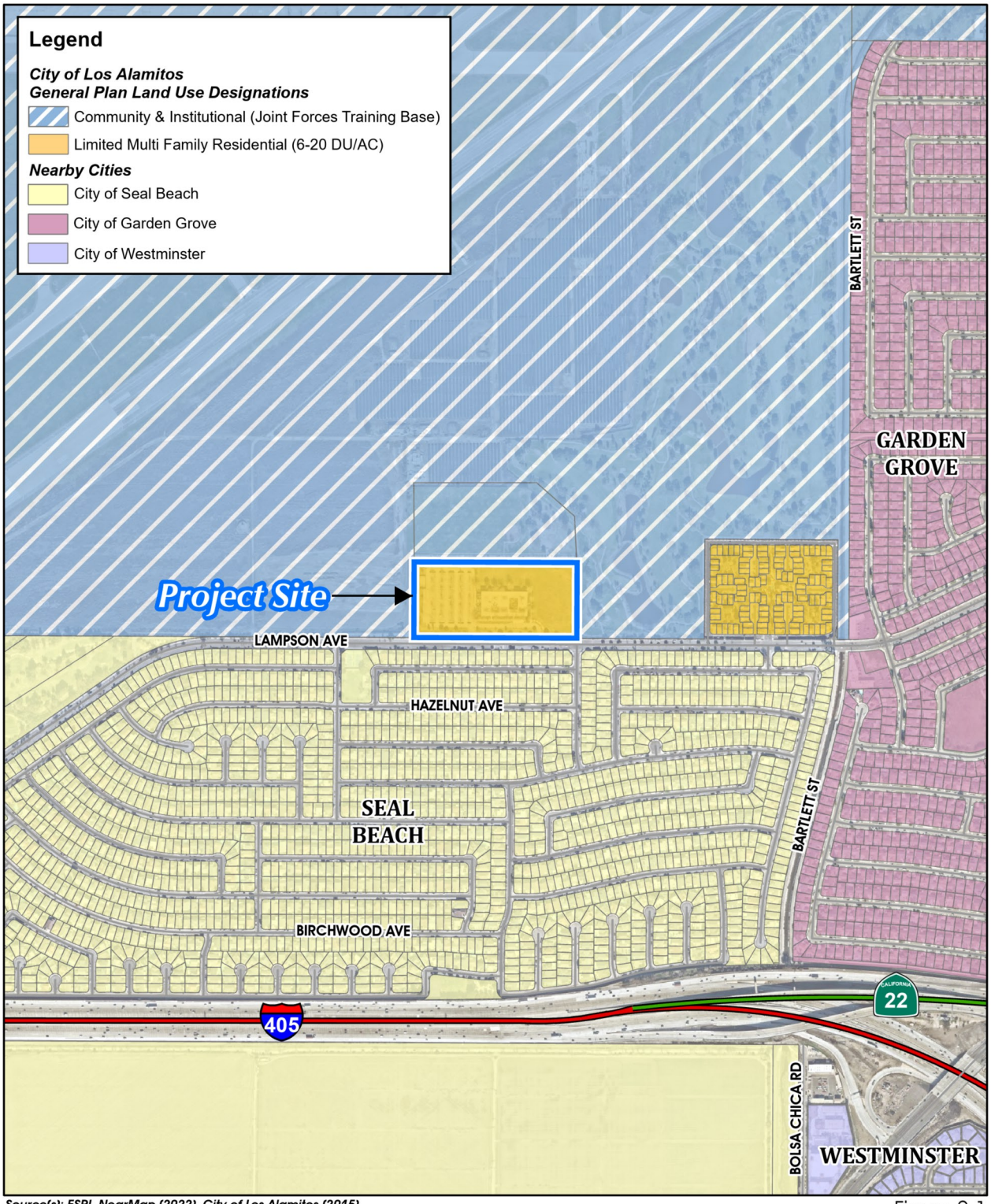
As depicted on Figure 2-1, *Existing General Plan Land Use Designations*, the City's General Plan designates the Project site for "Multi-Family Residential-25" land use. The "Multi-Family Residential-25" land use designation is defined as "single family detached and attached residences, including all development permitted in other residential categories as well as stacked flats and other building types with 4 or more units. Other uses such as convalescent hospitals, churches, and mobile home parks are also permitted subject to special procedures.

2.4.2 Zoning

On March 20, 2023, City Council adopted Ordinance 2023-01 which approved a R-4 Zoning District in the City, amended the Town Center Mixed Use Zone, and rezoned certain properties to the R-3 and new R-4 Districts. The Project site was rezoned from C-F (Community Facilities) to R-3 (Multi-Family Residential). As depicted on Figure 2-2, *Existing Zoning* , the Project site is zoned as "Multi-Family Residential (R-3)". The R-3 zone applies to lots intended to provide multi-family housing. Housing types permitted include those permitted in the R-1 and R-2 zones, as well as structures containing four or more dwelling units. The maximum permitted density is 20 to 25 dwelling units per net acre. The R-3 zone implements the General Plan Multi-Family Residential land use designation.

2.4.3 Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos

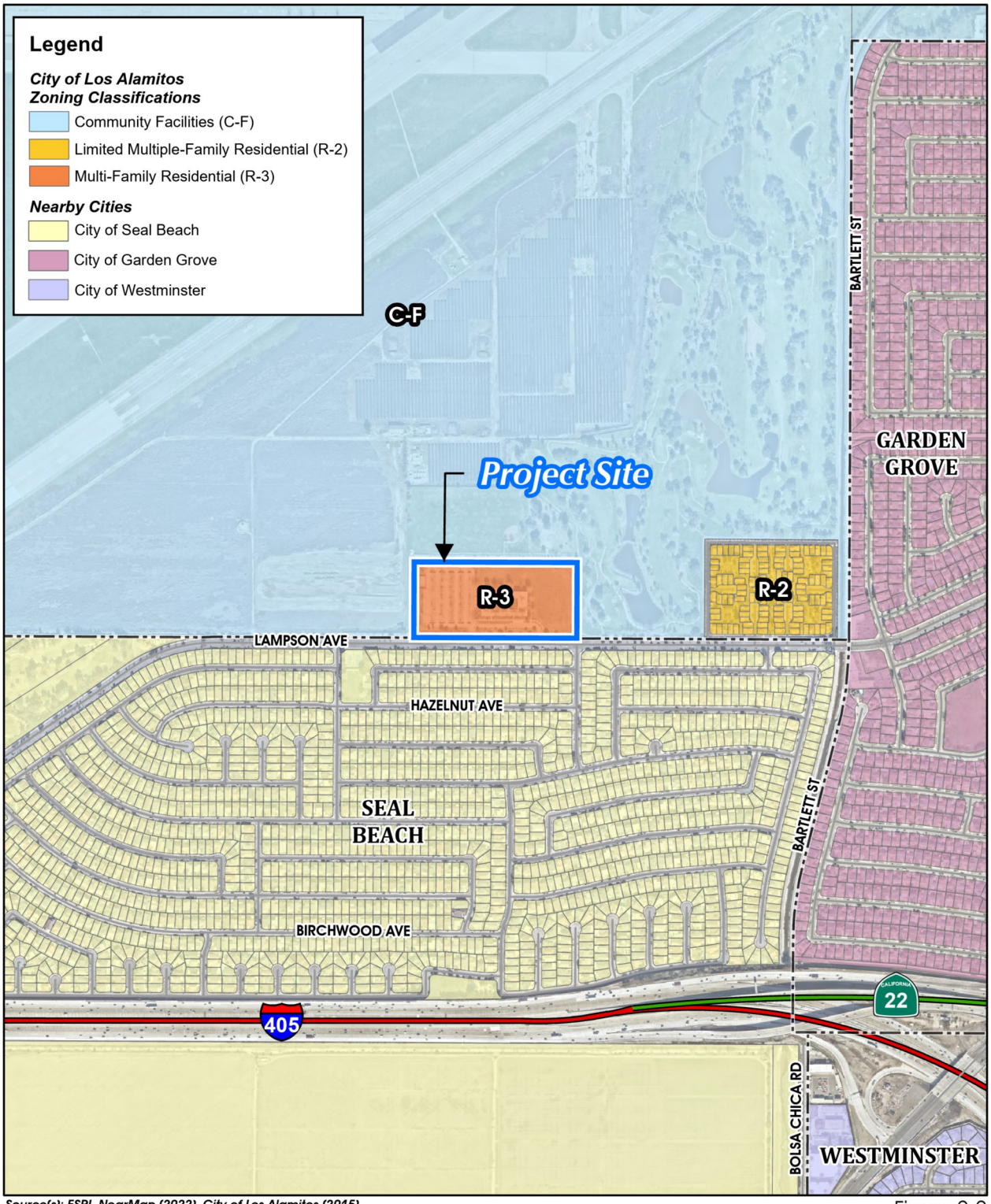
The Airport Environs Land Use Plan for the Joint Forces Training Base Los Alamitos (AELUP) intends to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. The AELUP seeks to protect the public from the adverse effects 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 airspace. The Project site is located within the airport influence area (AIA) of the JFTB and is subject to compliance with the AELUP (ALUC, 2017).



Source(s): ESRI, NearMap (2022), City of Los Alamitos (2015)

Figure 2-1

Existing General Plan Land Use Designations



Source(s): ESRI, NearMap (2022), City of Los Alamitos (2015)

Figure 2-2

0 250 500 1,000 Feet

Existing Zoning Classifications

The City's Housing Element received certification from the State Housing and Community Development Department (HCD). However, the Housing Element received an inconsistent finding from ALUC on January 19, 2023. On February 21, 2023, the City Council adopted Resolution 2023-04, providing notice of the City's intent to overrule ALUC's determination. The City Council conducted a Study Session and reviewed information related to ALUC's finding of inconsistency on July 17, 2023. A Public Hearing was held on August 21, 2023, where the City Council considered the adoption of a resolution overruling the ALUC's determination but failed to receive the required two-thirds affirmative vote (four affirmative votes were required). On September 21, 2023, the ALUC voted to require the City to submit all discretionary actions related to Housing Element Sites 6 (4655 Lampson Avenue), 7 (Laurel Park), and 10 (5030-5084 Katella) to ALUC for review until such time as the General Plan is revised, or the City overrules ALUC's determination. On December 11, 2023, the City received a four/fifths vote from the Los Alamitos City Council to overrule ALUC's finding and adopt the City's Housing Element. Accordingly, approval from ALUC is not required for the Project because the Project site is listed as a Housing Opportunity Site in the City's Housing Element.

2.5 EXISTING PHYSICAL SITE CONDITIONS

CEQA Guidelines Section 15125(a)(1), recommends that the physical environmental condition that existed at the time an EIR's NOP is released for public review normally be used as the comparative baseline for the EIR analysis. The NOP for this EIR was released for public review on October 3, 2022, and the following pages include a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. More information regarding the Project site's environmental setting is provided in the specific subsections of EIR Section 4.0, *Environmental Analysis.*

2.5.1 LAND USE

The Project site was undeveloped land sometime prior to 1896 through at least 1902. There is no information on past uses from 1902 to 1928. From at least 1928 to at least 1963, the site was developed for agricultural purposes. A small barn-like structure was located on the southwest portion of the subject property from 1928 to 1938. By 1938, the site was developed with an unpaved road on the west portion, running north to south, and the unpaved road was no longer present by 1947. In 1971, the Project site was redeveloped with the existing commercial structure on the central portion, a parking lot on the west portion, and landscaped areas in the remainder. The site has remained in this configuration through the present.

Under existing conditions, the Project site is currently developed with a vacant two-story, 88,000 sf commercial office building (most recently occupied by WestEd, California Department of Fish and Wildlife, National Comfort Institute, Inc., and James J. Mentas Attorney at Law) located centrally within the Project site and surface parking lot located within the western portion of the Project site. A boat storage area that is fenced off and a shipping container are located in the northwest corner of the property. AYSO uses the abutting Arbor Park (north of Project) on weeknights weekends for soccer practice and games, utilizing the existing paved parking lot on the Project site for overflow parking,

particularly on weekends. There was very little activity at the site at the time the Notice of Preparation (NOP) was released. As a result, the EIR assumes the on-site structures were vacant for purposes of the environmental baseline. This conservatively presents a worst-case scenario. The remainder of the Project site consists of open space, which includes approximately 5.97 acres of developed/ornamental land and approximately 6.40 acres of disturbed/ornamental land.

Pursuant to CEQA Guidelines Section 15125(d), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans. The Project Applicant proposes to redevelop the approximately 12.3-acre property as a residential development with 246 units. The principal discretionary actions required of the City of Los Alamitos to implement the Project are described in detail in Section 3.0, *Project Description*, and are listed in Table 3-5, *Project-Related Approvals/Permits*. The Project is consistent with the existing General Plan and Zoning designation of "Multiple Family Residential-25" and "R-3," respectively.

Refer to EIR Subsection 4.10, *Land Use and Planning*, for a more detailed discussion of the Project's consistency with the City's General Plan and Zoning designation.

2.5.2 Aesthetics and Topographic Features

The City is located in a highly urbanized area of Orange County and generally surrounded by other built-out cities, including Long Beach, Seal Beach, Cypress, Hawaiian Gardens, and Garden Grove. The City's physical setting in the Santa Ana River Basin region and relatively flat topography affords scenic views of the San Gabriel, San Bernardino, and San Jacinto Mountains. Although these vistas are often obscured by weather and poor air quality, they contribute to the unique character of the City. Because the City and Rossmoor are almost entirely built out with elements such as buildings, roadways, and parking, there are no natural scenic resources that can be construed as unique or significant. (City of Los Alamitos, 2014a) The Project site elevations range from approximately 21 feet to 26 feet above mean sea level (amsl). There are no rock outcroppings or unique topographic or aesthetic features present on the property.

Refer to EIR Subsection 4.1, *Aesthetics*, for a more detailed discussion of the Project site and surrounding area's aesthetic setting.

2.5.3 Air Quality and Climate

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Under the 1977 Lewis-Presley Air Quality Management Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and State air quality standards. The SCAB is a 6,745-square mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south. The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent (%) along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.
Refer to EIR Subsection 4.2, *Air Quality*, and 4.7, *Greenhouse Gas Emissions*, for a more detailed discussion of the existing air quality and climate setting in the Project area.

2.5.4 Cultural Resources & Tribal Cultural Resources

The Project site includes a commercial office building, associated hardscape and landscaping, and a large, undeveloped field east and north of the building, and the entire property appears to have been previously rough-graded. A boat storage area that is fenced off and a shipping container are located in the northwest corner of the property. The building was constructed in 1972 as a research center for Southwest Regional Laboratory (SWRL) for Educational Research and Development. The building was constructed in the Corporate International style, which is oriented to the south, has a rectangular plan with an off-center atrium that is not visible from the exterior. The roof is flat with no overhang and the exterior walls are composed of smooth concrete, glass, and metal with a horizontal emphasis. Other features include pebblestone, concrete, and asphalt walkways that encircle the building (with the exception of the loading area) and ornamental landscaping that, on the south side, includes small shrubs, grass, groundcover, and mature sycamore and liquid amber trees. There are several mature sycamore trees on the east and north sides as well. (BFSA, 2023)

No prehistoric cultural resources were identified during the archaeological survey. (BFSA, 2023)
Refer to EIR Subsection 4.4, *Cultural Resources*, for a more detailed discussion of the existing cultural setting in the Project area.

2.5.5 GEOLOGY

The entire southern California region is considered seismically active. The City is in a high seismic risk zone subject to seismic activity from various faults, including the Los Alamitos Fault—the closest fault, which also passes through the communities of Lakewood and Bellflower. Other nearby faults include the Norwalk, Newport-Inglewood-Rose Canyon, El Modena, Elysian Park, and Whittier-Elsinore faults. (City of Los Alamitos, 2014a)

The Project site is within the Orange County coastal plain, more generally located on the broad southern margin of the Los Angeles Basin. The Project site is located more specifically within the Santa Ana River drainage basin, and it is underlain at depth by poorly consolidated alluvial sediments mapped as Quaternary Young Alluvial Fan deposits.

Based on the results of the Project-specific Geotechnical Report, the Project site is underlain by a thin veneer of topsoil and older artificial fill over young alluvial deposits of Holocene age, per regional geologic mapping. Soil conditions on the Project site generally consist of interbedded layer of gray and brown, silty clay, clay silty sand, and clayey sand.

Refer to EIR Subsection 4.6, *Geology and Soils*, for a more detailed discussion of the existing geological setting.

2.5.6 HAZARDS AND HAZARDOUS MATERIALS

The Project site is listed on the Department of Defense Sites (DOD), Facility and Manifest Data (HAZNET), Hazardous Waste Tracking System (HWTS), California Hazardous Materials Information Reporting System (CHMIRS), Resource Conservation and Recovery Act - Non Generator/No Longer Regulated (RCRA NonGen/NLR), Facility Index System/Facility Registry System (FINDS), and Enforcement and Compliance History Online (ECHO) databases. The RCRA NonGen/ NLR listing reported the property as a handler of hazardous waste on July 29, 2013. No violations or evaluations were found. According to the CHMIRS listing, a potential release of 45 gallons of gasoline onto the asphalt was discovered on September 27, 2019, after an event of vandalism that included the vandalization of several governmental vehicles parked at the subject property parking lot. The spilled gasoline was contained under the regulatory oversight of the Orange County Emergency Management Division. The Project's Limited Phase II ESA (*Technical Appendix H2*) concluded no evidence of a significant release of potential chemicals of concern was identified in relation to the gasoline release. Based on a review of regulatory databases and a site reconnaissance, the Project site does not contain any hazards, nor is the Project site affected by any off-site hazards. In addition, the Project site is not located within a very fire hazard severity zone. (CalFire, 2022)

The Project site is located within the airport planning area of the Los Alamitos JFTB, which is immediately west of the Project site (ALUC, 2017, p. 4). Geographic areas around an airport that are determined to be a hazard to people are defined as "safety zones," "clear zones," or "accident potential zones." The Project site is not located within the Clear Zones, safety zones, or accident potential zones

for the JFTB. The northwestern vertex of the Project site intersects the 60-65 A-weighted decibel (dBA) community noise equivalence level (CNEL) noise contour boundary.

Refer to EIR Subsection 4.8, *Hazards and Hazardous Materials*, for a more detailed discussion of the Project's existing hazards and hazardous materials setting.

2.5.7 Hydrology

The Project site is located within the Orange County Water District (OCWD) Groundwater Basin. The basin spans more than 300 miles and provides approximately 85 percent of the water supply to more than 2.5 million residents in north and central Orange County (OCWD, n.d.).

The Project site is located within the Los Alamitos/East Garden Grove/Bolsa Chica Watershed. The site discharges into the Federal Storm Channel, converges with the San Gabriel River and outlets to the Pacific Ocean (C&V, 2024a).

The existing stormwater flows generally travel in a north to south direction into an existing westerly flowing concrete channel along the Project site's southerly property line. The westerly flowing channel is collected via an offsite 18-inch Corrugated Metal Pipe (CMP) that flows under the offsite driveway to Arbor Park and discharges into an offsite earthen channel on the west side of the driveway. Runoff flows within this earthen channel are then collected by an existing 24-inch CMP that flows westerly, discharge into a westerly flowing earthen channel within the JFTB, and then drains to the Old Ranch Country Club to the south. Runoff is ultimately conveyed downstream into the San Gabriel River.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06059C0116J (effective 12/03/2009), the Project site is located within FEMA Flood Zone D. Flood Zone D is correlated with areas with a potentially moderate to high risk of flooding, but the probability has not been determined. (FEMA, 2009)

Refer to EIR Subsection 4.9, *Hydrology and Water Quality*, for a more detailed discussion of the Project site's existing hydrology and water quality setting.

2.5.8 Noise

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with the arterial roadway network and the nearby community facility land uses, including but not limited to Los Alamitos Joint Forces Training Base, Navy Golf Course, and Arbor Park located adjacent to the northern, eastern, western Project site boundaries.

Refer to EIR Subsection 4.11, *Noise*, for a more detailed discussion of the Project site's existing noise setting.

2.5.9 TRANSPORTATION

The Project site is located north of Lampson Avenue. Lampson Avenue is classified as a Secondary Arterial (right-of-way is 80-feet, typically 4-lane undivided roadway). There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. (Urban Crossroads, 2023e)

The Project site is currently served by Orange County Transit Authority (OCTA) with bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). The Project site is served by OCTA bus routes 42 and 123. (Urban Crossroads, 2023e)

Refer to EIR Subsection 4.15, *Transportation*, for a more detailed discussion of the Project site's existing transportation setting.

2.5.10 PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

Fire protection services for the Project site is currently provided by the Orange County Fire Authority (OCFA). The Project site is located within Operations Division 1, which also serves the cities of Garden Grove, Seal Beach, and Westminster (OCFA, 2022a).

The Los Alamitos Police Department provides police services, including neighborhood patrols, investigations, traffic enforcement, community support, drug education, parking control, and crime prevention to the Project site. (City of Los Alamitos, 2014a)

The Project site is within the attendance boundaries of the Los Alamitos Unified School District (LAUSD). LAUSD operates a total of six elementary schools, two middle schools, and one high school. (LAUSD, 2023a)

Library services in Los Alamitos are provided by Orange County Public Libraries (OCPL), which is operated by Orange County. The Los Alamitos-Rossmoor Library is located at 12700 Montecito Road and the location hours are Monday – Thursday 10:00 AM – 7:00 PM and Saturday 9:00 AM – 5:00 PM.

The City of Los Alamitos provides parks, school fields, and recreation facilities and programming that directly serve the residents of Los Alamitos, Rossmoor, Seal Beach, and Long Beach. As shown in Table 4.14-1, *Existing Parks and Recreational Facilities*, there is a total of 18.03 acres of public parks within the City of Los Alamitos and 36.48 acres in Rossmoor, for a total of 36.48 acres. Figure 4.14-1, *Existing Parks and Recreational Facilities*, identifies the existing park and recreational amenities in the City of Los Alamitos and Rossmoor. Four facilities comprise 26.93 acres of park and recreation space through City ownership or joint-use agreements: Aquatic Center, Los Alamitos Community Center, Youth Center, McAuliffe Middle School, and Oak Middle School.

The Golden State Water Company (GSWC) provides water service to the Project area and the Rossmoor-Los Alamitos Area Sewer District provides wastewater conveyance service to the Project area, respectively. Under existing conditions, water mains and sewer are installed beneath Lampson Avenue abutting the Project site. Southern California Edison (SCE) and Southern California Gas (SoCalGas) provides electricity and natural gas to the Project site, respectively.

Refer to EIR Subsection 4.13, *Public Services*, 4.14, *Recreation*, and 4.17, *Utilities and Service Systems*, for a more detailed discussion of the Project site's existing public services, parks and recreational facilities, utility providers and existing utility infrastructure.

2.5.11 Vegetation Communities

The Project site is currently developed with a vacant two-story commercial office building, parking lot and ornamental landscaping. The Project site supports the following vegetation and land-cover types: approximately 5.97 acres of Developed/Ornamental land and approximately 6.40 acres of Disturbed/Ornamental land.

Refer to EIR Subsection 4.3, *Biological Resources*, for a more detailed discussion of the Project site's existing biological setting.

2.5.12 Rare and Unique Resources

As required by CEQA Guidelines Section 15125(c), the environmental setting should place special emphasis on resources that are rare or unique to that region and would be affected by the Project. Based on the existing conditions of the Project site and surrounding area described above and discussed in more detail in Section 4.0, *Environmental Analysis*, the Project would not affect any resources that are rare or unique to the region.

3.0 PROJECT DESCRIPTION

This section provides all of the information required of an Environmental Impact Report (EIR) Project Description pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a general description of the Project's technical, economic, and environmental characteristics; and a description of the intended uses of this EIR, including a list of the government agencies that are expected to use this EIR in their decision-making processes; a list of the permits and approvals that are required to implement the Project; and a list of related environmental review and consultation requirements.

3.1 PROJECT LOCATION AND ACCESS

As depicted on Figure 3-1, *Regional Map*, the approximately 12.3-acre Project site is located in the City of Los Alamitos, Orange County, California. The City of Los Alamitos (City) is in the northwestern corner of Orange County, bordering the county lines of Orange and Los Angeles. The City is located east of the city of Long Beach, southwest of the city of Cypress, west of the city of Garden Grove, and north of the city of Seal Beach. The Project site is located approximately 0.47-mile north of I-405/State Route 22 (SR-22), approximately 0.83-mile northwest of SR-22, and approximately 2.36 miles east of I-605. Regional access to the Project site is provided from Seal Beach Boulevard via I-405, I-605, and SR-22 Freeways and Valley View Steet via I-405 and SR-22.

At the local scale, the 12.3-acre Project site is located north of and adjacent to Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street (see Figure 3-2, *Vicinity Map*, and Figure 3-3, *Aerial Photograph*). The legal address for the Project site is 4665 Lampson Avenue, Los Alamitos, CA 90720, and the Project site's Assessor Parcel Number (APN) is 130-012-35. Access to the Project site is currently provided by two driveways off of Lampson Avenue. Refer to EIR Subsection 2.3, *Surrounding Land Uses*, for a description of existing land uses that abut the Project site.

3.2 STATEMENT OF OBJECTIVES

The underlying purpose of the Project is to redevelop the site with a residential community that will serve the City of Los Alamitos. The following is a list of specific objectives that the proposed Project is intended to achieve.

- Provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement.

- Provide a variety of housing types and affordability (for lower income, moderate, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing.

- Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.

- Improve the City's jobs housing balance to support reduced commute distances consistent with the Southern California Association of Governments' Connect SoCal.

- Create a residential character that provides for a high quality architectural design.

3.3 PROJECT COMPONENTS

"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])"

The Project Applicant, Lampson Park Place, LLC, is seeking approval of a Site Development Permit – Major, Tentative Parcel Map 2022-133 (for Finance and Conveyance Purposes), Vesting Tentative Tract Map No. 19263 (for Condominium Purposes), and an Affordable Housing Unit Application for Density Bonus and/or Incentives or Concessions to redevelop the Project site with 246 residential units (the "Project"). The following is a detailed description of the Project and the various elements and improvements that will be developed as part of the Project.

3.3.1 SITE PLAN

Figure 3-4, Site Plan, depicts the overall site plan proposed as part of the Project. As shown, the Project Applicant proposes to redevelop the Project site with a residential development consisting of a variety of housing product types, including single family detached homes, townhomes, and apartments. The unit mix proposes 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes. The Project would include a total of 246 units and the overall density for the Project would be 20 dwelling units per acre (DUA). Table 3-1, *Single Family Detached Unit Plan Type Summary*, Table 3-2, *Townhome Unit Plan Type Summary*, and Table 3-3, *Apartment Unit Plan Type Summary* presents the Project's unit count by product type.

Table 3-1 Single Family Detached Unit Plan Type Summary

Plan Type	Unit Area in Square Feet	Quantity	Total Square Footage
Plan 1 ALT: 3 Bedrooms with 2.5 Baths	1,719	2 units	3,438
Plan 1[1]: 4 Bedrooms with 3.5 Baths	2,214	18 units	39,852
Plan 2: 4 Bedrooms with 3.5 Baths	2,679	19 units	50,901
Plan 3: 4 Bedrooms with 3 Baths	2,187	10 units	21,870
Plan 3X: 4 Bedrooms with 4 Baths	2,815	6 units	16,890
	Total	**55 units**	**132,951**

Table 3-2 Townhome Unit Plan Type Summary

Plan Type	Unit Area in Square Feet	Quantity	Total Square Footage
Plan 1: 2 Bedrooms with 2.5 Baths	1,325	10 units	13,250
Plan 1X: 2 Bedrooms with 2.5 Baths	1,376	19 units	26,144
Plan 1Y: 2 Bedrooms with 2.5 Baths	1,266	9 units	11,394
Plan 2: 3 Bedrooms with 3.5 Baths	1,803	34 units	61,302
Plan 2X: 3 Bedrooms with 3.5 Baths	1,837	7 units	12,859
Plan 3: 4 Bedrooms with 3.5 Baths	1,928	35 units	67,480
	Total	**114 units**	**192,429**

Table 3-3 Apartment Unit Plan Type Summary

Plan Type	Unit Area in Square Feet	Quantity
Plan 1-1: 1 Bedroom with 1 Bath	665	36 units
Plan 1-2: 1 Bedroom with 1 Bath	667	
Plan 2-1: 2 Bedrooms with 1 Bath	809	20 units
Plan 2-2: 2 Bedrooms with 1 Bath	802	
Plan 2-3: 2 Bedrooms with 1 Bath	914	
Plan 3-1: 3 Bedrooms with 2 Baths	1081	21 units
Plan 3-1Alt: 3 Bedrooms with 2 Baths	1112	
Plan 3-2: 3 Bedrooms with 2 Baths	1034	
Plan 3-3: 3 Bedrooms with 2 Baths	1168	
Total		**77 units**

The Project includes a variety of floor plans that were submitted to the City through the development application process. Typical floor plans for each product type are shown in Figure 3-5, *Typical Single Family Dwelling Plan 1 Floor Plans* through Figure 3-11, *Typical Apartment Units Floor Plans*. Refer to the development application submittal for detailed floor plans for each unit and type which are available for review at the City of Los Alamitos, Development Services Department – Planning Division, 3191 Katella Avenue, Los Alamitos, California 90720, during the City's regular business hours or can be requested in electronic form on the City's website at

http://cityoflosalamitos.org/203/Planning-Commission-Projects or by contacting the City's Development Services Department – Planning Division.

3.3.2 Parking and Circulation

A. Parking

The Project would provide 577 parking spaces (475 spaces for the single family detached and townhomes and 102 for the apartments) in exceedance of the 440 parking spaces that would be required pursuant to the State's Density Bonus Law.

AYSO uses the abutting Arbor Park (north of Project) on weeknights and weekends for soccer practice and games, utilizing the existing paved parking lot on the Project site for overflow parking, particularly on weekends. To allow for additional parking at Arbor Park and Arbor Dog Park, located adjacent to the north boundary of the Project site, the Project Applicant proposes to dedicate or grant an easement for the northern 10 feet of property abutting Arbor Park and Arbor Dog Park to the City of Los Alamitos with authority over the two parks. This dedication or grant of easement would support the use of this area for parking after construction of the Project by allowing an approximate capacity of 154 to 200 parking spaces to serve the parks, depending on the ultimate configuration.

The Project would also promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations.

B. Vehicle Access and Circulation

Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right-in/right-out access only. Vehicular circulation would be unrestricted throughout the Project site. The primary neighborhood entry is not anticipated to meet a peak hour or planning level (daily volume) based traffic signal warrants. However, per the request of the City of Seal Beach and in response to public comments during scoping, the Project will install a traffic signal at the primary neighborhood entry in coordination with both the City of Los Alamitos and City of Seal Beach.

Along the Project frontage, Lampson Avenue is developed to its ultimate General Plan roadway classification. Frontage improvements would include median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards.

C. Pedestrian Improvements

Non-motorized circulation would include pedestrian connectivity with existing sidewalks along Lampson Avenue, including an existing signalized pedestrian connection to the south at Rose Street and Lampson Avenue and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. The Project would provide pedestrian gates to be controlled by the Homeowners' Association to restrict residents from entering Arbor Park and Arbor Dog Park outside of hours specified by JTFB.

A 4-foot-wide community natural colored concrete sidewalk and 6-foot-wide public natural colored concrete sidewalk would be constructed throughout the Project site to link residential neighborhoods to open spaces and amenities.

3.3.3 Architectural Features

The proposed residential buildings would range from two to three stories. The maximum building height for the Project is 41 feet. Los Alamitos Municipal Code (LAMC) Sections 17.08.030 and 17.16.040 govern maximum building height, height measurement, and exceptions. According to LAMC Section 17.16.040.B certain building elements may exceed the allowed height of the zone in which they are located, up to an additional 6 feet above the maximum height limit (maximum height limit of 41 ft). These building elements include plumbing vents and chimneys; fire and parapet walls; roof structures for the housing of air conditioners, elevators, stairways, tanks, ventilating fans, and similar equipment; and skylights. As shown in Figure 3-12, *Typical Single Family Dwelling Elevations*, the typical single family dwelling ranges from 25.9 feet to 36 feet in height. As shown in Figure 3-13, *Typical Townhouse Elevations*, typical townhomes are approximately 35.5 to 37 feet in height. As shown in Figure 3-14, *Typical Multi-Family Elevations*, typical multi-family is approximately 37 to 39 feet in height.

Architectural materials of the typical single family dwelling units include composite shingle roof (no rake tile), metal roof (standing seam), faux wood, French door, vinyl windows, decorative fiberglass entry door, and cantilever built-up deck/balcony. Refer to Figure 3-12 for a complete list of the materials.

Architectural materials of the typical townhome unit include composite shingle roof, stucco light sand finish, faux wood trim, decorative faux vent, barge board, decorative gable end outlooker, vinyl windows, wood railing, decorative fiberglass entry door, and metal utility door. Refer to Figure 3-13 for a complete list of the materials.

Architectural materials of the typical multi-family units include stucco, vertical siding, composite shingle roof, decorative gable end outlooker, vinyl windows, metal sectional garage door, and stone veneer. Refer to Figure 3-14 for a complete list of the materials.

Figure 3-15, *Lampson Street Scene* through Figure 3-17, *Townhomes Street Scene* depict the conceptual renderings of the single family homes and townhomes. Public views of the townhomes and cluster homes from Lampson Avenue would consist of the two-story to three-story buildings, parked cars, landscaping, and residents.

Furthermore, the Project incorporates the following Project Design Feature (PDF) related to architectural features that would reduce potential noise impacts for future residents. "Project design features" refer to avoidance and minimization measures or environmental commitments that have been incorporated into the project design as part of the project description, and the use of these project design features is contemplated pursuant to CEQA Guidelines Sections 15064(f)(2) and 15126.4(a)(1)(A). Project design features incorporated into the project design to avoid or minimize environmental impacts should be distinguished from proposed mitigation. (CEQA Guidelines Section 15126.4(a)(1)(A)) This EIR distinguishes between PDFs and Mitigation Measures, which are identified in CEQA Guidelines Section 15126.4(a)(1) as "feasible measures which could minimize significant adverse impacts."

PDF N-2 To comply with the State of California and City of Los Alamitos 45 A-weighted Decibels (dBA) Community Noise Equivalent Level (CNEL) interior noise standards for residential land use the Project will provide the following or equivalent noise abatement measures on building plans:

- Windows & Glass Doors: At a minimum the Project will provide windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 27. Additionally, all second floor facades adjacent to Lampson Avenue will be provided with windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 29.
- Doors (Non-Glass): All exterior doors shall be well weather-stripped and have well-sealed perimeter gaps around the doors are essential to achieve the minimum STC rating.
- Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or

active ventilation system (e.g. fresh air supply) shall be provided which satisfies the requirements of the Uniform Building Code.

3.3.4 Landscaping and Open Space

Figure 3-18, *Landscape Plan*, depicts the conceptual landscape plan for the Project site. A variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, in common areas, recreational amenities, open space areas, and parking areas. Landscaping will feature drought-tolerant plant materials. A total of 441 trees, including 51 36" box focal trees, 190 15-gallon trees, 5 10x10'specimen canopy trees, and 195 24/36" box trees, would be planted throughout the Project site.

Figure 3-19, *Open Space Plan*, depicts the open space proposed as part of the Project. As shown, the Project would provide 58,027 sf of open space, including approximately 16,508 sf of usable common open space, approximately 41,519 sf of private open space, and approximately 78,038 sf of planting area[1]. The usable common open space areas would include amenities such as tot-lot with rubberized play surface, shade surface with BBQ Island and dining furniture, lawn area with cornhole, ping pong table, and lounge seating with fire-pit.

LAMC Section 17.08.030, Table 2-03 requires a minimum of 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. Pursuant to the Density Bonus Law, the Applicant is requesting a reduction from 200 to 150 square foot per unit. (Government Code Section 65915). Refer to Section 3.4.3 for a detailed discussion on the request for a development standard wavier related to the City's common area requirement pursuant to the Density Bonus Law.

3.3.5 Wall and Fence Plan

Wall and fencing would be provided throughout the Project site to provide visual and physical privacy, sight lines for views, buffering between different uses, and to allow for privacy and security in residential areas. As shown in Figure 3-20, *Wall and Fence Plan*, a 7-foot high concrete wall would be constructed around the Project's perimeter and between the apartments and single family detached homes/townhomes. Vinyl fencing (5'6" high) would be constructed around the single-family detached homes and a 3'6" high stucco concrete patio wall would be constructed around the patio areas of the townhomes. Additionally, a 4-foot high combo metal guard-rail fencing would be constructed on the northern portion of the eastern boundary of the Project site.

[1] As shown in Figure 3-12, *Open Space Plan*, the Project would provide a total of 67,480 square feet (sf) or 1.55 acres of open space in the Project site, including 16,508 sf of usable common open space, 51,320 sf of private open space (homeowner maintained). The 51,320 sf of private open space includes 4,620 sf of multi-family private deck, 5,181 sf of townhomes private deck, and 41,519 sf of private open space (homeowner maintained).

The Project incorporates the following Project Design Feature related to walls that would reduce potential noise impacts for future residents:

PDF N-1 Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise control barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and /or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of at least 4 pounds per square foot;
- Material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA;
- Earthen berm; or,
- Any combination of these construction materials

3.3.6 LIGHTING

As shown in Figure 3-21, *Lighting Plan*, the Project includes the installation of outdoor nighttime lighting throughout the Project site. Exterior light poles would be installed throughout the entry ways and parking areas to provide lighting for security and wayfinding. Additionally, exterior lighting in the form of landscape accent tree up lighting would be installed in the common areas and floodlights would be installed at the Project's monument sign walls, located at the primary neighborhood and apartment entries. All exterior lights would be shielded where feasible and focused to minimize spill light into the night sky or adjacent properties. All lighting is required to comply with the light and glare standards set forth in LAMC Section 17.24.040, Light and Glare.

3.3.7 INFRASTRUCTURE IMPROVEMENTS

A. Mobility

Lampson Avenue is the existing public street abutting the Project site to the south. The Project would not result in the alteration of the segment of Lampson Avenue that abuts the Project site except for the replacement of the existing median curb and construction of the two proposed driveways shown in Figure 3-22, *Circulation Plan*.

B. Water Infrastructure

Golden State Water Company would provide water service to the Project. Domestic water lines would be provided as shown in Figure 3-23, *Utility Plan.* In addition, the Project would include a 1,200 feet watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension.

Additionally, fire hydrants would be installed at key locations within the Project site, as required by the Orange County Fire Authority to meet hose-pull requirements and provide adequate fire access.

C. Sanitary Sewer Infrastructure

Although the Project site is in the City of Los Alamitos, sanitary sewer will be served by the City of Seal Beach via the Rossmoor-Los Alamitos Area Sewer District. The Rossmoor/Los Alamitos Sewer District would provide wastewater conveyance and treatment services to the Project. A lift station and force main is proposed at the southeast corner of the Project site (refer to Figure 3-23, *Utility Plan*). The Project would connect the force main to the existing 8-inch sanitary sewer line at the southeast corner of the site. All connections to existing sanitary sewer lines would be constructed in accordance with City standards. Additionally, an agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach would be required for Inter-Jurisdictional Wastewater Services.

D. Stormwater Drainage Infrastructure

1. Preferred Stormwater Drainage

The proposed Project site's stormwater runoff would be conveyed by roof downspouts or street surface flow to the proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the Project site. From the detention system, a stormwater sump pump located in the southwest corner of the Project site would outlet flow into the existing outlet storm drain pipe at the southwest corner to match the historical flow pattern across the Los Alamitos Joint Forces Training Base (JFTB).

2. Alternate Stormwater Drainage

An alternate plan for stormwater conveyance is proposed in the event the preferred route (historical flow) across the JFTB, as described above, is not available. The alternate would include stormwater outflow onto Lampson Avenue, which would subsequently flow west to an existing stormwater catch basin approximately 2,200 feet west of the Project site. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows to Lampson Avenue would resume. Under the Alternate Off-Site

Storm Drain plan, stormwater will be detained and mitigated onsite such that Lampson Avenue meets OC Hydrology flooding standards. Approximately 32,300 cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates.

The proposed 10-foot land dedication area along the northern property line to Arbor Park and Arbor Dog Park is outside the proposed residential development and would not be tributary to the Project site's proposed storm drain system.

Additionally, as part of the Project's hydrology analysis, a total of five drainage designs with different outlet locations were reviewed but found to be infeasible. Details of these designs are discussed in Section 4.9, *Hydrology and Water Quality*.

E. Dry Utilities

The Project also would involve utility connections to provide electric power and telecommunications services to the Project site. Based on information provided by the Project Applicant, no natural gas would be used as a result of the Project, and as such, use of natural gas is not considered in the EIR analysis. The Project would be served in accordance with the State of California's Public Utilities Commission (CPUC) and Federal Energy Regulatory Commission tariffs.

F. Green Building and Sustainability

Green building is the practice of designing, constructing and operating buildings to maximize occupant health and productivity, use fewer resources, reduce waste and negative environmental impacts, and decrease lifecycle costs. The Project will use applicable green building practices, including those of the most current Building Energy Efficiency Standards (Title 24, California Code of Regulations, Part 6) and California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11). The Building Energy Efficiency Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings. CALGreen is California's statewide "green" building code. Its purpose to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: planning and design; energy efficiency; water efficiency and conservation; water conservation and resource efficiency; and environmental quality.

Furthermore, the Project incorporates the following Project Design Features related to green building and sustainability, which will reduce energy demand and greenhouse gas emissions.

PDF GHG-1 The Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually.

PDF GHG-2 The Project will be 100% electric and not use natural gas.

PDF GHG-3 A community electric vehicle for the affordable housing component for residents to drive short distance trips to the local grocery store.

PDF GHG-4 The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

3.4 PROJECT ENTITLEMENTS

3.4.1 SITE DEVELOPMENT PERMIT – MAJOR

A Site Development Permit - Major ("Major Site Development Permit") is required for development projects that involve a tentative parcel map or tentative subdivision map and any multi-family residential development. The Project Applicant is seeking approval of a tentative parcel map (for Finance and Conveyance Purposes) and vesting tentative tract map (for Condominium Purposes) for a residential development that includes multi-family residential development. Pursuant to LAMC Section 17.44.030(B), in approving a Major Site Development Permit, the city shall consider the Project's: 1) compliance with City regulations and policies, including the General Plan and adopted design guidelines; 2) efficient site layout and design; 3) environmental review; 4) compatibility with neighboring properties and developments; 5) efficiency and safety of public access and parking and loading facilities; 6) compatibility in scale and aesthetic treatment of proposed structures with public areas; 7) adequacy of proposed driveways, landscaping, parking spaces, onsite and off-site parking, pedestrian improvements; 8) private open spaces; 9) the use of design techniques, such as façade articulation; 10) orientation of balconies and windows; and 11) open space and water-efficient landscaping.

3.4.2 TENTATIVE PARCEL MAP NO. 2022-133 AND VESTING TENTATIVE TRACT MAP NO. 19263

As shown in Figure 3-24, *Tentative Parcel Map 2022-133*(for finance and conveyance purposes) would subdivide the property into two parcels: 1) Parcel 1 (2.204 acres) for the affordable housing component and 2) Parcel 2 (10.163 acres) for the single family detached and townhome component.

As shown in Figure 3-25, *Vesting Tentative Tract Map*, a Vesting Tentative Tract Map is being provided for condominium purposes. The 77-unit affordable housing apartment home component will be established on Parcel 1. The Vesting Tentative Tract Map would be proposed on the Parcel 2 and would be used for condominium purposes.

3.4.3 AFFORDABLE HOUSING UNIT APPLICATION

Pursuant to Government Code Section 65915 and the LAMC Section 17.28.050, the Project Applicant is making the following Density Bonus Law requests for the Project.

The State's Density Bonus Law specifies that for housing developments in which 24% or more of units in the development are low-income units, the local government must allow a 50% density bonus pursuant to Government Code Section 65915(f)(1). Because of the density authorized under the Density Bonus Law, and assuming the maximum density of 25 dwelling units per acre allowed within Residential R-3 Zone, the Project could obtain a density increase of 154 additional units for a total of 462 units on the site. However, the Applicant has determined that the Project can accommodate the proposed number of units based on the allowed density of the Residential R-3 zoning requirement. Therefore, at this time the Applicant is not requesting a density bonus but is requesting concessions.

A. Concession Requests

The Project Applicant is requesting three concessions pursuant to the State's Density Bonus Law.

- Concession #1: Reduction in Setback Distance Between Structures
- Concession #2: Exception for Building Step Back Requirements
- Concession #3: Reduction in Minimum Storage Space

As to Concession #1, LAMC, Section 17.08.030, Table 2-03 requires a 10-foot minimum distance between structures. Though most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances, the setback distance is reduced to 6 feet at certain locations within the Project site plan. Meeting the required 10-foot minimum setback distance would require a significant change to the site plan and likely result in a reduction of residential units. As such, the Applicant is requesting as Concession #1 that the setback requirement in certain locations identified on the site plan be reduced to 6 feet.

As to Concession #2, LAMC Section 17.08.045.A.1 requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a project site or surrounding land uses. While the City interprets this requirement as applying only to perimeter buildings (i.e., buildings that are located along the perimeter of a Project site), however, given the requirement's ambiguity, the Applicant is requesting as Concession #2 an exception from the required minimum 5-foot step back requirement for those structures identified on the site plan.

As to Concession #3, LAMC Section 17.08.030, Table 2-03, requires a minimum storage space in a garage or carport of 200 cubic feet per unit. For certain units within the Project, this storage space requirement will be difficult to satisfy because of limitations in garage and carport space. As such, the Applicant is requesting as Concession #3 that the minimum storage space requirement be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the site plan.

B. Waiver Requests

The State's Density Bonus Law specifies that an applicant may submit to a local government a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development providing the requisite amount of affordable housing at the densities or with the concessions permitted under the Density Bonus Law. A waiver request can be denied only if the waiver would (i) have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact; (ii) have an adverse impact on any real property that is listed in the California Register of Historical Resources (CRHR); or (iii) be contrary to state or federal law. (Government Code Section 65915(e)(1))

The Applicant requests one waiver pursuant to the State's Density Bonus Law:

- Waiver #1: Reduced Common Area Requirement

LAMC Section 17.08.030, Table 2-03 requires a minimum 200 square feet of common area and 60 square feet of private space per unit. The Project will be able to comply with the minimum private space requirement, but the Project will not be able to comply with the common area requirement. This is due to the proposed dedication or grant of easement related to the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property. When this area is dedicated to the City, then the Project will be unable to comply with the common area requirement because compliance with this requirement would physically preclude construction of the Project at the densities allowed and with the concessions described above. Therefore, the Applicant is requesting as a waiver a reduction in the common area requirement from 200 to 150 square foot per unit.

C. Parking Reduction Request

The Project would provide 577 parking spaces, which is below the City's required 679 parking spaces pursuant to LAMC Section 17.22.030, Required Parking Spaces. The State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).)

The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project, which is significantly more than the 440 parking spaces that would be required pursuant to the State's Density Bonus Law.

3.5 TECHNICAL CHARACTERISTICS OF THE PROJECT

3.5.1 CONSTRUCTION CHARACTERISTICS OF THE PROJECT

A. Site Demolition

Redevelopment of the Project site would require demolition/crushing of the existing 2-story 88,000 sf office building, 21,713 sf of concrete paving, 147,569 sf of asphalt paving, 307,680 sf of landscaping and green waste, and 7,300 linear feet of existing curbs, gutters, and wheel stops. All concrete and asphalt would be hauled off-site.

B. Proposed Physical Disturbance

As shown on Figure 3-26, *Grading Plan*, approximately 6,280 cubic yards of soil import would be required. The Project would be built such that the finished floor elevation for the onsite buildings is set 1 foot minimum above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements (PDF HYD-1). The physical disturbance area is shown on Figure 3-27, *Physical Disturbance Area*. The physical disturbance area would be limited to the Project site with the exception of off-site improvements. All off-site infrastructure and improvements would occur concurrently with the construction of the proposed Project. Off-site improvements include replacement of the existing median curb/landscape on Lampson Avenue with new median and landscape. In addition, the Project would include an 8-inch water line extension of approximately 1,200 feet along Lampson Avenue between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson.

C. Construction Schedule

For purposes of analysis in this EIR, construction is assumed to occur over a period of approximately 39.5 months. The estimated Project construction schedule, organized by construction stage, is summarized in Table 3-4, *Estimated Construction Schedule*. The Project is anticipated to be partially operational in early 2025 with some buildings being fully constructed by that time.

Table 3-4 Estimated Construction Schedule

Construction Activity	Days
Proposed Project	
Demolition	26
Site Preparation	26
Grading	90
Paving	26
Building Construction	863
Architectural Coating	863
Off-site improvements	
Linear, Grubbing, & Land Clearing	160
Linear, Paving	40

D. Construction Equipment

Project construction equipment is summarized in Table 3-5, *Project Construction Equipment*. The Project includes the following PDF to reduce the Project's construction-related air quality emissions, which will also be included in as a Conditional of Approval for the Project.

PDF AQ-1 The Project will utilize Tier 4 Interim construction equipment during construction activities.

Table 3-5 Project Construction Equipment

Construction Activity	Equipment	Amount	Hours Per Day
Proposed Project			
Demolition	Concrete/Industrial Saws	1	8
	Excavators	3	8
	Rubber Tired Dozers	2	8
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Crawler Tractors	2	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Welders	1	8
	Crawler Tractors	3	8
Architectural Coating	Air Compressors	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Off-Site Improvements			
Linear, Grubbing, & Land Clearing	Off-Highway Trucks	2	8
	Tractors/Loaders/Backhoes	1	8
	Excavators	2	8

Construction Activity	Equipment	Amount	Hours Per Day
Linear, Paving	Excavators	1	8
	Tractors/Loaders/Backhoes	1	8
	Off-Highway Trucks	2	8

3.6 OPERATIONAL CHARACTERISTICS OF THE PROJECT

In accordance with CEQA, the EIR makes reasonable assumptions for operating characteristics based on the expected use of the proposed buildings. For the purposes of this EIR, assuming an average household size of 2.63, consistent with the household size reported in the City's 2021-2029 Housing Element, the proposed 246 residential units are expected to house approximately 647 new residents (City of Los Alamitos, 2023b).

A. Estimated Water, Sewer, and Energy Demand

Water service to the Project site would be provided by GSWC. Because the Project proposes a residential development of 246 dwelling units and because the Project would not demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project, a water supply assessment is not required to evaluate the Project's water demand. According to GSWC's 2020 UWMP, the 2016-2020 average unit demand factors for single family and multi-family are 0.26 and 2.23 acre-feet of water per year (AFY)/Connection, respectively (GSWC, 2021). The Project includes 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes within three 3-story structures. The Project would result in a total water demand of approximately 50.63 AFY (43.94 AFY for the single family and 6.69 AFY for multi-family).

Wastewater generation is calculated as 100 percent of indoor water demand. Based on a conservative[2] estimate of 60 percent indoor water demand, the Project would generate approximately 30.38 AFY (27,122 gallons per day [gpd]) of wastewater. To determine sewer capacity, projected wastewater flows were estimated at 49,468 gpd.[3] Although the Project site is in the City of Los Alamitos, sanitary sewer will be served by the City of Seal Beach via the Rossmoor-Los Alamitos Area Sewer District. Based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in the existing sewer mains of three manholes: 1) Basswood and Aster Street (Manhole A-16); 2) Candleberry Avenue and Aster Street (Manhole A-21); and 3) Elder Avenue (Manhole A-25) indicated good flow, along with hydraulics and relatively low depths. The Project site would contribute an additional 0.0824 cfs to the trunk main and would not exceed the existing capacity in all three locations.

Based on calculations from the Project's Energy Analysis (see *Technical Appendix E* in this Draft EIR), operations for the Project would result in approximately 1,131,132 kWh of electricity annually and

[2] Outdoor water usage can account for more than 50% of water usage.
[3] Table 3-2, Unit Flow factors from the City of Seal Beach Sewer System Master Plan (2018) projects sewer flows at 4,000 gpd for high density residential uses (4,000 gpd*12.367 acres = 49,468 gpd). https://www.sealbeachca.gov/Portals/0/Documents/Draft%202018%20Sewer%20Master%20Plan.pdf

would offset the demand through the use of on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually – which results in a net electricity demand of 98,388 kWh/year of electricity.

B. Estimated Traffic Generation

The Project's traffic generation was calculated in the Traffic Impact Analysis (see *Technical Appendix N1* in this Draft EIR). Traffic generation is used for the purpose of analyzing impacts related to air quality, greenhouse gas emissions, energy, and noise. Determining traffic generation for a specific project is based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. Trip generation for the Project was conservatively developed using rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) for the Single Family Detached Residential Land Use category (ITE Land Use Code 210), Multifamily (Low-Rise) Housing (ITE Land Use Code 220), and Affordable Housing (ITE Land Use Code 223). The Project is anticipated to generate 1,658 two-way trip-ends per day with 112 AM peak hour trips and 147 PM peak hour trips.

The roadway section of Lampson Avenue along the Project's frontage is entirely within the City of Seal Beach. According to the City of Seal Beach General Plan, Lampson Avenue is a divided roadway with a raised median and designed to accommodate a maximum of 37,500 daily vehicle trips (City of Seal Beach, 2003). The City of Seal Beach's General Plan identifies two roadway segments that generally comprise the portion of Lampson Avenue fronting the Project site: Rose Street to Tulip (east of the Project) and Rose Street to Heather Street (adjacent and wets of the Project). At General Plan Buildout with the Project, these two segments comprising this portion of Lampson Avenue would carry between 15,350 and 15,750 daily trips (see *Technical Appendix N1* of the EIR). Therefore, the Project's anticipated generation of 1,658 daily trips is well within the capacity of Lampson Avenue even at General Plan Buildout.

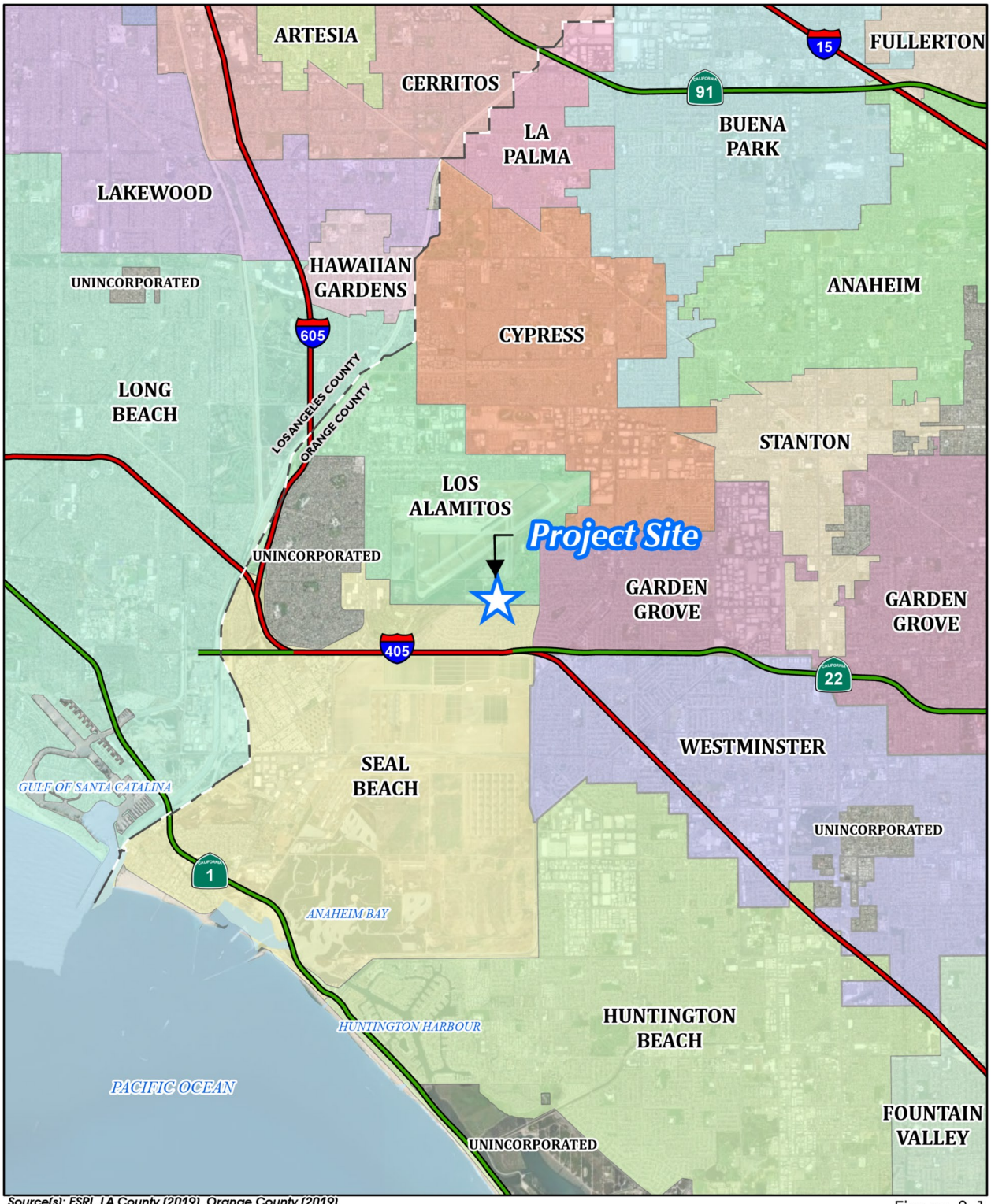
3.7 SUMMARY OF REQUESTED ACTIONS

The City of Los Alamitos has primary approval responsibility for the Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines Section 15050. The Planning Commission serves as the approval body for the Project and will consider the Project along with the Planning staff's recommendations within its staff report. The Planning Commission will make a decision to approve, approve with changes, or deny the Project. In the event of approval of the Project and certification of the EIR, the City would conduct future administrative reviews and grant ministerial permits and approvals to implement Project requirements and conditions of approval.

A list of the actions under City of Los Alamitos jurisdiction is provided in Table 3-6, *Project-Related Approvals/Permits*. Additional discretionary and/or administrative actions may be necessary from other government agencies to fully implement the Project. Table 3-6 lists: (1) the government agencies that are expected to use the Project's EIR during their consultation and review of the Project; and (2) the corresponding actions required by those agencies to implement the Project.

Table 3-6 Project-Related Approvals/Permits

Public Agency	Approvals and Decisions
City of Los Alamitos	
Proposed Project – City of Los Alamitos Discretionary Approvals	
Planning Commission	• Certify the Project's EIR and adopt the Mitigation Monitoring and Reporting Program and Findings and Statement of Overriding Considerations. • Approval of a Site Development Permit - Major • Approval of Tentative Parcel Map No. 2022-113 • Approval of Vesting Tentative Tract Map No. 19263 • Approval of Affordable Housing Unit Application for Density Bonus Request, Concessions, and a Waiver
Subsequent City of Los Alamitos Discretionary and Ministerial Approvals	
City of Los Alamitos Subsequent Implementing Approvals	• Approval of Landscaping/Irrigation Plan • Issuance of Demolition Permits • Issuance of Grading Permits • Issuance of Building Permits • Approval of Road Improvement Plans • Issuance of Encroachment Permits • Approval of Infrastructure Plans • Approval of public right-of-way dedications • Approval of Water Quality Management Plan • Approval of connections to the municipal sewer system
Responsible Agencies – Approvals and Permits	
Regional Water Quality Control Board (RWQCB)	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.
Rossmoor Los Alamitos Area Sewer District.	• Issuance of a Sewer Connection Permit • Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services.
City of Seal Beach	• Issuance of Public Works Permit (encroachment permit) for infrastructure improvements within the Lampson Ave. right-of-way. • Agreement between the Rossmoor/Los Alamitos Area Sewer District and the City of Seal Beach for Inter-Jurisdictional Wastewater Services. • Approval of stormwater discharge/conveyance.
South Coast Air Quality Management District	• Issuance of permits that allow for the construction and operation of the Project.

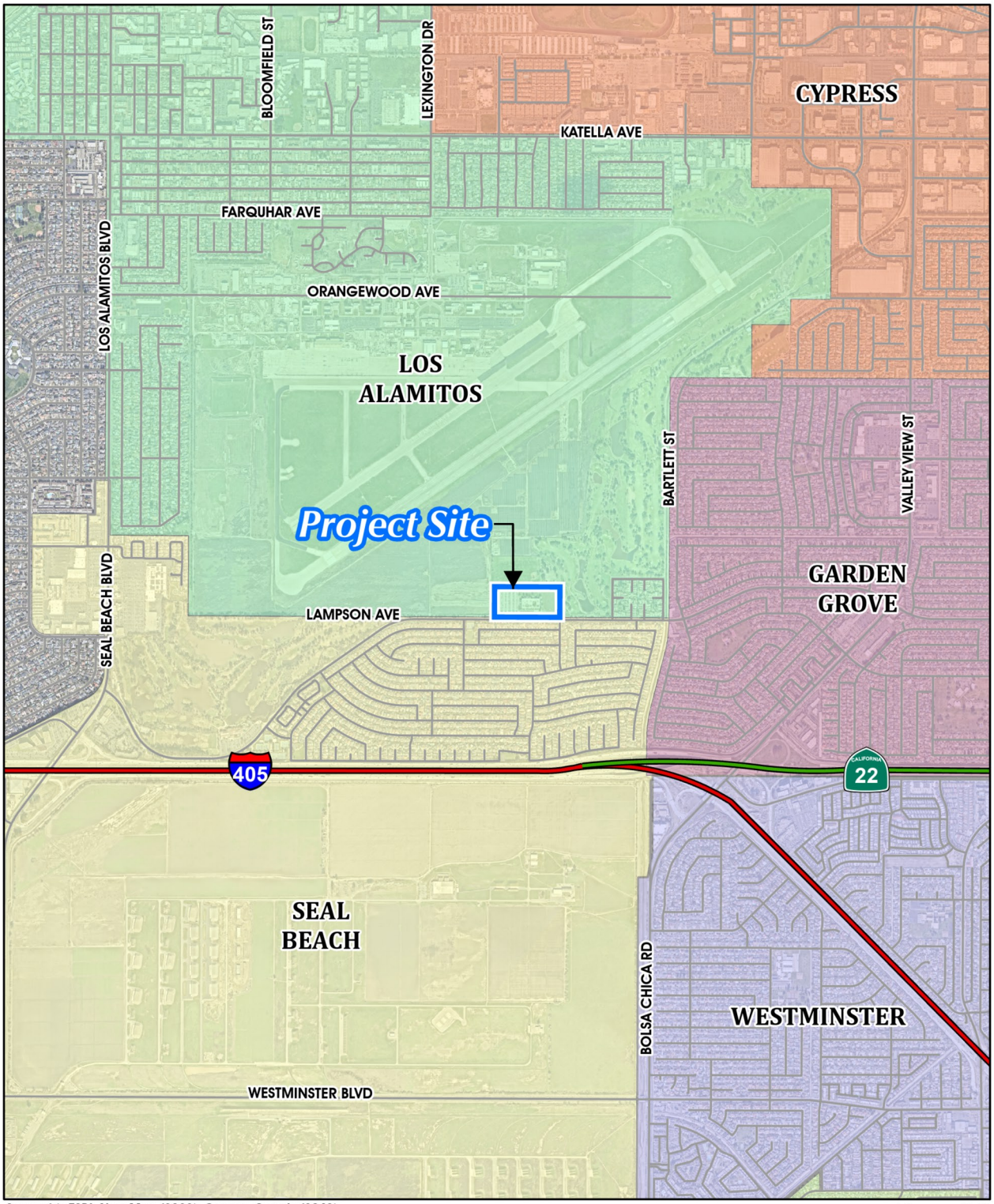


Source(s): ESRI, LA County (2019), Orange County (2019)

Figure 3-1

0 2,000 4,000 8,000 Feet

Regional Map



Source(s): ESRI, NearMap (2023), Orange County (2019)

Figure 3-2

0 625 1,250 2,500 Feet

Vicinity Map

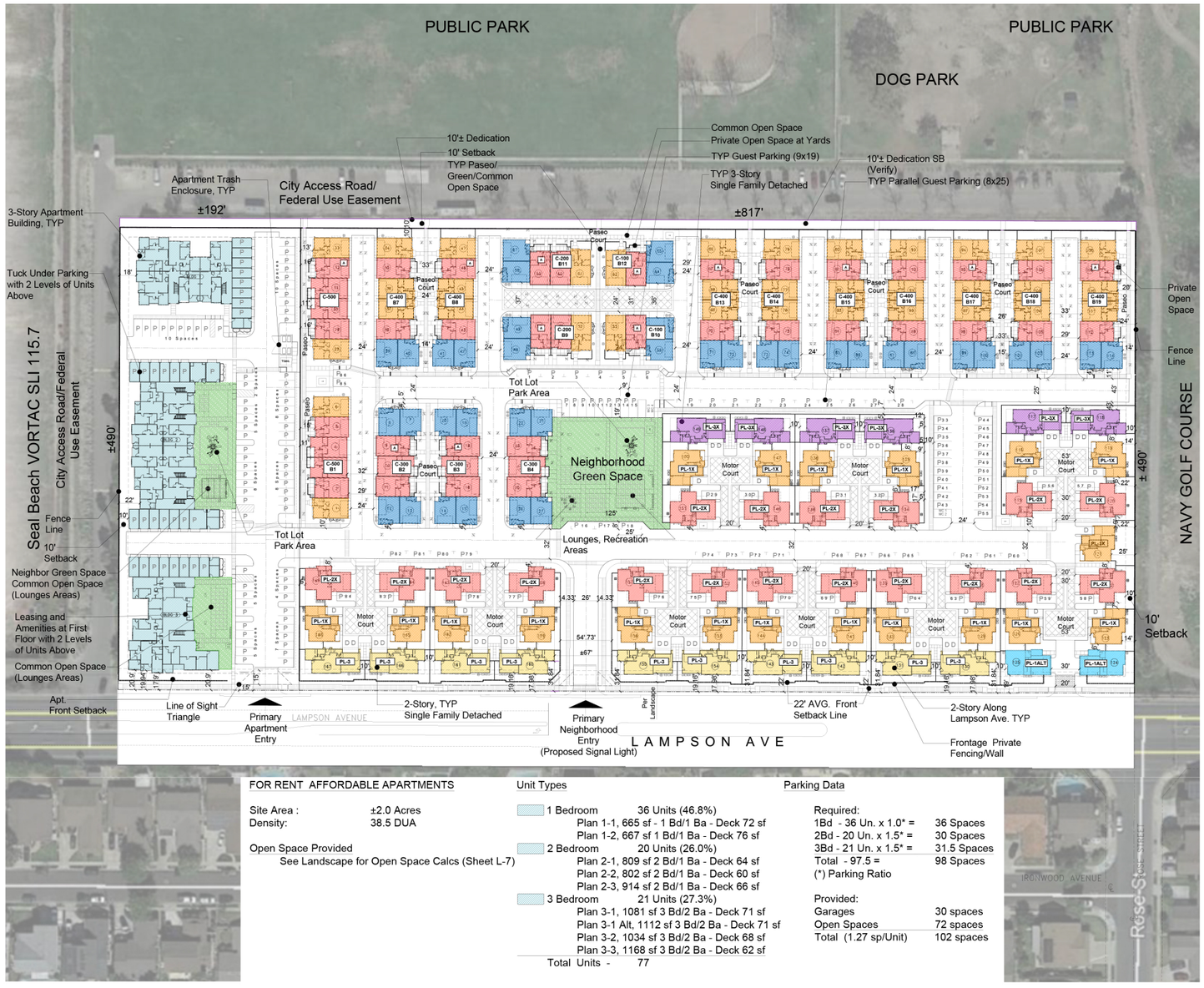


Source(s): ESRI, NearMap (2023)

Figure 3-3

0 75 150 300 Feet

Aerial Photograph



SITE INFORMATION
Address: 4665 Lampson Ave. #C
City: Los Alamitos
County: Orange County
APN: 130-012-35
Current Zoning: C-F Community Facilities
Proposed Zoning: Adopted R-3 Ordinance (Pending)
Building Height: 35' to Roof (Exemption - 17.16.040 to 41')
Front Street Setback: 20' Avg. (15' Min.)
Rear Setback: 10'
Side Setback (Interior): 5'

SITE SUMMARY COMBINED DATA

	Net Site	Gross Site
Site Area:	±12.1 Acres^	±12.3 Acres
Total Units for SITE:	246 Units	246 Units
Mixed Density:	20.33 DUA	20.0 DUA
Combined Parking Required:	440 Spaces	
Combined Provided Parking:	577 Spaces	
Surplus Parking:	137 Spaces	

Open Space	Required	Provided
Common Open Space (COS)	49,200sf (200sf/Unit)	16,160sf (67sf/Unit)
(Per Section 17.08.030 Development Standard in Residential)		
Private Open Space (POS)	14,760sf (60sf /Unit)	51,320sf (216sf/Unit)
(Includes all Decks and Private Patios. See Landscape Sheet L-7)		

FOR SALE PRODUCT - Single Family Detached/Townhomes
Site Area: ±10.1 Acres
Density (SFD/Towns): 16.73 DUA
Total Units: 169

Plan/Unit Types

Detached SFD (Gross sf):
2 units - Plan 1 ALT - 1719 sf - 3Bd/2.5Ba, Bonus/Loft - 2 Story
18 units - Plan 1X - 2214 sf - 4Bd/3.5Ba, Bonus/Loft - 3 Story
19 units - Plan 2X - 2679 sf - 4Bd/3.5Ba, Bonus/Loft - 3 Story
10 units - Plan 3 - 2187 sf - 4Bd/3Ba, Loft/Opt.Bd/Den - 2 Story
6 units - Plan 3X - 2815 sf - 4Bd/4Ba, Bonus,Loft/Opt. Bd/Den/ - 3 Story
55 units (Total) 132,951sf

Townhomes (Gross sf):
10 units - Plan 1 - 1325sf - 2bd/2.5ba - 73sf Deck (Carriage)
19 units - Plan 1X - 1376sf - 2bd/2.5ba - 68sf Deck (Carriage)
9 units - Plan 1Y - 1266sf - 2bd/2.5ba - 71sf Deck (Carriage)
34 units - Plan 2 - 1803sf - 3bd/3.5ba (side/side)
7 units - Plan 2X - 1837sf - 3bd/3.5ba(side/side)
35 units - Plan 3 - 1928sf - 4bd/3.5ba - 72sf Deck (side/side)
114 units (Total) 192,429sf 5,181sf
(A) - Accessible Unit Provided at 10% (12 Units of Plan 2)

Parking Data

Parking Required (Per State Density Bonus, Section 65915):

2Bd:	38 units x 1.5 sp/unit =	57 spaces
3Bd:	43 units x 1.5 sp/unit =	65 spaces
4Bd (or more):	88 units x 2.5 sp/unit =	220 spaces
Total Required: (Max Parked)		342 spaces
Parking Provided:		
Garages		338 spaces
(D) Driveways		51 spaces
(P) Open Parking**		86 spaces
Total Parking Provided		475 spaces (2.8 sp/unit)

(**) Required Four(4) Motor Cycle Parking Spaces to be provided at (MC) Open Spaces (Per 17.22.060 - 1 space : 20 Car Spaces)

Open Space Provided

Common Open Space
SFD/Towns Combined - see Landscape for areas (Sheet L-7)

Private Open Space - see Landscape for Open Space calculations (Sheet L-7)

FOR RENT AFFORDABLE APARTMENTS

Site Area : ±2.0 Acres
Density: 38.5 DUA

Open Space Provided
See Landscape for Open Space Calcs (Sheet L-7)

Unit Types

1 Bedroom 36 Units (46.8%)
Plan 1-1, 665 sf - 1 Bd/1 Ba - Deck 72 sf
Plan 1-2, 667 sf 1 Bd/1 Ba - Deck 76 sf
2 Bedroom 20 Units (26.0%)
Plan 2-1, 809 sf 2 Bd/1 Ba - Deck 64 sf
Plan 2-2, 802 sf 2 Bd/1 Ba - Deck 60 sf
Plan 2-3, 914 sf 2 Bd/1 Ba - Deck 66 sf
3 Bedroom 21 Units (27.3%)
Plan 3-1, 1081 sf 3 Bd/2 Ba - Deck 71 sf
Plan 3-1 Alt, 1112 sf 3 Bd/2 Ba - Deck 71 sf
Plan 3-2, 1034 sf 3 Bd/2 Ba - Deck 68 sf
Plan 3-3, 1168 sf 3 Bd/2 Ba - Deck 62 sf
Total Units - 77

Parking Data

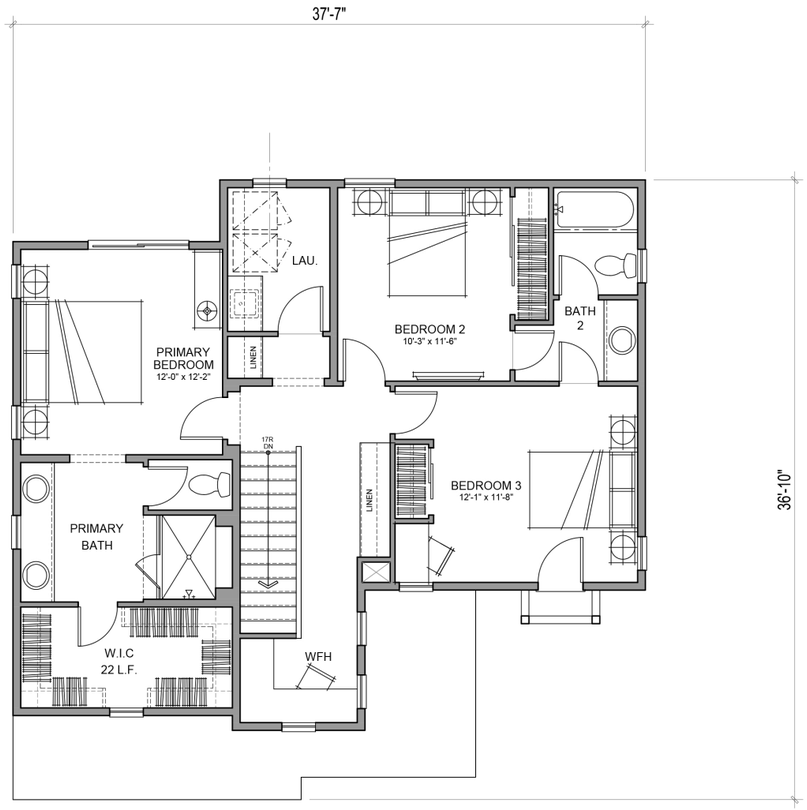
Required:	
1Bd - 36 Un. x 1.0* =	36 Spaces
2Bd - 20 Un. x 1.5* =	30 Spaces
3Bd - 21 Un. x 1.5* =	31.5 Spaces
Total - 97.5 =	98 Spaces
(*) Parking Ratio	
Provided:	
Garages	30 spaces
Open Spaces	72 spaces
Total (1.27 sp/Unit)	102 spaces

Source(s): KTGY Architecture (01-16-2024)

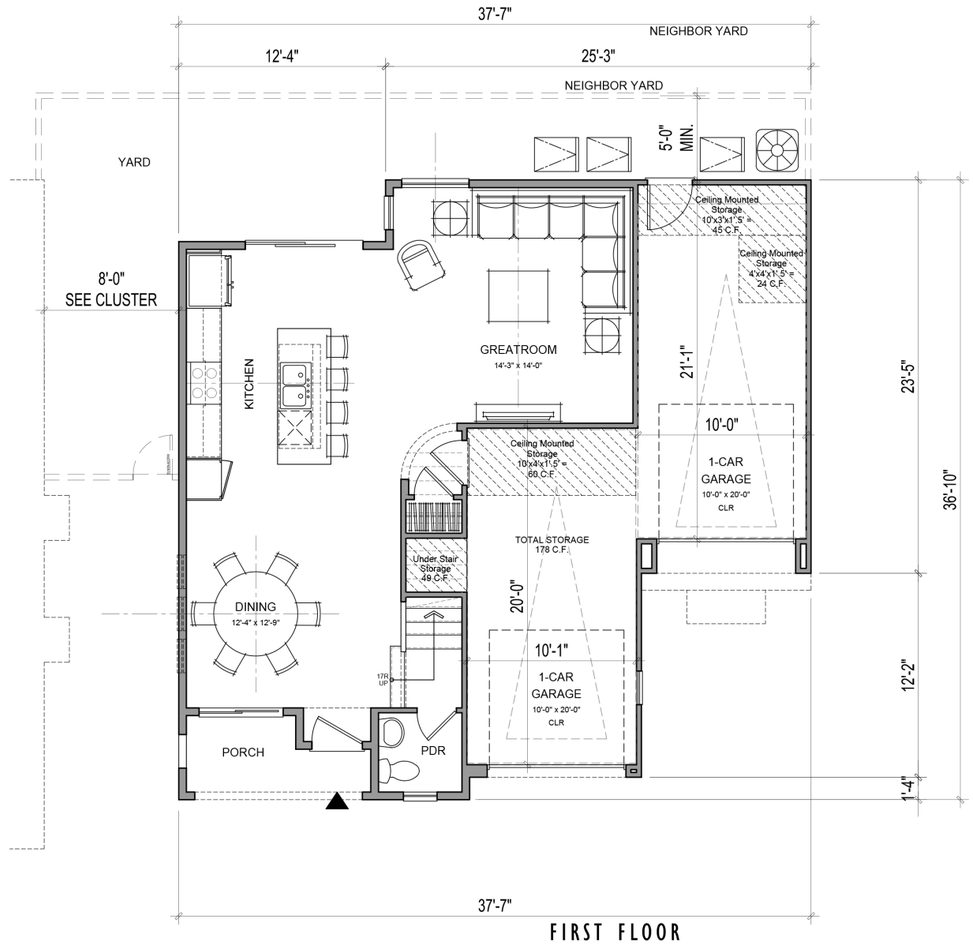
Figure 3-4

Not to Scale

Site Plan



SECOND FLOOR



FIRST FLOOR

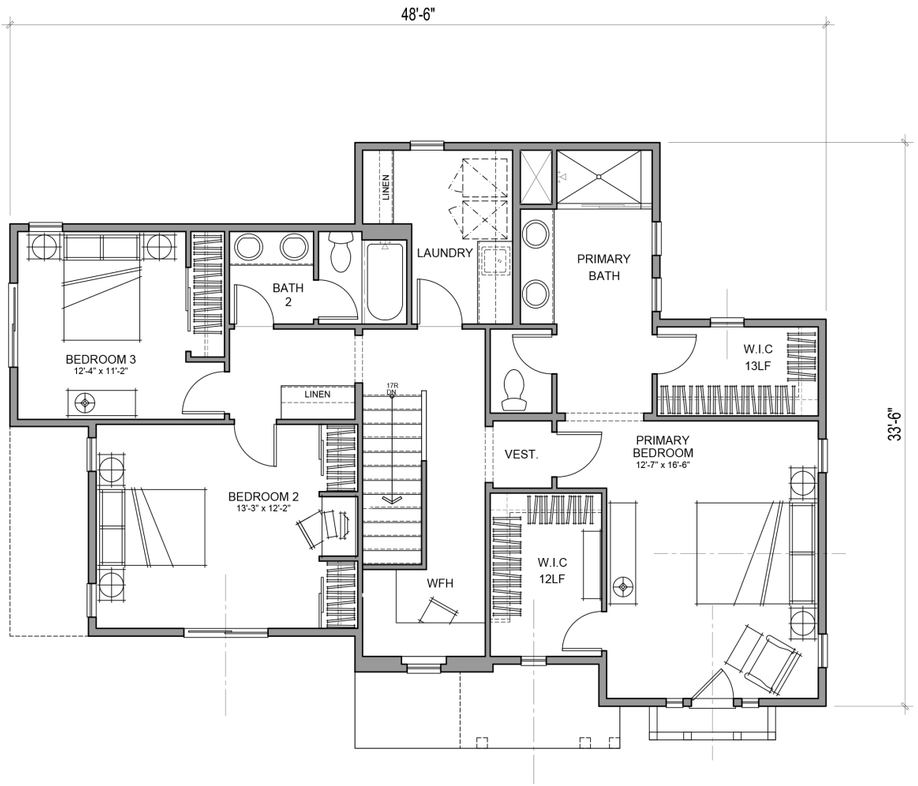
P1 - GROSS AREA	
1ST FLOOR	688 SQ. FT.
2ND FLOOR	1034 SQ. FT.
TOTAL LIVING	1722 SQ. FT.
GARAGE	431 SQ. FT.
PORCH	48 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

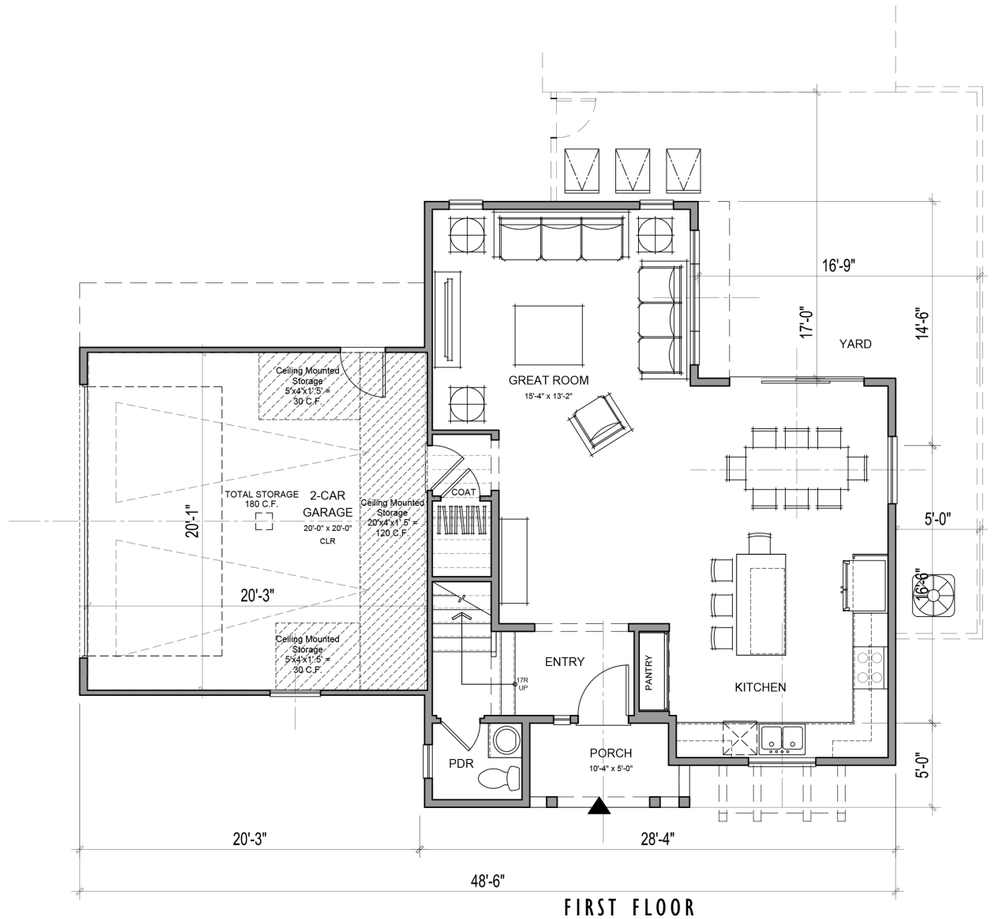
Figure 3-5

Not to Scale

Typical Single Family Dwelling Plan 1 Floor Plans



SECOND FLOOR



FIRST FLOOR

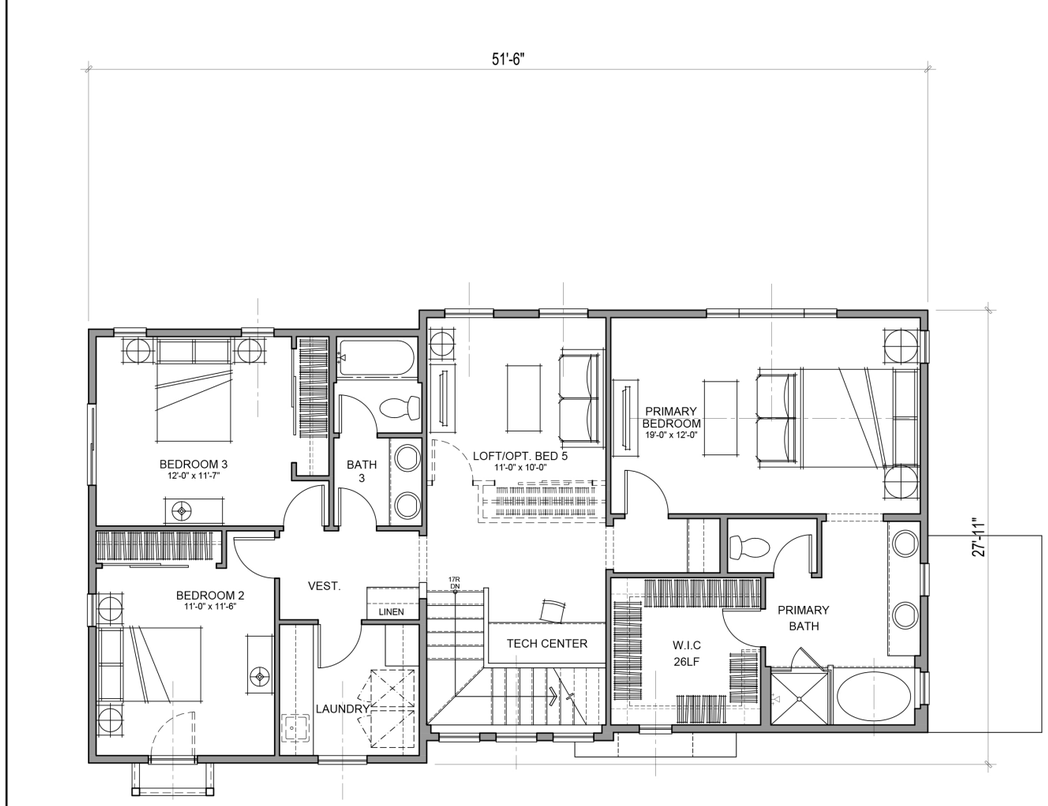
P2 - GROSS AREA	
1ST FLOOR	773 SQ. FT.
2ND FLOOR	1242 SQ. FT.
TOTAL LIVING	2015 SQ. FT.
GARAGE	427 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

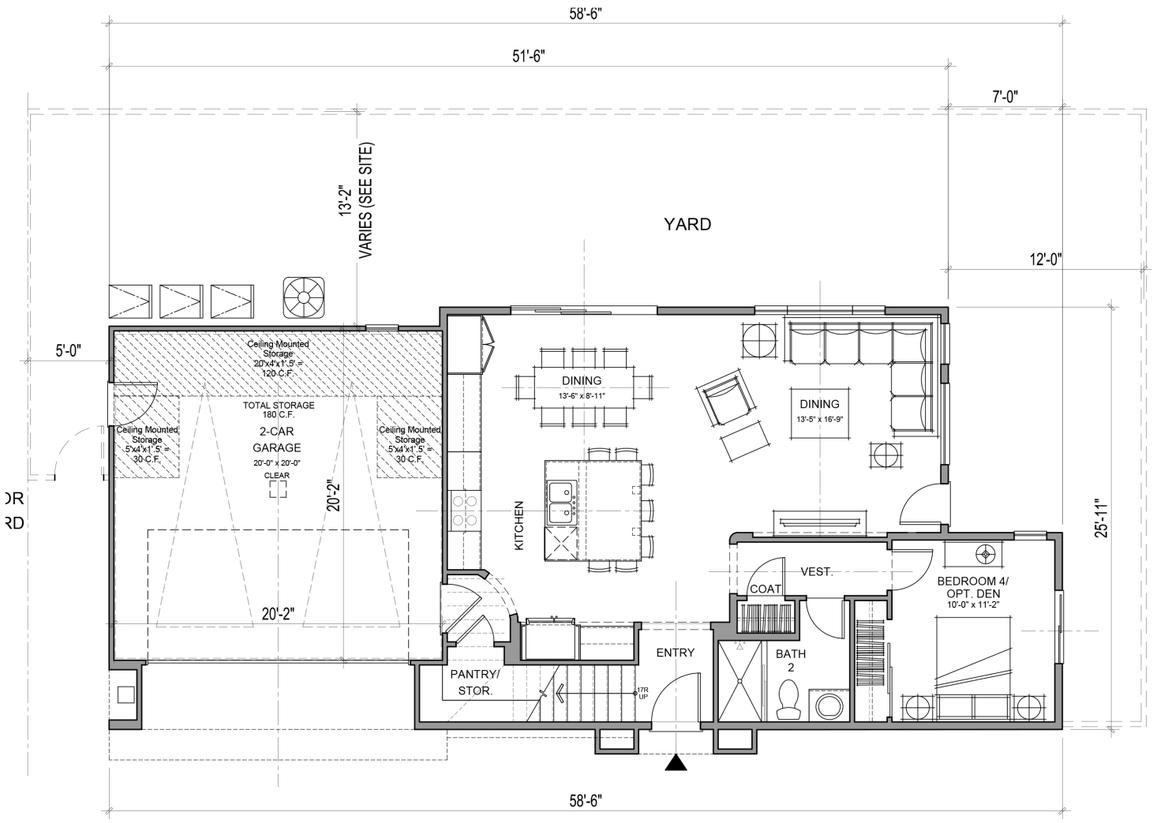
Figure 3-6

Not to Scale

Typical Single Family Dwelling Plan 2 Floor Plans



SECOND FLOOR



FIRST FLOOR

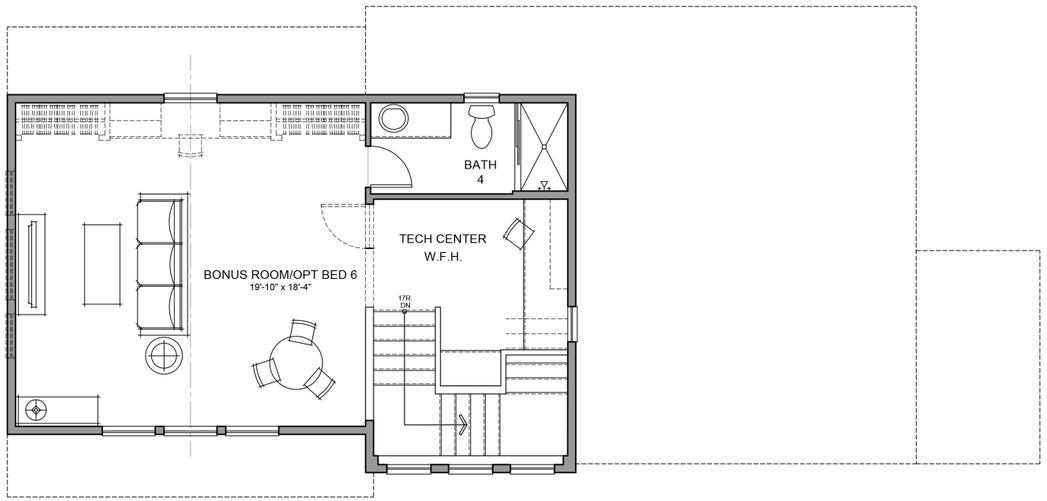
P3 - GROSS AREA	
1ST FLOOR	897 SQ. FT.
2ND FLOOR	1290 SQ. FT.
TOTAL LIVING	2187 SQ. FT.
GARAGE	425 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

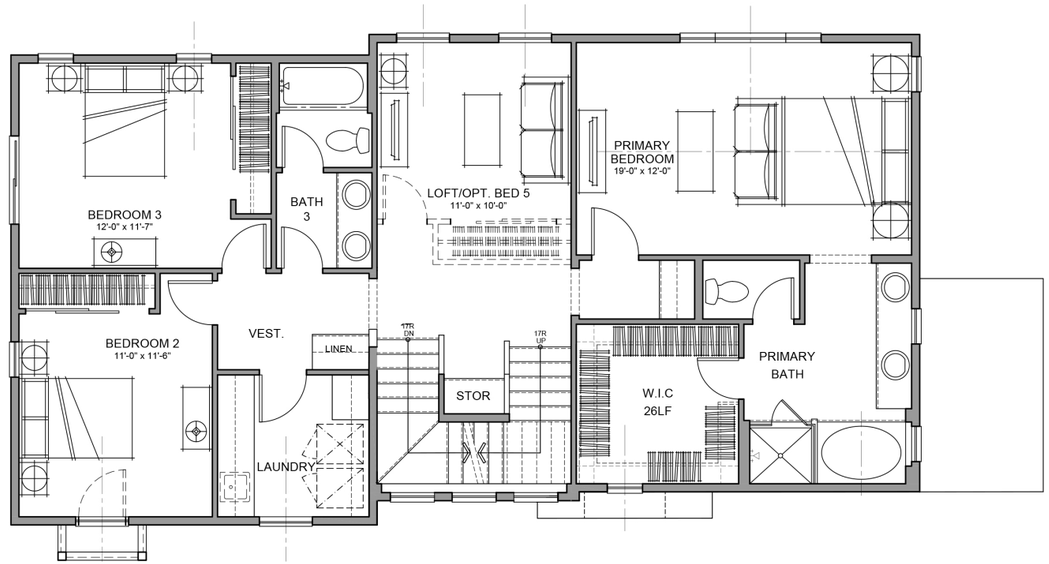
Figure 3-7

Not to Scale

Typical Single Family Dwelling Plan 3 Floor Plans



THIRD FLOOR



SECOND FLOOR

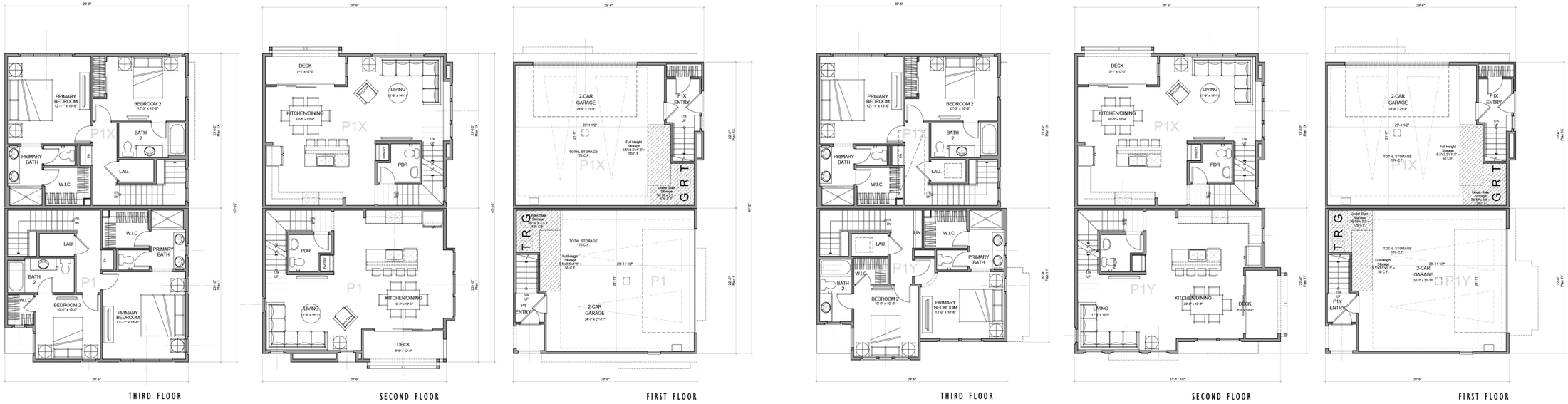
P3X - GROSS AREA	
1ST FLOOR	897 SQ. FT.
2ND FLOOR	1350 SQ. FT.
3RD FLOOR	568 SQ. FT.
TOTAL LIVING	2815 SQ. FT.
GARAGE	425 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

Figure 3-8

Not to Scale

Typical Single Family Dwelling Plan 3X Floor Plans



P1 - GROSS AREA	
1ST FLOOR	115 SQ. FT.
2ND FLOOR	611 SQ. FT.
3RD FLOOR	599 SQ. FT.
TOTAL LIVING	1325 SQ. FT.
PORCH	NA
DECK	73 SQ. FT.
GARAGE	568 SQ. FT.

P1X - GROSS AREA	
1ST FLOOR	127 SQ. FT.
2ND FLOOR	627 SQ. FT.
3RD FLOOR	622 SQ. FT.
TOTAL LIVING	1376 SQ. FT.
DECK	68 SQ. FT.
GARAGE	568 SQ. FT.

P1Y - GROSS AREA	
1ST FLOOR	91 SQ. FT.
2ND FLOOR	606 SQ. FT.
3RD FLOOR	569 SQ. FT.
TOTAL LIVING	1266 SQ. FT.
PORCH	NA
DECK	71 SQ. FT.
GARAGE	568 SQ. FT.

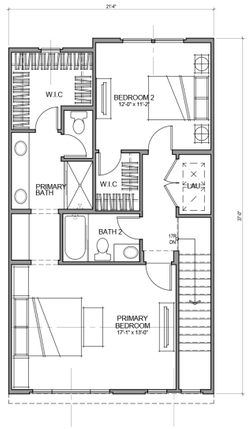
P1X - GROSS AREA	
1ST FLOOR	127 SQ. FT.
2ND FLOOR	627 SQ. FT.
3RD FLOOR	622 SQ. FT.
TOTAL LIVING	1376 SQ. FT.
DECK	68 SQ. FT.
GARAGE	568 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

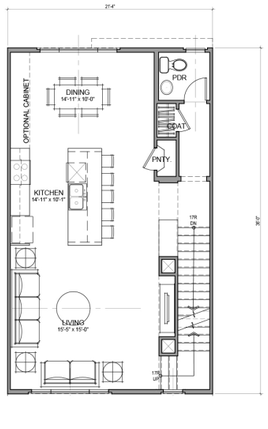
Figure 3-9

Not to Scale

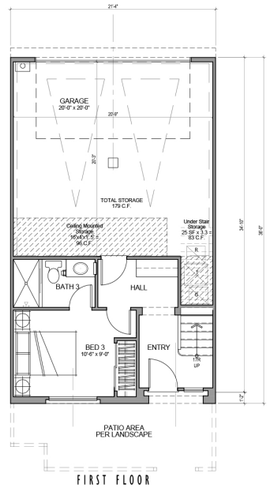
Typical Townhome Units Plan 1/1X/1Y Floor Plans



THIRD FLOOR

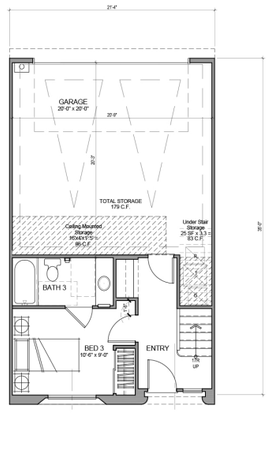


SECOND FLOOR

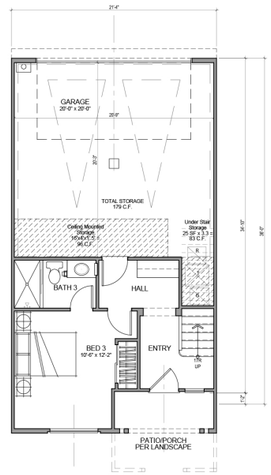


FIRST FLOOR

P2 - GROSS SF	
1ST FLOOR	321 SQ. FT.
2ND FLOOR	768 SQ. FT.
3RD FLOOR	714 SQ. FT.
TOTAL LIVING	1803 SQ. FT.
GARAGE	460 SQ. FT.

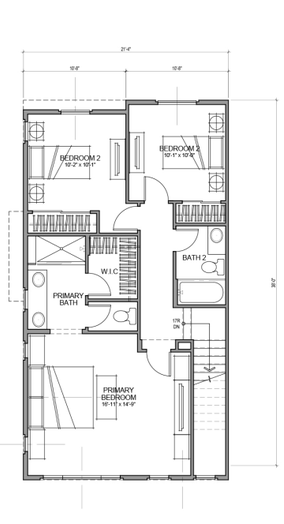


ACCESSIBLE UNIT FIRST FLOOR

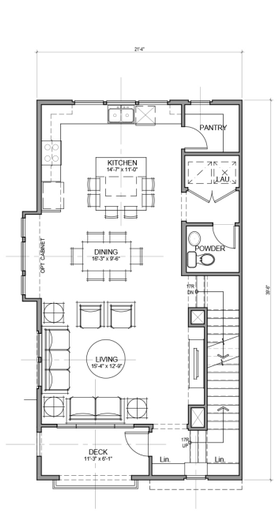


FIRST FLOOR ALTERNATE

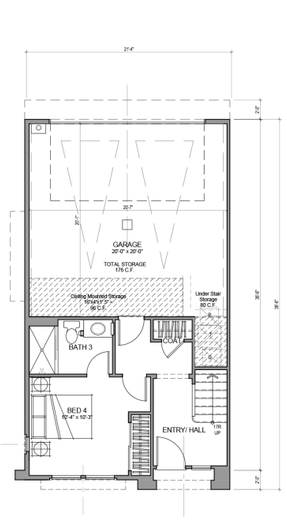
P2X - GROSS SF	
1ST FLOOR	355 SQ. FT.
2ND FLOOR	768 SQ. FT.
3RD FLOOR	714 SQ. FT.
TOTAL LIVING	1837 SQ. FT.
GARAGE	460 SQ. FT.



THIRD FLOOR



SECOND FLOOR



FIRST FLOOR

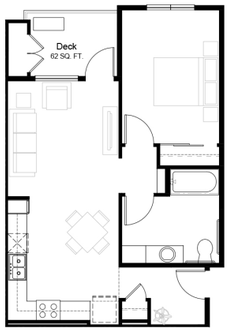
P3 - GROSS SF	
1ST FLOOR	372 SQ. FT.
2ND FLOOR	792 SQ. FT.
3RD FLOOR	764 SQ. FT.
TOTAL LIVING	1928 SQ. FT.
PORCH	15 SQ. FT.
GARAGE	457 SQ. FT.
DECK	72 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

Figure 3-10

Not to Scale

Typical Townhome Units Plan 2/2X/3 Floor Plans



Plan 1-1
1 Bedroom / 1 Bathroom
665 SQ. FT.



Plan 1-2
1 Bedroom / 1 Bathroom
667 SQ. FT.



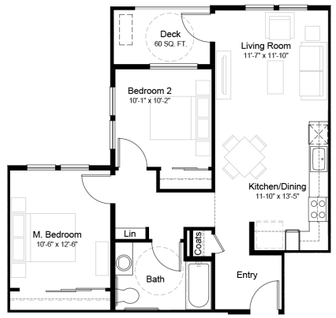
Plan 2-1
2 Bedroom / 1 Bathroom
809 SQ. FT.



Plan 3-1
3 Bedroom / 2 Bathroom
1081 SQ. FT.



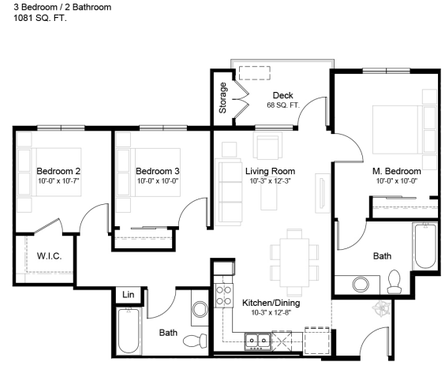
Plan 3-1 Alt
3 Bedroom / 2 Bathroom
1112 SQ. FT.



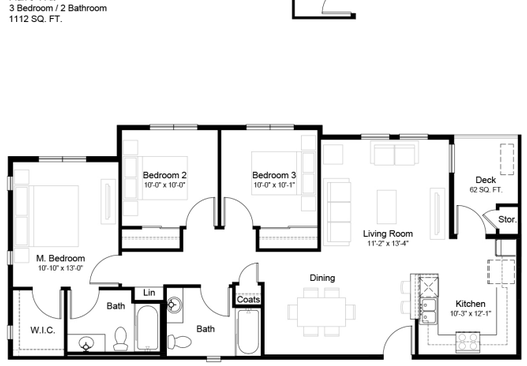
Plan 2-2
2 Bedroom / 1 Bathroom
802 SQ. FT.



Plan 2-3
2 Bedroom / 1 Bathroom
914 SQ. FT.



Plan 3-2
3 Bedroom / 2 Bathroom
1034 SQ. FT.



Plan 3-3
3 Bedroom / 2 Bathroom
1168 SQ. FT.

Source(s): KTGY Architecture (04-04-2023)

Figure 3-11

Not to Scale

Typical Apartment Units Floor Plans





MATERIAL LEGEND STYLE

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, FINISH
3. METAL ROOF (STANDING SEAM)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM
5. FAUX WOOD HORIZONTAL TRIM w/ 2X3 FLAT TRIM CAP
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL.
9. VERTICAL B&B SIDING (12" O.C.)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X6 BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. DECORATIVE WOOD CORBEL
14. HORIZONTAL SIDING (4" EXPOSURE)
15. HORIZONTAL SIDING (10" EXPOSURE)
16. WOOD RAILING (WHERE OCCURS)
17. VINYL WINDOWS
18. DECORATIVE FIBERGLASS ENTRY DOOR
19. SLIDING DOOR
20. PORCH / COLUMNS / POST (WHERE OCCURS)
21. METAL SECTIONAL GARAGE DOOR
22. DECORATIVE EXTERIOR LIGHTS/RAISED PIN MOUNTED ADDRESS
23. FRENCH DOOR (WHERE OCCURS)
24. FAUX GABLE END VENT 1X4 BOARDS OVER PANEL BOARD
25. BUILT-UP FAUX POT SHELF
26. CANTILEVER BUILT-UP DECK/BALCONY
27. 2X3 CORNER TRIM AT VERTICAL SIDING
28. 2X4 CORNER TRIM AT HORIZONTAL SIDING
29. CEMENTITIOUS PANEL BOARD
30. GARAGE MAN DOOR
31. PORCH DECK TAPERED COLUMNS AND BUILT-UP TRIM BASE
32. HORIZ. FLAT 2X3 TRIM OVER 2X3 BOARD

Source(s): KTGY Architecture (04-04-2023)

Figure 3-12

Not to Scale

Typical Single Family Dwelling Elevations

MATERIAL LEGEND

1. COMPOSITE SHINGLE ROOF (NO RAKE TILE)
2. STUCCO, LIGHT SAND FINISH (20/30)
3. STANDING SEAM METAL (WHERE OCCURS)
4. ROOF AWNING w/ WOOD OUTLOOKER / BRACE & BEAM (B)
5. FAUX WOOD HORIZONTAL TRIM w/ FLAT TRIM
6. FAUX WOOD CORNER TRIM AT SIDING
7. FAUX WOOD / CEMENTITIOUS TRIM / SURROUND
8. FAUX WOOD TRIM SILL
9. DECORATIVE FAUX VENT (6" SPACED 1X4 BOARD) (B)
10. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
11. 2X4/ 2X6 BARGE BOARD
12. 4X6 DECORATIVE GABLE END OUTLOOKER
13. HORIZONTAL SIDING (4" EXPOSURE) (WHERE OCCURS)
14. HORIZONTAL SIDING (10" EXPOSURE) (WHERE OCCURS)
15. VERTICAL BOARD & BATT SIDING (16" O.C.)
16. WOOD RAILING
17. VINYL WINDOWS
18. SLIDING GLASS DOOR
19. DECORATIVE FIBERGLASS ENTRY DOOR
20. DECORATIVE WOOD CORBELS
21. METAL UTILITY DOOR
22. PORCH/DECK COLUMNS (WHERE OCCURS)
23. METAL SECTIONAL GARAGE DOOR
24. DECORATIVE EXTERIOR LIGHTS/RAISED NUMBER ADDRESS

(A) AT 'A' STYLE ELEVATION
(B) AT 'B' STYLE ELEVATION









Source(s): KTGY Architecture (04-04-2023)

Figure 3-13

Not to Scale

Typical Townhouse Elevations



1. FRONT ELEVATION



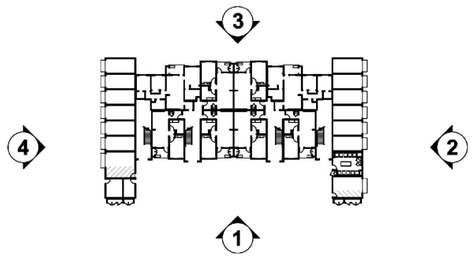
4. LEFT ELEVATION



3. REAR ELEVATION



2. RIGHT ELEVATION



Building Key Plan N.T.S.

Material Legend

1. STUCCO
2. HORIZONTAL SIDING (4" EXPOSURE)
3. VERTICAL SIDING
4. COMPOSITE SHINGLE ROOF
5. 4X6 DECORATIVE GABLE END OUTLOOKER
6. 2X3 EAVE BOARD W/ EXPOSED TRUSS TAILS
7. VINYL WINDOWS
8. METAL RAILING W/ BULLSEYE DETAIL AND HORIZONTAL SIDING
9. DECORATIVE EXTERIOR LIGHTS/ADDRESS
10. METAL SECTIONAL GARAGE DOOR
11. STONE VENEER

Source(s): KTGY Architecture (04-04-2023)

Figure 3-14

Not to Scale

Typical Multi-Family Elevations



PLAN 3A

PLAN 3B

Source(s): KTGY Architecture (04-04-2023)

Figure 3-15

Not to Scale

Lampson Street Scene



Source(s): KTGY Architecture (04-04-2023)

Figure 3-16

Not to Scale

Cluster Homes Street Scene

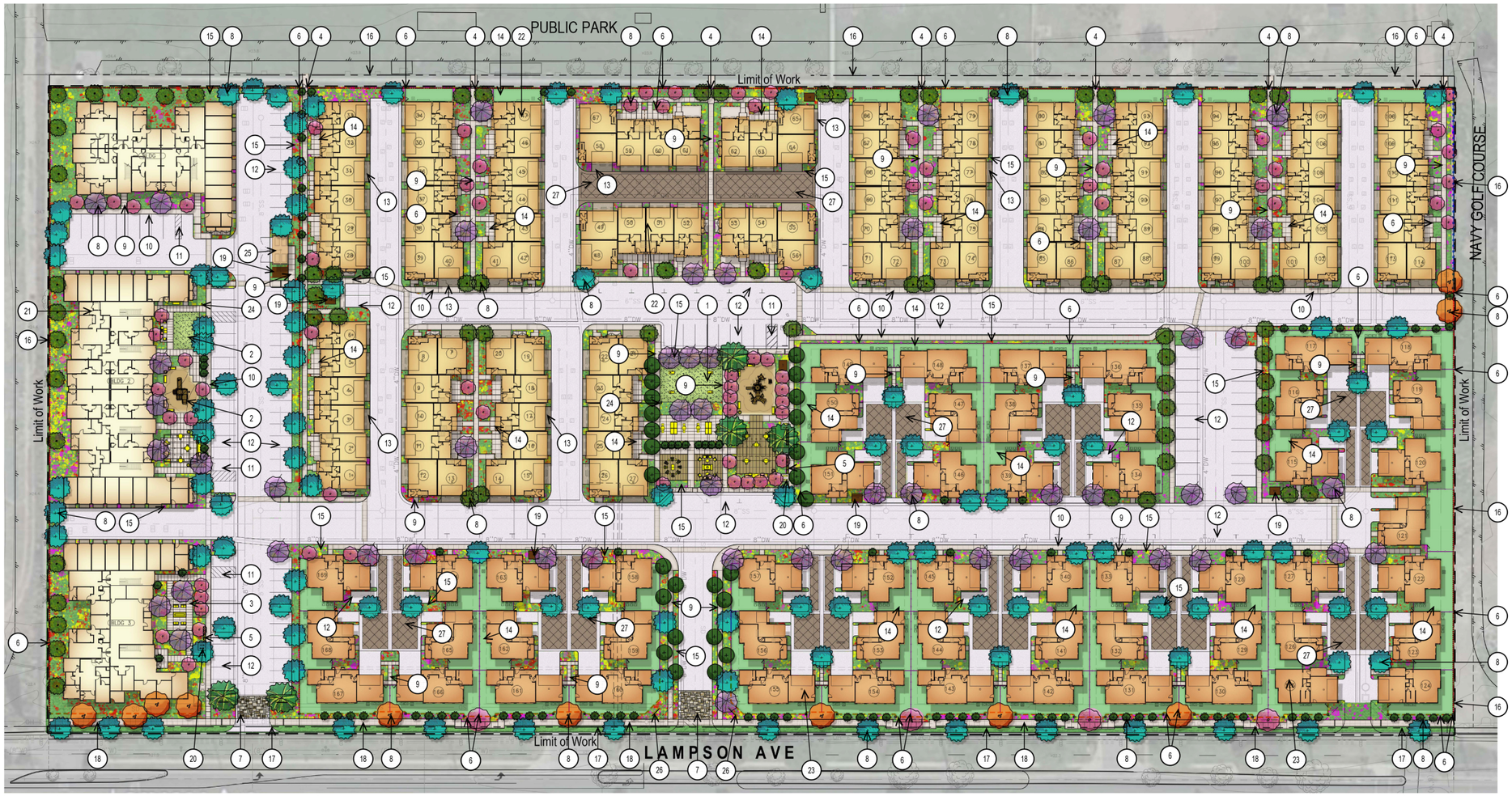


Source(s): KTGY Architecture (04-04-2023)

Figure 3-17

Not to Scale

Townhomes Street Scene



LEGEND

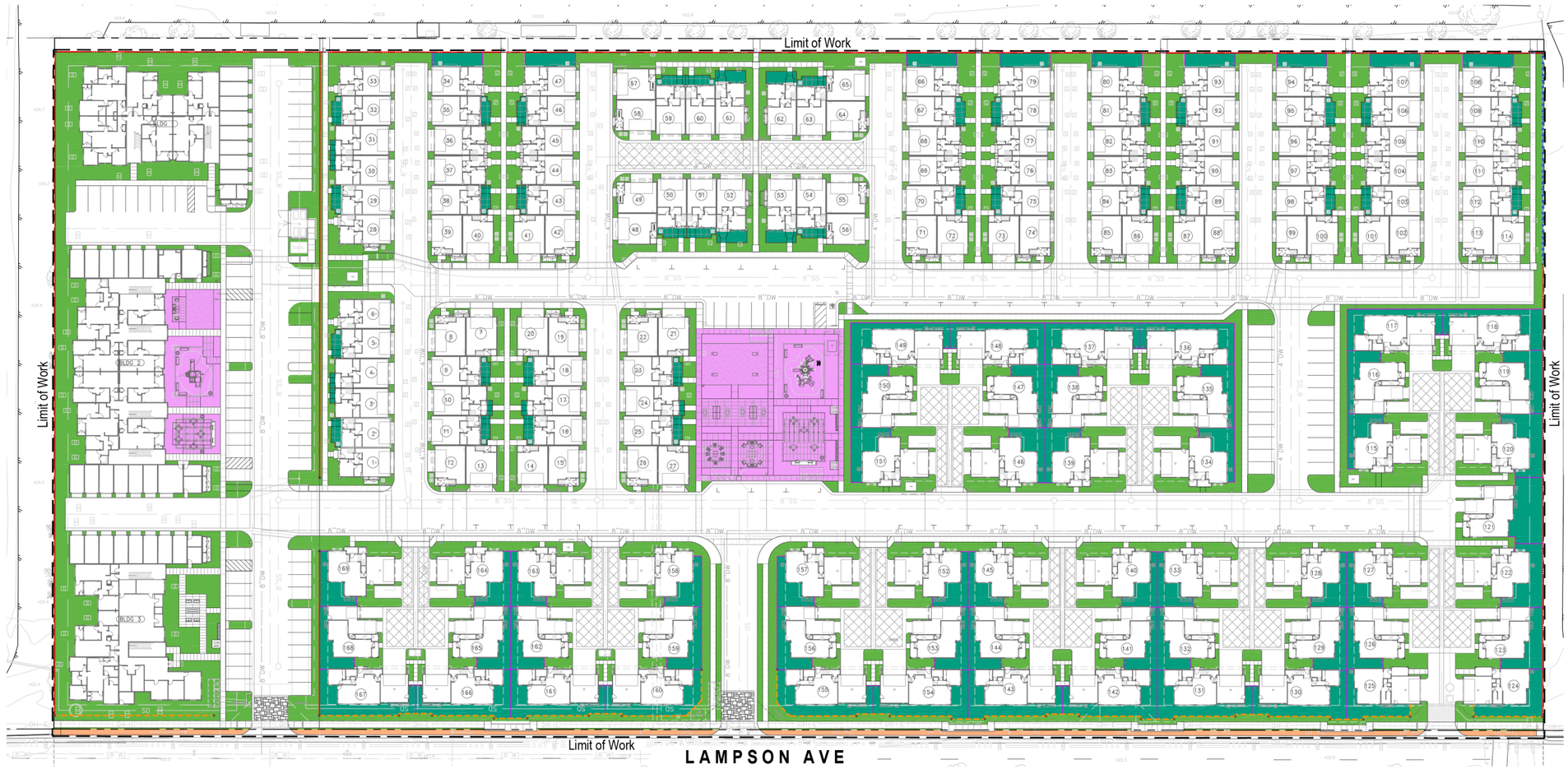
1. Central community open space area with lawn area for active / passive play, ping-pong table, corn hole, shade structure, BBQ counter, dining table seating, tot-lot, fire pit, Adirondacks seating and areas for social events and group gatherings. See sheet L-2 for Enlargement.
2. Tot Lot park with specimen trees and benches, shade structure, BBQ counter and dining table seating. See sheet L-2 for Enlargement.
3. Open space areas with lounge seating and/or fire pit for small gatherings and social events. See sheet L-2 for Enlargement.
4. Paseo to Park.
5. Community cluster mailboxes, per USPS review and approval.
6. Proposed wall, pilaster, gate or fence, per Wall & Fence Plan.
7. Enhanced paving at main project entry.
8. Proposed tree, per Planting Plan.
9. 4' wide community natural colored concrete sidewalk, with light top-cast finish and saw-cut joints.
10. 6' wide public natural colored concrete sidewalk with light top-cast finish and saw-cut joints.
11. Accessible parking stall and striping, per Civil plans.
12. Guest parking stall.
13. Natural colored concrete driveway, with light broom finish and tooled joints.
14. Private patio / yard area, homeowner maintained.
15. Common area landscape, builder installed and HOA maintained.
16. Property line.
17. Public street R.O.W.
18. Proposed public street sidewalk, per Civil plans.
19. Transformer to be screened with landscape, quantity and final locations to be determined.
20. Short term bike parking.
21. Affordable units, per Architect's plans.
22. Townhouse, per Architect's plans.
23. Cluster units, per Architect's plans.
24. Dog Bag Station.
25. Trash Enclosure.
26. Proposed Sign Monument.
27. Driveways with enhanced paving.

Source(s): Studio PAD, Inc. (04-04-2023)

Figure 3-18

Not to Scale

Landscape Plan



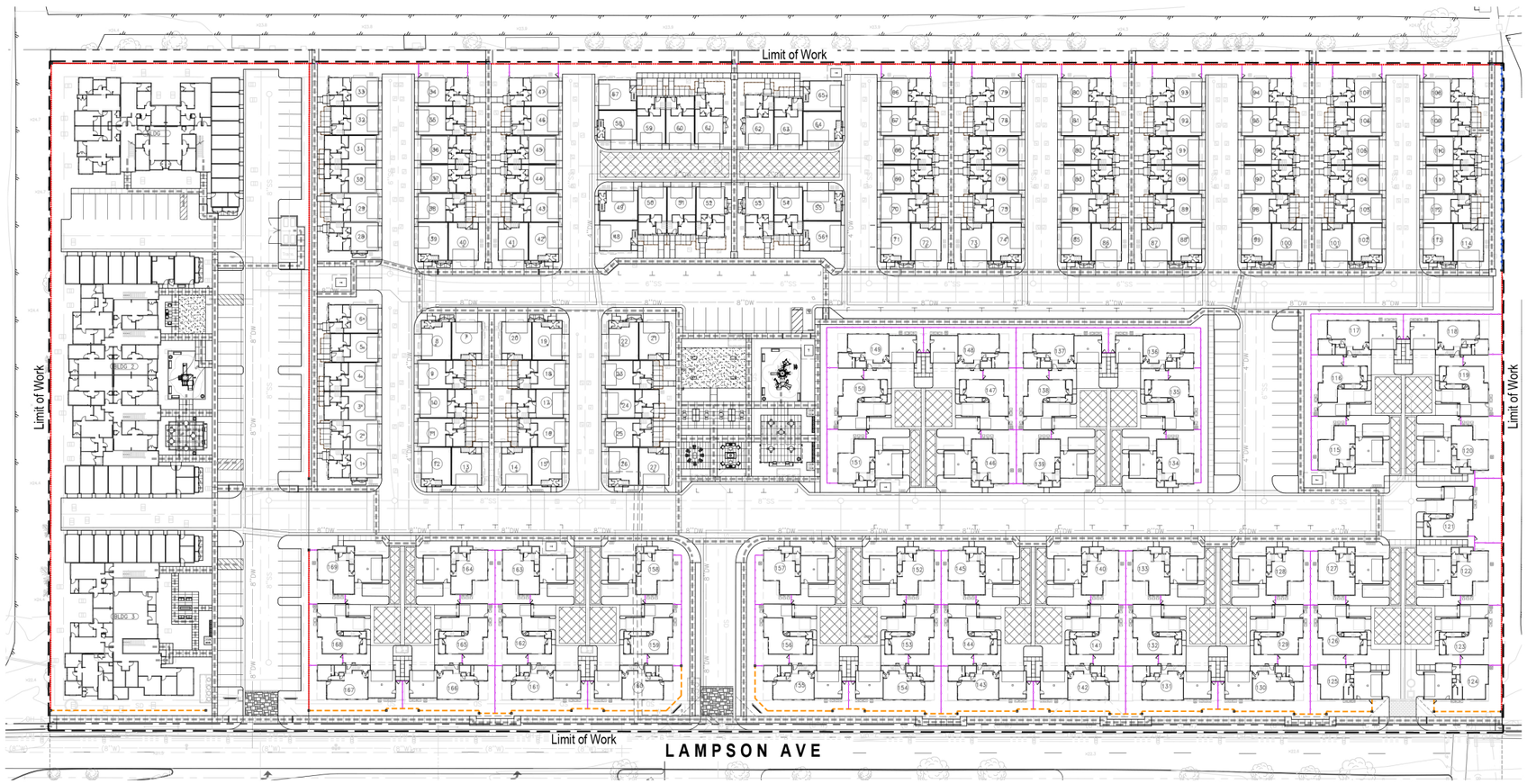
OPEN SPACE LEGEND		
SYMBOL	NOTES	QTY
	USABLE COMMON OPEN SPACE	16,160 sf
	OPEN SPACE - PRIVATE YARD - HOMEOWNER MAINTAINED	41,519 sf
	PLANTING AREA- COMMON AREA	78,038 sf
	PUBLIC STREET R.O.W	3,827 sf
	OPEN SPACE - MULTI-FAMILY PRIVATE DECK	4,620 sf
	OPEN SPACE - TOWNHOMES PRIVATE DECK	5,181 sf
	TOTAL OPEN SPACE	149,345 sf

Source(s): Studio PAD, Inc. (04-04-2023)

Figure 3-19

Not to Scale

Open Space Plan

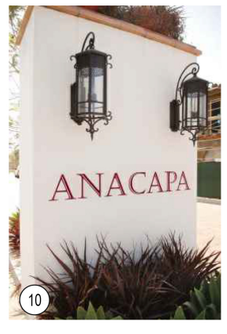


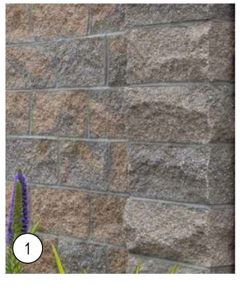
WALL, FENCE & GATE LEGEND

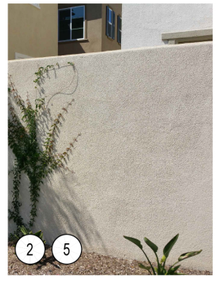
1. 6'-0" High split-face CMU wall, with CMU cap. Retaining per Civil plans (gray blend color).
2. 6'-0" High Stucco over CMU wall, with flat cap.
3. 5'-6" High vinyl fence (white color).
4. 4'-0" High combo metal guard-rail T.S. fence set on split-face CMU (6" min free-board). Retaining per Civil Engineer plans (black color).
5. 3'-6" High stucco CMU patio wall, with flat stucco cap.
6. 6'-6" High (16" sq.) split-face CMU pilaster, with 2" high CMU cap (gray blend color).
7. 6'-6" High (16" sq.) stone veneer over CMU pilaster, with precast cap.
8. 5'-6" High vinyl side yard gate (white color).
9. 5'-6" High metal pedestrian ADA access gate; for access to public park (black color).
10. Project monument sign wall / feature, stucco over CMU with lettering.

ADA Path of Travel.









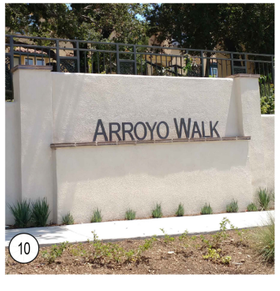










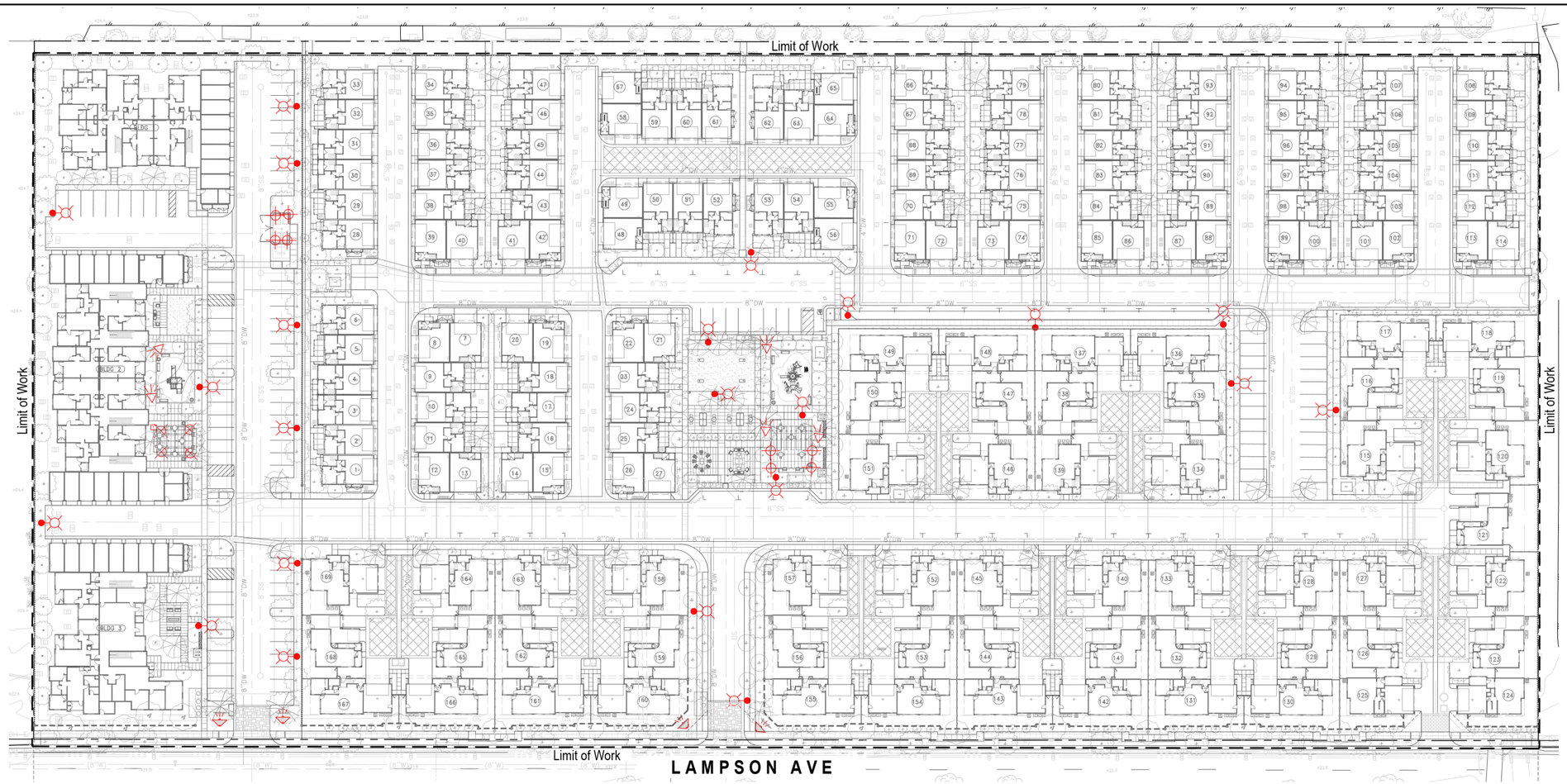


Source(s): Studio PAD, Inc. (04-04-2023)

Figure 3-20

Not to Scale

Wall and Fence Plan



LIGHTING SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Area Pole Light, HID - Direct Lighting Sales, Model San Vicente #SVE-3 Cast Aluminum, Textured Bronze, RA21 Radius Lamp: Per Elec. Eng., Per Elec. Eng., Per Elec. Eng. Accessories: On DBC-1 Base & 10' round pole.	22
	FX Luminaire FB-Tree Up-light Fits well into light spaces. 7.5" H x 2.0" Dia. Order code: FB, Aluminum Alloy, (BZ) Bronze Metallic, 3-Prong Spike Lamp: FB-3LED, 4.2W|4.5VA, 2700K, Beamspread: Spot	5

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	FX Luminaire Low Voltage Transformer Low-voltage transformer - FX model EX or PX. Cast Aluminum, Stainless Steel, Wall 300W Accessories: Install with Mechanical Transformer Timer (#15557BK & Plug-In Transformer Remote Photocell (#15534K).	1

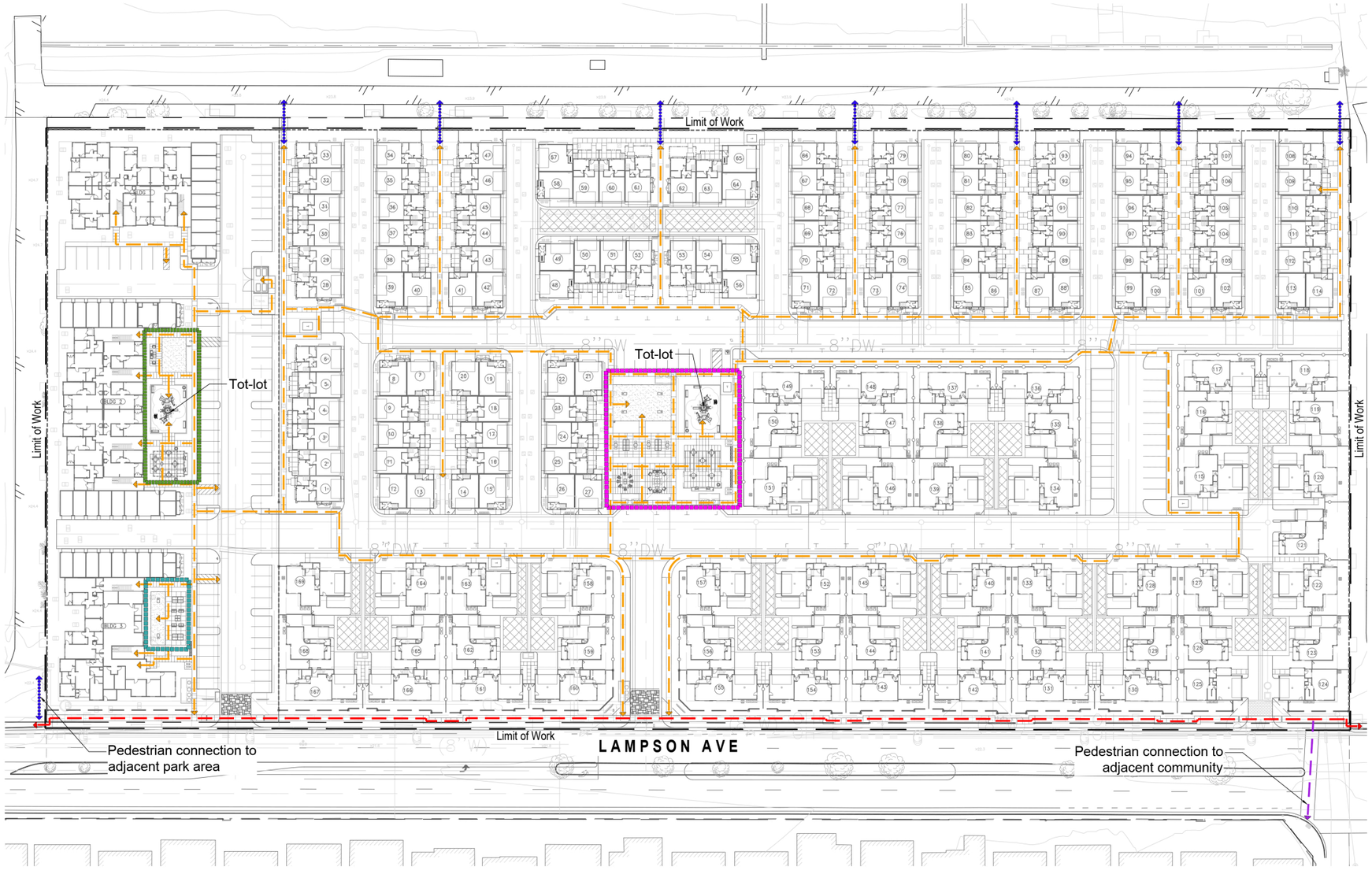
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	FX Luminaire MD-5h Structure Down-light Down light ideal for small space applications. 9.38" H x 2.62" Dia. Order code: MD, Aluminum, (FB) Flat Black, Mini J-Box for 1/2" Threa Lamp: 20W MR-16 LED Warm Flood, 4W|4.3VA, 2700K	12
	FX Luminaire PB-Flood Wall Up-light Ideal selection for large broad objects or washing light. 2.23" W x 6.72" H x 4.03" L Order code: PB, Aluminum Alloy, (AB) Antique Bronze, Ground Mount Lamp: PB-3LEDT, 4.2W|4.5VA, Beamspread: Flood	4

Source(s): Studio PAD, Inc. (04-04-2023)

Figure 3-21

Not to Scale

Lighting Plan

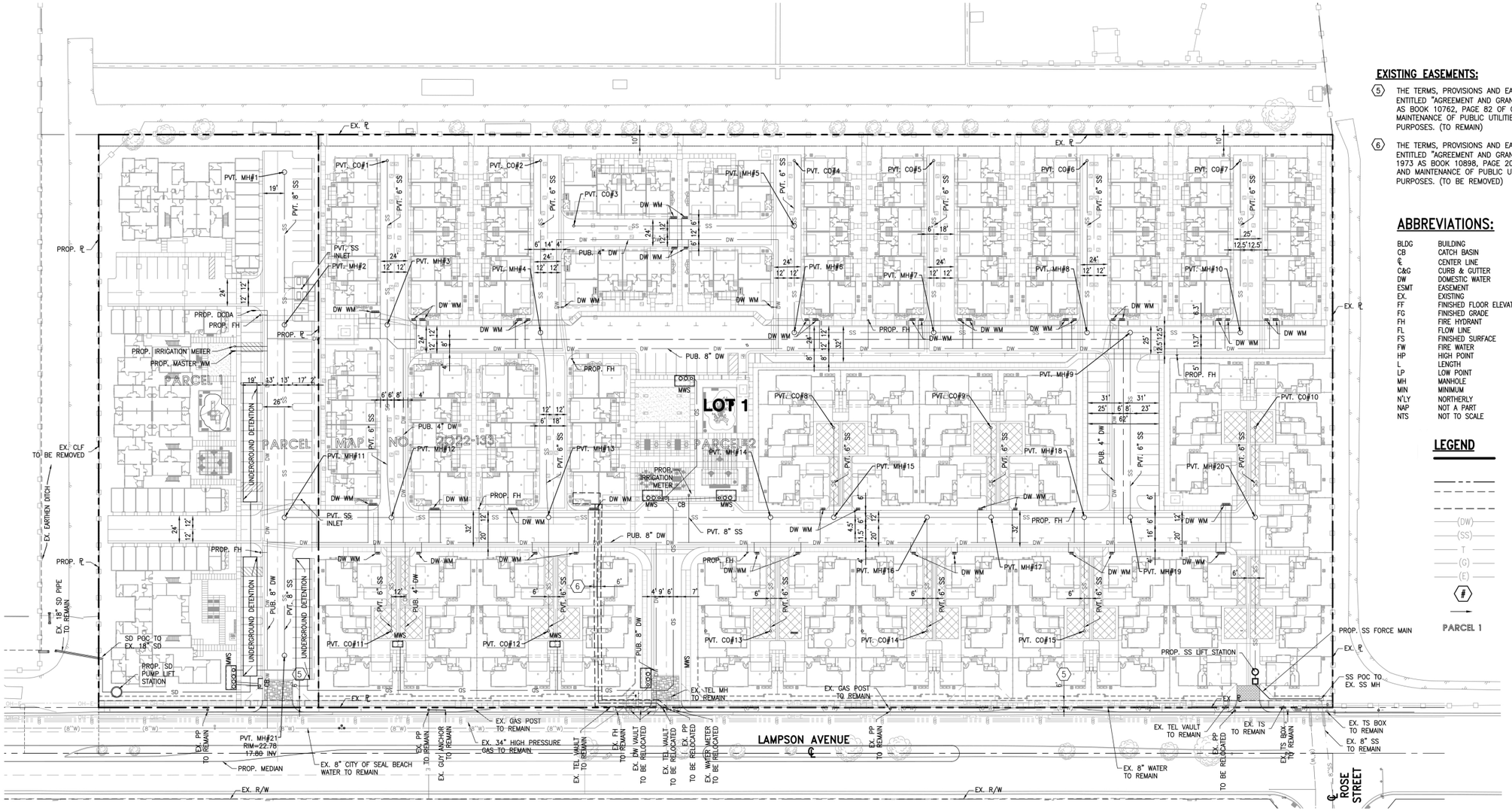


Source(s): Studio PAD Landscape Architecture (01-19-2024)

Figure 3-22

Not to Scale

Circulation Plan



EXISTING EASEMENTS:

(5) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED JUNE 21, 1973 AS BOOK 10762, PAGE 82 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO REMAIN)

(6) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED SEPTEMBER 13, 1973 AS BOOK 10898, PAGE 202 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO BE REMOVED)

ABBREVIATIONS:

BLDG	BUILDING	OH-E	OVERHEAD LINE
CB	CATCH BASIN	℄	PROPERTY LINE
℄	CENTER LINE	PP	POWER POLE
C&G	CURB & GUTTER	POC	POINT OF CONNECTION
DW	DOMESTIC WATER	PROP.	PROPOSED
ESMT	EASEMENT	R	RADIUS
EX.	EXISTING	RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
FF	FINISHED FLOOR ELEVATION	R/W	RIGHT OF WAY
FG	FINISHED GRADE	SD	STORM DRAIN
FH	FIRE HYDRANT	SF	SQUARE FEET
FL	FLOW LINE	SL	STREET LIGHT
FS	FINISHED SURFACE	SS	SANITARY SEWER
FW	FIRE WATER	S'LY	SOUTHERLY
HP	HIGH POINT	S/W	SIDEWALK
L	LENGTH	TC	TOP OF CURB
LP	LOW POINT	TG	TOP OF GRATE
MH	MANHOLE	TYP.	TYPICAL
MIN	MINIMUM	W'LY	WESTERLY
N'LY	NORTHERLY		
NAP	NOT A PART		
NTS	NOT TO SCALE		

LEGEND

Source(s): C&V Consulting, Inc. (04-04-2023)

Figure 3-23

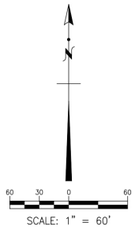
Not to Scale

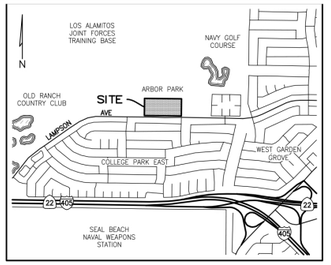
Utility Plan

TENTATIVE PARCEL MAP NO. 2022-133

FOR FINANCE AND CONVEYANCE PURPOSES

IN THE CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA





VICINITY MAP
SCALE: NONE

LEGAL DESCRIPTION:
BEING A SUBDIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 11 WEST, IN THE RANCHO LOS ALAMITOS, AS PER MAP FILED IN DECREE OF PARTITION IN THE SUPERIOR COURT OF LOS ANGELES COUNTY, STATE OF CALIFORNIA, CASE NO. 13527, A CERTIFIED COPY OF THE FINAL DECREE OF SAID CASE HAVING BEEN RECORDED FEBRUARY 2, 1891, IN BOOK 14, PAGE 31 OF DEEDS OF SAID ORANGE COUNTY
APN: 130-012-35

SITE ADDRESS:
4665 LAMPSON AVENUE, LOS ALAMITOS, CALIFORNIA

VESTED OWNER:
LAMPSON PARK PLACE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BASIS OF BEARINGS:
THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N28°33'38.9"W BETWEEN CALIFORNIA SPATIAL REFERENCE CENTER, (CSRC), CONTINUOUSLY OPERATING REFERENCE STATIONS, (CORS), "BLSA" AND "FVPK".

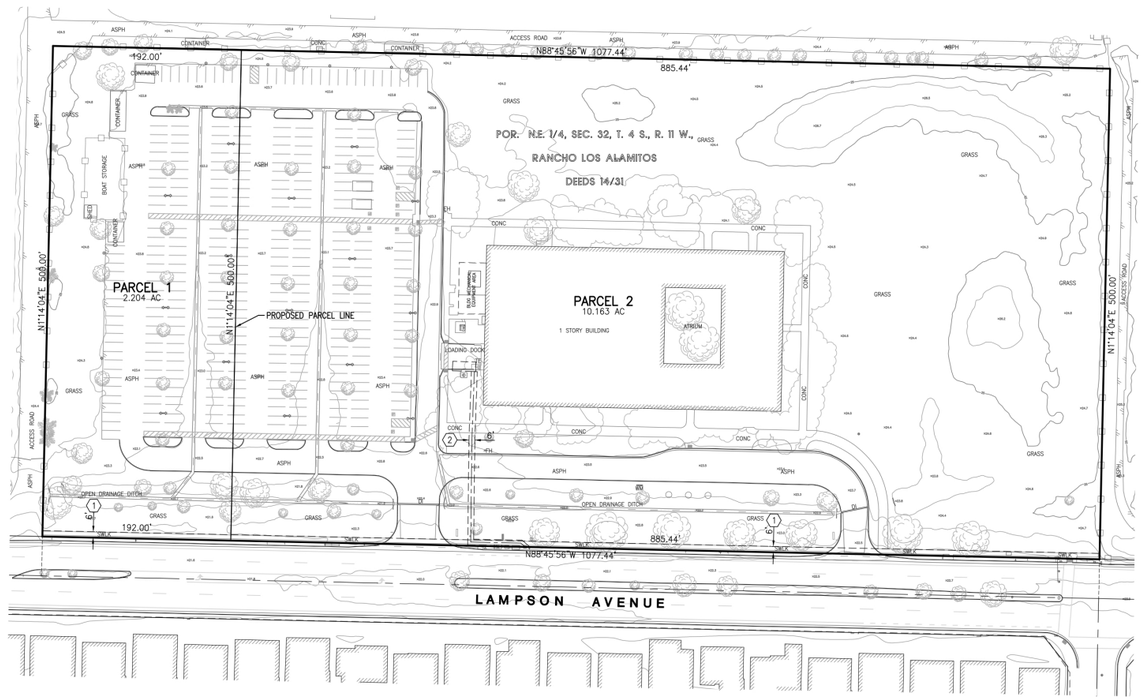
DATUM STATEMENT:
ALL COORDINATES SHOWN HEREON ARE GRID VALUES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE VI, NORTH AMERICAN DATUM OF 1983 (NAD83), 2017.50 EPOCH OCS GPS ADJUSTMENT, IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. A GENERALIZED COMBINATION SCALE FACTOR OF 0.99998924 WAS USED FOR THIS PROJECT AT NORTHING 2233124.607, EASTING 6015398.692. TO OBTAIN GRID DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINATION SCALE FACTOR.

BLSA N: 2239164.39, E: 6021324.82
FVPK N: 2188769.57, E: 6048756.26

BENCHMARK STATEMENT:
COUNTY OF ORANGE BENCHMARK NO. GG-113
ELEV: 23.116 (NAVD88, LEVELED 2012)
DESCRIBED AS: FOUND 2 ½" BRONZE CITY OF GARDEN GROVE BENCHMARK DISK WITH PUNCH IN TRIANGLE, SET IN THE NORTHWEST CORNER OF A 6.5 FT. BY 4.5 FT. CONCRETE CATCH BASIN. MONUMENT IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION OF LAMPSON AVE. AND MANLEY AVE. 13 FT., NORTH OF THE B.C.R. AND 4 FT. WEST OF THE CURB FACE. (TABLE A-5)

FLOOD NOTE:
THE SUBJECT PROPERTY FALLS WITHIN "ZONE D – AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE" PER FEMA MAP NO. 06059C0116J, A PRINTED PANEL, EFFECTIVE DECEMBER 3, 2009

LAND USE SUMMARY:
GROSS AREA: 12.367 ACRES
TOTAL PROPOSED PARCELS: 2



EXISTING EASEMENTS:

(1) AN EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES IN FAVOR OF THE CITY OF SEAL BEACH, A MUNICIPAL CORPORATION, PER DOCUMENT RECORDED JUNE 21, 1973 IN BOOK 10762, PAGE 82 OF OFFICIAL RECORDS.

(2) AN EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CALIFORNIA CORPORATION, PER DOCUMENT RECORDED SEPTEMBER 13, 1973 IN BOOK 10898, PAGE 202 OF OFFICIAL RECORDS.

AN EASEMENT FOR RIGHT OF ACCESS TO ALL PORTIONS OF THE PROPERTY FOR THE PURPOSES OF ENVIRONMENTAL INVESTIGATION, REMEDIATION, OR OTHER CORRECTIVE ACTION IN FAVOR OF THE UNITED STATES OF AMERICA, ACTING BY AND THROUGH THE ADMINISTRATOR OF GENERAL SERVICES PER DOCUMENT RECORDED DECEMBER 6, 2021 AS INSTRUMENT NO. 2021000734414 OF OFFICIAL RECORDS. EASEMENT IS BLANKET IN NATURE.

SUBDIVIDER:
LAMPSON PARK PLACE, LLC
14665 LAMPSON AVE
LOS ALAMITOS, CA 90720
562-400-4473
CONTACT: GEORGE VOIGT

ENGINEER:
C&V CONSULTING, INC.
9830 IRVINE CENTER DRIVE
IRVINE, CA 92618
(949)916-3800

LEGEND:

AP	ANGLE POINT
ASPH	ASPHALT PAVEMENT
BC	BUILDING CORNER
BEG	BEGIN
BO	BLOW-OFF VALVE
BLDG	BUILDING
BW	BLOCK WALL
CB	CATCH BASIN
CF	CURB FACE
CLF	CHAIN LINK FENCE
CMF	CORRUGATED METAL FENCE
CONC	CONCRETE PAVEMENT
DI	DRAIN INLET
DWY	DRIVEWAY
FH	FIRE HYDRANT
GM	GAS METER
LS	LANDSCAPING
MH	MANHOLE
PKWY	PARKWAY
P/L	PROPERTY LINE
RET	RETAINING
ROW	RIGHT-OF-WAY
SFH	SINGLE-FAMILY HOME
ST LT	STREET LIGHT
TE	TRASH ENCLOSURE
TEMP	TEMPORARY
TF	TRANSFORMER
WF	WOOD FENCE
WL	WALL
WM	WATER METER
V	VALVE

SYMBOLS:

BO	BLOW-OFF VALVE
DI	DRAIN INLET
FH	FIRE HYDRANT
	LIGHT STANDARD
	STORM DRAIN MANHOLE
S	SANITARY SEWER MANHOLE
	SIGN POST
GM	GAS METER
WM	WATER METER
V	UTILITY VALVE
	UTILITY/POWER POLE
	BLOCK/RETAINING SCREEN WALL
	BLOCK/RETAINING LOW WALL
	PLANTER/DECORATIVE WALL
OH-E	OVERHEAD WIRE
	EDGE OF ASPHALT PAVEMENT
	WOOD/WROUGHT IRON FENCE
X	CHAIN LINK FENCE
	DIRECTION OF FLOW
93	MINOR CONTOUR (1' INTERVAL)
100	MAJOR CONTOUR (5' INTERVAL)
×91.5	SPOT ELEVATION

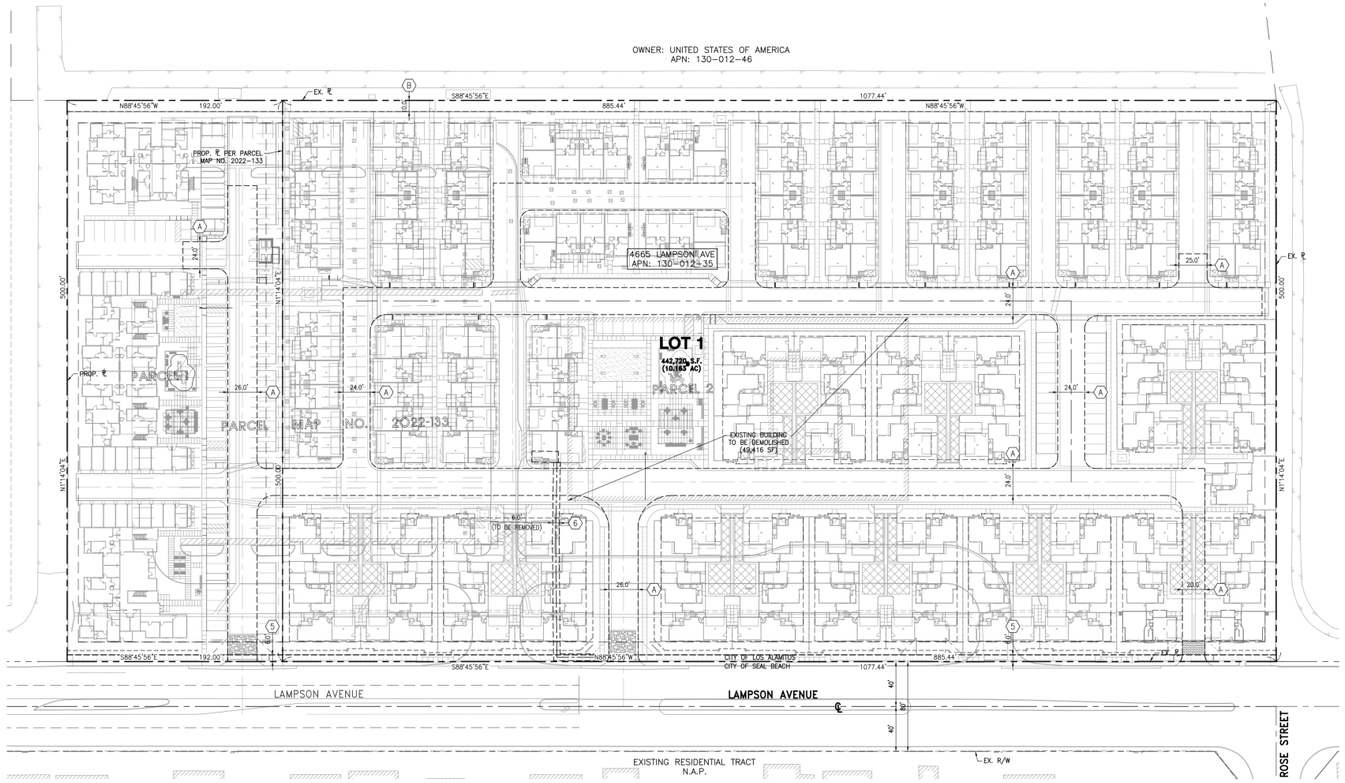
Source(s): C&V Consulting, Inc. (11-09-2023)

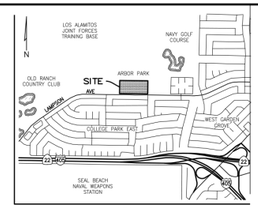
Figure 3-24

Not to Scale

Tentative Parcel Map 2022-133

VESTING TENTATIVE TRACT MAP NO. 19263
IN THE CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA
FOR CONDOMINIUM PURPOSES





VICINITY MAP
N.T.S.

VESTED OWNER:
LAMPSON PARK PLACE, LLC,
A CALIFORNIA LIMITED
LIABILITY COMPANY

DEVELOPER:
MJW INVESTMENTS, LLC
1278 GLENNEYRE STREET, SUITE 439
LAGUNA BEACH, CA 92651
(626) 710-6377

SITE ADDRESS:
4665 LAMPSON AVENUE
LOS ALAMITOS, CA 90720

ASSESSOR'S PARCEL NO.:
APN: 130-012-35

PROPOSED LOT SUMMARY:
SINGLE LOT SUBDIVISION FOR CONDOMINIUM PURPOSES

PROPOSED LOT 1:
LOT SIZE: 10.163 AC (GROSS)
PROPOSED USE:
55 DETACHED CONDO UNITS
114 ATTACHED TOWNHOUSE UNITS
169 TOTAL CONDOMINIUM UNITS

UTILITY PURVEYORS:
ELECTRICITY
SOUTHERN CALIFORNIA EDISON
(800) 655-4555

GAS
SOUTHERN CALIFORNIA GAS COMPANY
(800) 427-2200

WATER
GOLDEN STATE WATER COMPANY
(800) 999-4033

SANITARY SEWER
CITY OF SEAL BEACH- PUBLIC WORKS DEPARTMENT
(562) 431-2527

FIRE PROTECTION AGENCY
ORANGE COUNTY FIRE AUTHORITY
(714) 573-6100

CIVIL ENGINEER:
C&V CONSULTING, INC.
9830 IRVINE CENTER DRIVE
IRVINE, CA 92618
(949) 916-3800

ARCHITECT:
KTGY GROUP, INC
17911 VON KARMAN AVENUE, SUITE 200
IRVINE, CA 92614
(714) 639-9860

GEOTECHNICAL ENGINEER:
LGC GEOTECHNICAL, INC.
131 CALLE IGLESIA, SUITE 200
SAN CLEMENTE, CA 92672
(949) 369-6141

FLOOD ZONE INFORMATION:
THE SUBJECT PROPERTY FALLS WITHIN "ZONE D – AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE" PER FEMA MAP NO. 06059C0116J, A PRINTED PANEL, EFFECTIVE DECEMBER 3, 2009 (TABLE A-3).

EXISTING ZONING/ LAND USE:
EXISTING LAND USE: 1 EXISTING OFFICE BUILDING AND PARKING LOT
EXISTING ZONING: "C-F COMMUNITY FACILITIES"

PROPOSED ZONING:
ADOPTED R-3 ORDINANCE (PENDING)

PROPOSED BUILDING SETBACKS:
FRONT STREET: 20' AVG. (15' MIN.)
REAR: 10-FT MIN.
SIDE: 5-FT MIN.

NOTES:
1. ON-SITE SANITARY SEWER STORM DRAIN PROPOSED TO BE PRIVATELY OWNED AND MAINTAINED
2. ON-SITE WATER PROPOSED TO BE PUBLICLY OWNED AND MAINTAINED

EXISTING EASEMENTS:
(5) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED JUNE 21, 1973 AS BOOK 10762, PAGE 82 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO REMAIN)

(6) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED SEPTEMBER 13, 1973 AS BOOK 10898, PAGE 202 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO BE REMOVED)

LEGAL DESCRIPTION:
THE FOLLOWING TITLE INFORMATION WAS DERIVED FROM A PRELIMINARY REPORT ISSUED BY FIRST AMERICAN TITLE COMPANY, ORDER NO.: NHSC-6668752 DATED JULY 06, 2022:

THAT PORTION OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 4 SOUTH, RANGE 11 WEST, IN THE RANCHO LOS ALAMITOS, IN THE CITY OF LOS ALAMITOS, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP FILED IN DECREE OF PARTITION IN THE SUPERIOR COURT OF LOS ANGELES COUNTY, STATE OF CALIFORNIA, CASE NO. 13527, A CERTIFIED COPY OF THE FINAL DECREE OF SAID CASE HAVING BEEN RECORDED FEBRUARY 11, 1891, IN BOOK 14, PAGE 31 OF DEEDS OF SAID ORANGE COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTERLINE INTERSECTION OF LAMPSON AVENUE AND ROSE STREET AS PER MAP OF TRACT NO. 5961 IN THE CITY OF SEAL BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA RECORDED IN BOOK 217, PAGES 41 THROUGH 44 INCLUSIVE OF MISCELLANEOUS MAPS, RECORDS OF SAID ORANGE COUNTY; THENCE N 0°11'35" E 40.00 FEET TO THE TRUE POINT OF BEGINNING, SAID POINT ALSO BEING IN THE SOUTH LINE OF SAID NORTHEAST QUARTER AND DISTANT N 89°48'25" W 842.72 FEET FROM THE SOUTHWESTERLY CORNER OF THE LAND DESCRIBED IN QUITCLAIM DEED RECORDED JULY 13, 1965, IN BOOK 7590 PAGE 539, OFFICIAL RECORDS OF SAID ORANGE COUNTY; THENCE ALONG SAID SOUTH LINE N 89°48'25" W 1077.44 FEET; THENCE N 0°11'35" E 500.00 FEET; THENCE S 89°48'25" E 1077.44 FEET; THENCE S 0°11'35" W 500.00 FEET TO THE TRUE POINT OF BEGINNING.

DATUM STATEMENT
ALL COORDINATES SHOWN HEREON ARE GRID VALUES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE VI, NORTH AMERICAN DATUM OF 1983 (NAD83), 2017.50 EPOCH OCS GPS ADJUSTMENT, IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. A GENERALIZED COMBINATION SCALE FACTOR OF 0.99998924 WAS USED FOR THIS PROJECT AT NORTHING 2233124.607, EASTING 6015398.692. TO OBTAIN GRID DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINATION SCALE FACTOR.

BASIS OF BEARINGS
THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING N28°33'38.9"W BETWEEN CALIFORNIA SPATIAL REFERENCE CENTER, (CSRC), CONTINUOUSLY OPERATING REFERENCE STATIONS, (CORS), "BLSA" AND "TVPK". (TABLE A-5)

LEGEND
- PROP. SUBDIVISION BOUNDARY
- PROP. EASEMENT
- EX. LOT LINE
- EX. EASEMENT LINE
- (DW) EX. DW LINE
- (SS) EX. SS LINE
- T EX. TELEPHONE LINE
- (G) EX. GAS LINE
- (E) EX. ELECTRIC LINE
- (#) DENOTES PLOTTED ITEM
- EX. DRAINAGE PATTERN
- PARCEL 1 EX. PARCEL PER SEPARATE MAP REFERENCE

ABBREVIATIONS:

BLDG	BUILDING	FW	FIRE WATER	R	RADIUS
CB	CATCH BASIN	HP	HIGH POINT	RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
℄	CENTER LINE	LP	LOW POINT	R/W	RIGHT OF WAY
C&G	CURB & GUTTER	MH	MANHOLE	SF	SQUARE FEET
DW	DOMESTIC WATER	MIN	MINIMUM	SL	STREET LIGHT
ESMT	EASEMENT	N'LY	NORTHERLY	SS	SANITARY SEWER
EX.	EXISTING	NAP	NOT A PART	S'LY	SOUTHERLY
FF	FINISHED FLOOR ELEVATION	NTS	NOT TO SCALE	S/W	SIDEWALK
FG	FINISHED GRADE	PL	PROPERTY LINE	TC	TOP OF CURB
FL	FLOW LINE	PP	POWER POLE	TG	TOP OF GRATE
FS	FINISHED SURFACE	PROP.	PROPOSED	TYP.	TYPICAL
				W'LY	WESTERLY

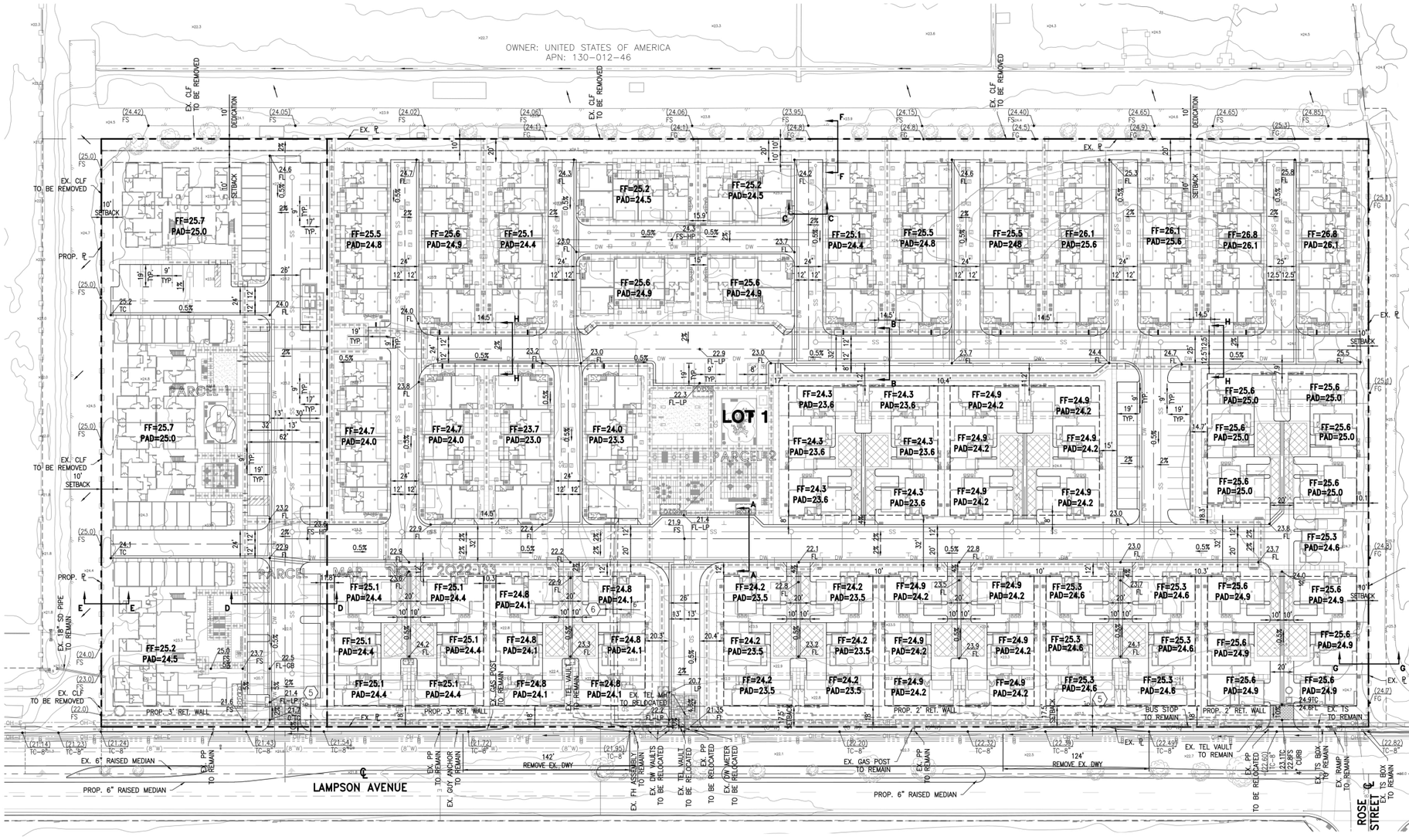
PROPOSED EASEMENTS
(A) AN EASEMENT FOR EMERGENCY VEHICLE ACCESS PURPOSES AS DEDICATED TO THE CITY OF LOS ALAMITOS.

(B) PROP. PARK EASEMENT DEDICATED TO CITY OF SEAL BEACH PER SEPARATE INSTRUMENT.

Source(s): C&V Consulting, Inc. (04-04-2023)

Figure 3-25

Not to Scale



EXISTING EASEMENTS:

(5) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED JUNE 21, 1973 AS BOOK 10762, PAGE 82 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO REMAIN)

(6) THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT AND GRANT OF EASEMENT" RECORDED SEPTEMBER 13, 1973 AS BOOK 10898, PAGE 202 OF OFFICIAL RECORDS. FOR: INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND IMPROVEMENTS AND INCIDENTAL PURPOSES. (TO BE REMOVED)

ABBREVIATIONS:

BLDG	BUILDING	OH-E	OVERHEAD LINE
CB	CATCH BASIN	℄	PROPERTY LINE
℄	CENTER LINE	PP	POWER POLE
C&G	CURB & GUTTER	POC	POINT OF CONNECTION
DW	DOMESTIC WATER	PROP.	PROPOSED
ESMT	EASEMENT	R	RADIUS
EX.	EXISTING	RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
FF	FINISHED FLOOR ELEVATION	R/W	RIGHT OF WAY
FG	FINISHED GRADE	SD	STORM DRAIN
FH	FIRE HYDRANT	SF	SQUARE FEET
FL	FLOW LINE	SL	STREET LIGHT
FS	FINISHED SURFACE	SS	SANITARY SEWER
FW	FIRE WATER	S'LY	SOUTHERLY
HP	HIGH POINT	S/W	SIDEWALK
L	LENGTH	TC	TOP OF CURB
LP	LOW POINT	TG	TOP OF GRATE
MH	MANHOLE	TYP.	TYPICAL
MIN	MINIMUM	W'LY	WESTERLY
N'LY	NORTHERLY		
NAP	NOT A PART		
NTS	NOT TO SCALE		

LEGEND

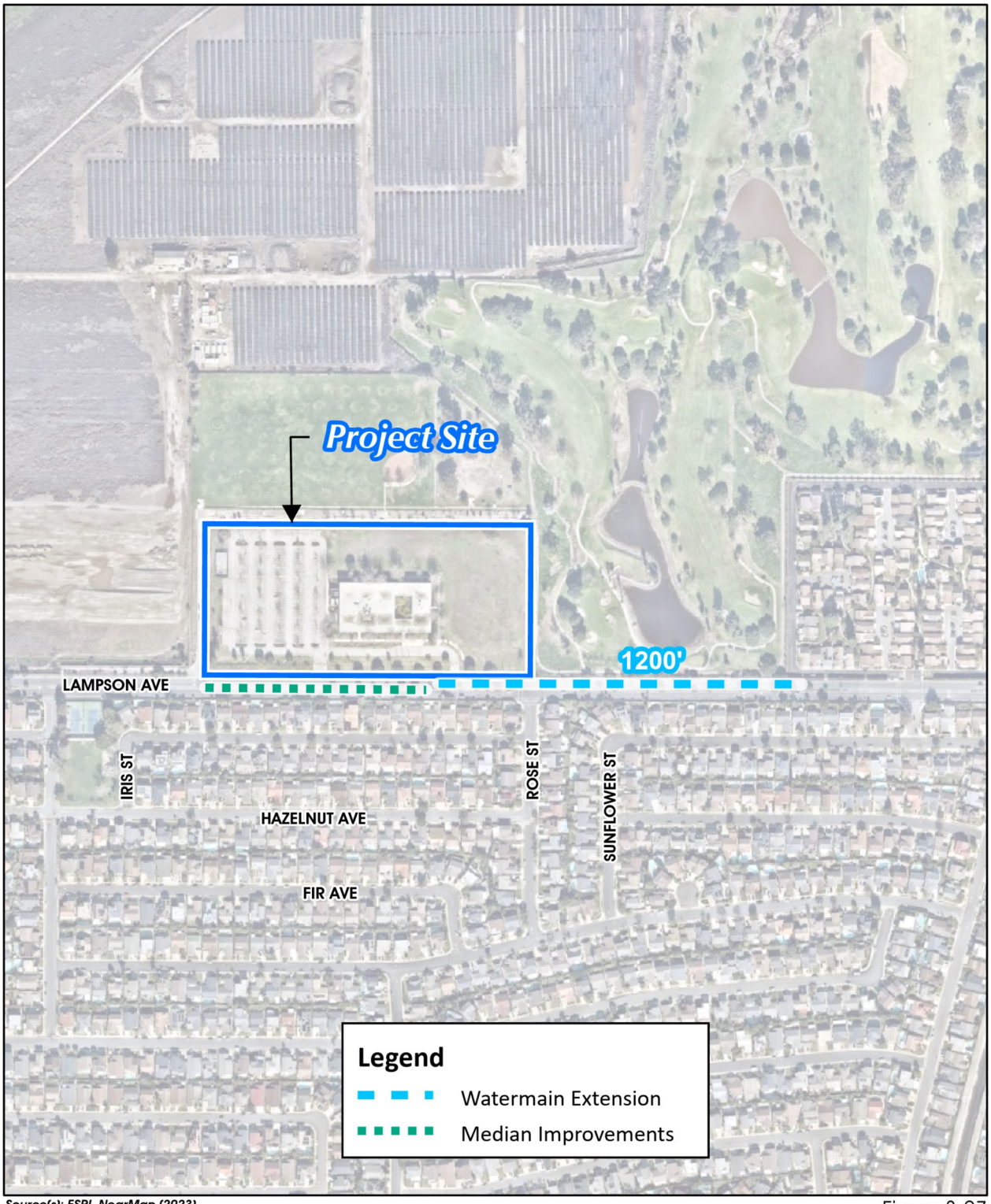
- PROP. SUBDIVISION BOUNDARY
- PROP. EASEMENT
- EX. LOT LINE
- EX. EASEMENT LINE
- (DW) EX. DW LINE
- (SS) EX. SS LINE
- (T) EX. TELEPHONE LINE
- (G) EX. GAS LINE
- (E) EX. ELECTRIC LINE
- (#) DENOTES PLOTTED ITEM
- EX. DRAINAGE PATTERN
- PARCEL 1 EX. PARCEL PER SEPARATE MAP REFERENCE
- A.D.A. ACCESSIBLE PATH

Source(s): C&V Consulting, Inc. (04-04-2023)

Figure 3-26

Not to Scale

Grading Plan



Source(s): ESRI, NearMap (2023)

Figure 3-27

0 125 250 500 Feet

Physical Disturbance Area

4.0 Environmental Analysis

4.0.1 Summary of EIR Scope

In accordance with CEQA Guidelines Sections 15126-15126.4, this EIR Section includes analyses of potential direct, indirect, and cumulatively-considerable impacts that could occur from planning, constructing, and/or operating the proposed Project.

In compliance with the procedural requirements of CEQA, the City of Los Alamitos filed an NOP with the State Clearinghouse to indicate that an EIR would be prepared to evaluate the Project's potential to impact the environment. The NOP was distributed to Responsible Agencies, Trustee Agencies, and other interested parties on October 3, 2022, for a 30-day public review period. The NOP was distributed for public review to solicit responses that would help the City identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. In addition, a publicly-noticed EIR Scoping Meeting was held on October 20, 2022. The EIR Scoping Meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of potential environmental concerns to be addressed in this EIR.

Taking all known information and public comments into consideration, 17 primary environmental subject areas are evaluated in detail in this Section 4.0, as listed below. Each subsection evaluates several specific subject matters related to the primary environmental subject. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein. Environmental issues and their corresponding subsection are listed below:

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Energy
4.6 Geology and Soils
4.7 Greenhouse Gas Emissions
4.8 Hazards and Hazardous Materials
4.9 Hydrology and Water Quality
4.10 Land Use and Planning
4.11 Noise
4.12 Population and Housing
4.13 Public Services
4.14 Recreation
4.15 Transportation
4.16 Tribal Cultural Resources
4.17 Utilities and Service Systems

After consideration of all comments received by the City of Los Alamitos on the scope of this EIR and the City's administrative record, the City determined that the Project clearly had no potential to result in significant impacts to three (3) primary environmental subject areas: Agriculture and Forestry Resources; Mineral Resources; and Wildfire. These 3 subjects are addressed in Section 5.0, *Other CEQA Considerations*.

4.0.2 Organization of Environmental Analysis

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

- Existing Conditions
- Regulatory Framework
- Methodology
- Basis for Determining Significance
- Impact Analysis
- Cumulative Impact Analysis
- Significance of Impacts Before Mitigation
- Mitigation
- Significance of Impacts After Mitigation

In addition, Section S.0, *Executive Summary*, summarizes all impacts by environmental issue.

The thresholds used in this EIR are based on the thresholds of significance identified in CEQA Guidelines Appendix G, as most recently updated in December 2022. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, and whether the impact would be significant or less than significant.

Serving as the CEQA Lead Agency for this EIR, the City of Los Alamitos is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the independent judgement of the City of Los Alamitos, taking into consideration the City of Los Alamitos General Plan; the City of Los Alamitos Municipal Code and adopted City policies; the judgement of the technical experts that prepared this EIR's technical appendices; performance standards adopted, implemented, and monitored by regulatory agencies; and significance standards recommended by regulatory agencies.

As required by CEQA Guidelines Section 15126.2(a), Project-related effects on the environment are characterized in this EIR as direct, indirect, cumulatively-considerable, short-term, long-term, on-site, and/or off-site impacts. A summarized "impact statement" is provided in each Subsection following the analysis. Each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project and its implementing actions are required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. For any impact identified as significant and unavoidable, the City of Los Alamitos would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines Section 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological,

and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.

4.0.3 Terminology Used in This EIR

The level of significance is identified for each impact in this EIR. 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 adversely affect the environment.
- **Less than Significant Impact.** The Project would not cause any substantial adverse change in the environment.
- **Significant Impact.** A substantial or potentially substantial adverse change in the physical environment would occur and would exceed the threshold(s) of significance presented in this EIR, requiring the consideration of mitigation measures.

As described above, each Subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations, etc.) that the Project is required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. The following terms are used to describe the level of significance following the application of recommended mitigation measures:

- **Less than Significant with Mitigation Incorporated.** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measure(s).
- **Significant and Unavoidable Impact.** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this EIR. Feasible and enforceable mitigation measure(s) that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance.

4.0.4 Scope of Cumulative Effects Analysis

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a project. As noted in CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines Section 15130(a)(1)). As defined in CEQA Guidelines Section 15355:

'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probably future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

CEQA Guidelines Section 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: "1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency ['the list of projects approach'], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact ['the summary of projections approach']."

The cumulative impact analysis in this EIR uses both Method 1 and Method 2. Method 2 uses projections in the long-range planning documents–such as City of Los Alamitos's General Plan, Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and South Coast Air Quality Management District (SCAQMD) 2022 Air Quality Management Plan (AQMP). This information was supplemented with a list of related projects (Method 1), described in detail below.

Cumulative impact analyses for several topical sections are also based on the most appropriate geographic boundary for the respective impact. For example, cumulative air quality and greenhouse gas emission impacts are based on the South Coast Air Basin (SCAB), which includes all of Orange County, including the City of Los Alamitos, and the non-desert regions of Los Angeles, Riverside, and San Bernardino counties. The approach and cumulative development area for each respective topical section is further discussed below. Several potential cumulative impacts that encompass regional boundaries (e.g., air quality, greenhouse gases, transportation) have been addressed in the context of various regional plans and significance thresholds defined by local/regional agencies such as SCAQMD. Following is a summary of the approach to the cumulative impacts, which is further detailed in each topical environmental section.

- **4.1, Aesthetics.** Aesthetic impacts are based on the regional scenic resources specified in the City's General Plan EIR, such as the San Gabriel, San Bernardino, and San Jacinto

Mountains. The visual character and lighting analysis considers the Project in conjunction with other development projects in the vicinity of the Project site.

- **4.2, Air Quality.** Air quality impacts are based on the regional boundaries of SCAB and the emissions standards of SCAQMD.

- **4.3, Biological Resources.** The cumulative impact analysis for biological resources considers development of the Project in conjunction with other development projects in the vicinity of the Project area, in addition to the range of species being affected.

- **4.4, Cultural Resources.** Cultural resources impacts are site specific and generally do not combine to result in cumulative impacts. However, the cumulative impact analysis considers development of the Project in conjunction with other development projects in the immediate vicinity of the Project site.

- **4.5, Energy.** Energy impacts are based on the service areas of Southern California Edison (SCE), SoCalGas, and transportation fuel consumption of the state and region.

- **4.6, Geological Resources.** Geologic and soils impacts are site specific and generally do not combine to result in cumulative impacts. However, the cumulative analysis considers the Project in conjunction with other development projects in the immediate vicinity of the Project site.

- **4.7, Greenhouse Gas (GHG) Emissions.** Potential GHG emission impacts are not bounded by geography but affect global climate change. The assessment of cumulative GHG impacts is based on the regional boundaries of SCAB and the emissions standards of SCAQMD.

- **4.8, Hazards and Hazardous Materials.** The cumulative analysis highlights the regulatory requirements related to the storage, handling, and use of hazardous substances. Project impacts, however, are site specific and generally would not combine with impacts of other projects to result in cumulatively considerable impacts. The cumulative analysis considers the Project site and other development projects in the vicinity of the Project site.

- **4.9, Hydrology and Water Quality.** The cumulative impact analysis for hydrology and water quality analysis considers potential hydrology and water quality effects of the Project in conjunction with other development projects in the vicinity of the Project site as well as other projects located in the San Gabriel-Coyote Creek Watershed and the Orange County Groundwater Basin.

- **4.10, Land Use and Planning.** Cumulative analysis for land use consistency considers the Project's impacts in conjunction with buildout of the City's General Plan and SCAG's RTP/SCS (Connect SoCal).

- **4.11, Noise.** Cumulative traffic noise is assessed relative to the City's noise-level standards and considers development of the Project in conjunction with other development projects in the vicinity of the Project site. The study area (for construction and on-site operation) includes the Project site, nearby development, and the nearest sensitive receptors, while the study area for off-site traffic-related operation is aligned with the traffic study area (see Table 4.0-1, *Cumulative Development Land Use Summary*).

- **4.12, Population and Housing.** The cumulative impact analysis for population and housing considers development of the Project in conjunction with other development projects in the vicinity of the Project area. The cumulative impact evaluation also takes into consideration growth projections identified in SCAG's Connect SoCal and the City's General Plan.

- **4.13, Public Services.** Public services impacts are based on the service areas of Los Alamitos Police Department, Orange County Fire Authority, Los Alamitos Unified School District, and Orange County Public Libraries.

- **4.14, Recreation.** This cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development in the vicinity of the Project site.

- **4.15, Transportation.** The cumulative analysis considers development of the Project in conjunction with buildout of the City's General Plan.

- **4.16, Tribal Cultural Resources.** The cumulative analysis considers development of the Project in conjunction with other projects located in Orange County that occur in the same tribal influence areas as the Project site.

- **4.17, Utilities and Service Systems.** This cumulative impact analysis considers development of the Project site in conjunction with other development projects and planned development within the service area for the respective utility providers or the service area for specific facilities. For example, the cumulative area considered for water service is Golden State Water Company service area, for electricity the SCE service area, for natural gas the SoCalGas service area, and for wastewater service the Orange County Sanitation District service area.

4.0.5 Related Projects

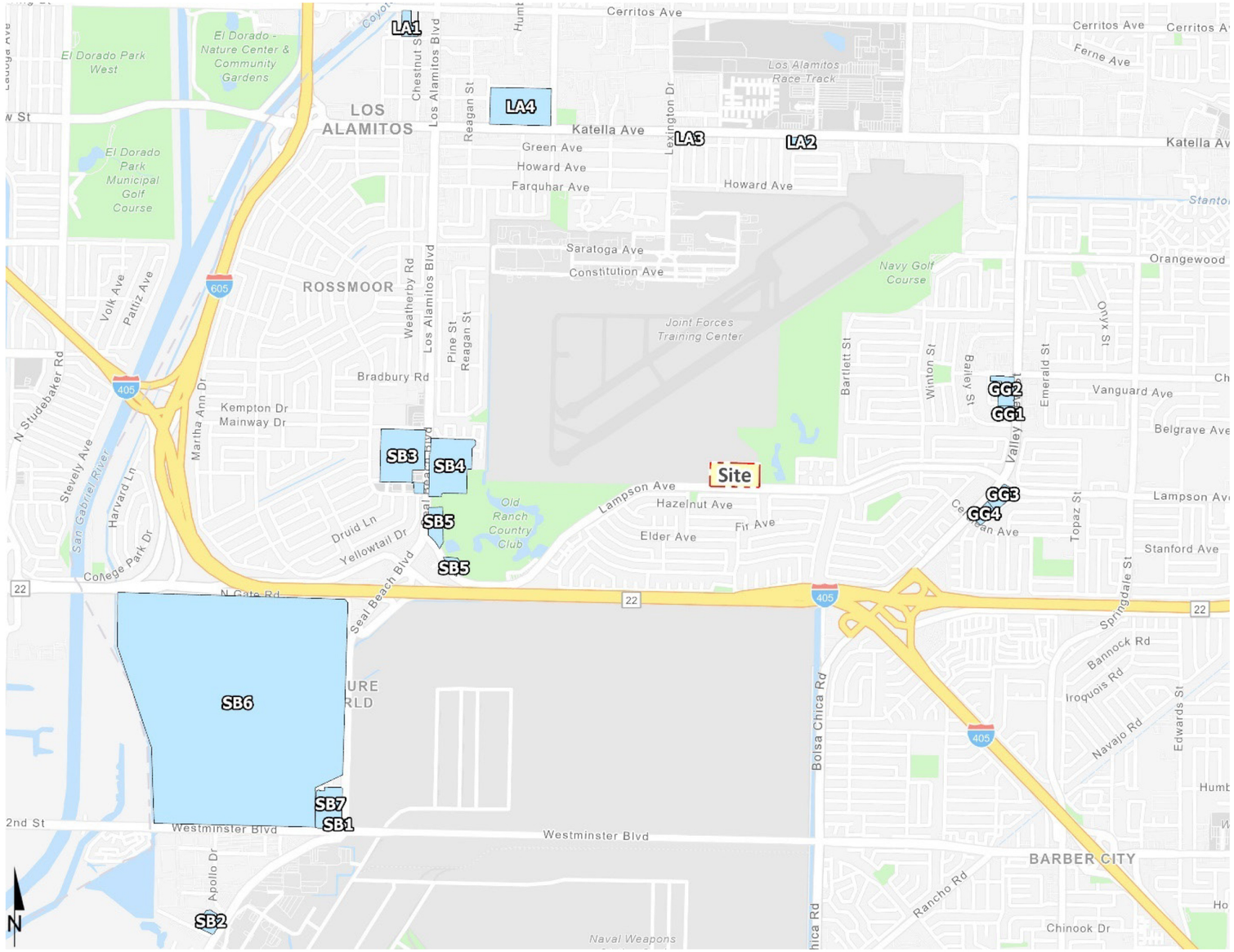
As stated, the cumulative analysis uses both a "projections" and a "list of related projects" approach to provide a conservative analysis of potential cumulative impacts. During the time of the NOP and through consultation with planning staff from the City of Los Alamitos, as well as consultation with the cities of Seal Beach and Garden Grove, the list of related projects was prepared for the Project's Traffic Analysis (*Technical Appendix N1*). The Traffic Analysis, required by the City, also forms the basis of analysis for air quality, GHG emissions, energy, and noise impacts of the Project in this EIR.

A total of 15 related projects were identified in the study area for the Traffic Analysis, shown on Table 4.0-1, *Cumulative Development Land Use Summary* and Figure 4.0-1, *Cumulative Development Location Map*.

Table 4.0-1 Cumulative Development Land Use Summary

ID	Project	Land Use	Quantity	Unit[1]
City of Los Alamitos				
LA1	Los Alamitos Luxury Apartments	Multifamily (Low-Rise) Housing	107	DU
LA2	Chevron Gas Station	Gas Station w/ Convenience Store	2.724	TSF
LA3	4562 Katella Avenue	Medical Office Building	5.200	TSF
LA4	Los Alamitos Medical Center (Phase 2 & 3)	Hospital Building I	92	Beds
		Hospital Building II	126	Beds
City of Seal Beach				
SB1	13980 Seal Beach Boulevard Project/Hydrogen Fueling Station	Hydrogen Fueling Facility	1.010	TSF
SB2	Accurate Storage	Multifamily (Mid-Rise) Housing	59	DU
SB3	Shops at Rossmoor	Multifamily (Mid-Rise) Housing	400	DU
SB4	Old Ranch Town Center	Multifamily (Mid-Rise) Housing	200	DU
SB5	Old Ranch Country Club	Multifamily (Mid-Rise) Housing	120	DU
SB6	Leisure World	Multifamily (Mid-Rise) Housing	150	DU
SB7	Seal Beach Plaza	Multifamily (Mid-Rise) Housing	75	DU
City of Garden Grove				
GG1	Valley View Lanes (CUP-211-2021)	Bowling Alley	13.740	TSF
GG2	12141 Valley View Street	Restaurant	7.214	TSF
		Drive-Thru Restaurant	2.000	TSF
GG3	Marley's Preschool (CUP-212-2021)	Preschool/Day Care	84	STU
GG4	Pro Athletics (CUP-216-2022)	Athletic & Health Club/Gym	7.100	TSF

[1]DU=Dwelling Units; TSF = Thousand Square Feet; STU=Students
(Urban Crossroads, 2023e)



Source(s): Urban Crossroads (02-03-2023)

Figure 4.0-1

Not to Scale

Cumulative Location Development Map

4.1 AESTHETICS

This Subsection describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity and evaluates potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on-site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based on field observations and site photographs collected by T&B Planning, Inc. in November 2022; analysis of aerial photography; and the Project's proposed site, architecture, and landscaping plans (as described in Section 3.0, *Project Description*, of this EIR). This Subsection also is based on information contained in the Aesthetics section of the certified Final Program EIR prepared for the City's General Plan (SCH No. 2013121055) (City of Los Alamitos, 2015b), and the City of Los Alamitos Municipal Code (City of Los Alamitos, 2023a). All references used in this Subsection are listed in EIR Section 8.0, *References*.

4.1.1 EXISTING CONDITIONS

A. Regional Setting

As previously discussed, the approximately 12.3-acre Project site is within the City of Los Alamitos, which is located in the northwestern portion of Orange County, California. The City is surrounded by the cities of Long Beach to the west, Seal Beach to the south, Cypress to the north, and Garden Grove to the east. The City is primarily built out and does not contain substantial undeveloped areas. The visual setting of the City is dominated by roadways, residential uses, and commercial uses, which is consistent with a suburban setting that does not feature any element that is highly prominent such as a mountain, ridge, river, or group of tall buildings. However, a notable exception to the City's visual environment is the Los Alamitos Joint Forces Training Base (JFTB), which is located to the north and west of the Project site. The JFTB has a large expanse of undeveloped land between and adjacent to its runways (City of Los Alamitos, 2015b).

B. Project Site and Surrounding Areas

The Project site is currently occupied by a vacant two-story, 88,000 sf commercial office building (most recently occupied by WestEd, California Department of Fish and Wildlife, National Comfort Institute, Inc., and James J. Mentas Attorney at Law) and surface parking lot. The remainder of the Project site consists of open space: approximately 5.97 acres of Developed/Ornamental land and approximately 6.40 acres of Disturbed/Ornamental land. The office building is centrally located within the Project site; the surface parking lot is located within the western portion of the Project site; and the open space is located within the northern and eastern portions of the Project site. Ornamental trees, shrubs, and groundcover are provided along the perimeter of the Project site, within the surface parking lot, and around the office building. The Project site elevations range from approximately 21 feet to 26 feet above mean sea level. There are no rock outcroppings or unique topographic features present on the property.

The Project site is fully visible from Lampson Avenue, located immediately south of the Project site, and is partially visible from the Lampson Avenue/Rose Street intersection located immediately south

of the Project site. Public views of the Project site include the existing structures, ornamental landscaping, Arbor Park, Navy Golf Course, and San Gabriel Mountains.

Figure 4.1-1, *Site Photographs 1-4*, illustrates the photographic inventory of the Project site and are relied upon herein to describe the Project site's aesthetic condition and character. These photographs provide a representative visual depiction of the site's visual characteristics as seen from surrounding public viewing areas, which consist of public roads adjacent to the Project site. The photographs were all taken during the same session and reflect a field of view approximately six (6) feet above the ground.

The Project site is within an urbanized area that is built out. A description of the surrounding uses is provided below.

- North: Arbor Park, which is within the City of Seal Beach, is immediately north of the Project site. Further north is JFTB, which includes runways and associated structures.
- South: Lampson Avenue is immediately south of the Project site. Further south, on the opposite side of Lampson Avenue and within the City of Seal Beach, is a residential neighborhood (College Park East) consisting of low-density single-family residential dwelling units.
- West: Land associated with the JFTB, which includes runways and associated structures, is located immediately west of the Project site.
- East: The Navy Golf Course is located immediately east of the Project site. Further east, beyond the Navy Golf Course, is a residential neighborhood (Park Wood Los Alamitos) consisting of single-family residential dwelling units and the City of Garden Grove.

C. Scenic Vista and Scenic Resources

The City's physical setting in the Santa Ana River Basin region and relatively flat topography afford distant scenic views of the San Gabriel, San Bernardino, and San Jacinto Mountains. According to the City's General Plan Update Final Program EIR, Katella Avenue and Los Alamitos Boulevard serve as the community's primary scenic corridors giving motorists, bicyclists, and pedestrians extensive vantage points from which to view the community as a whole. There is an overall lack of identifying features or landmarks in the City that visually sets it apart from adjacent communities, such as community art and iconic buildings or structures. However, the City features individual buildings that have unique scenic and cultural value. Such landmarks include the Los Alamitos Museum (housed in the former volunteer fire station), St. Isidore Chapel, and the antique band saw displayed in front of the Ganahl Lumber Store. Furthermore, other places in the City serve as local landmarks— such as the civic center, Laurel Park, Los Alamitos Medical Center, and various neighborhood schools. The City's General Plan does not identify the Project site as a scenic resource nor does it identify Lampson Avenue as a scenic corridor (City of Los Alamitos, 2015b, p. 5.1-2).

As shown on Figure 4.1-1, *Site Photographs 1-4*, the Project site is relatively flat and scenic resources are limited to ornamental trees. The Project site does not contain any scenic resources, such as historical buildings or any landforms of visual interest. In addition, partial distant views, which are partially obstructed by existing mature ornamental trees and the vacant commercial office building, Arbor Park, Navy Golf Course, and of the San Gabriel Mountains are available from Lampson Avenue.

D. Light and Glare

Artificial light is associated with the evening and nighttime hours, and sources may include streetlights, illuminated signage, and vehicle headlights. Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use.

The Project site and surrounding area currently contain sources of artificial exterior lighting. On-site sources of artificial lighting are associated with the existing office building and parking lot include building-mounted fixtures and pole-mounted flood light fixtures within the Project site. Sources of artificial light off-site include street lights and headlights from vehicles traveling along Lampson Avenue and exterior lighting from developed properties to the south. There are very minimal sources of glare on-site.



View 1: Southwest of the Project site, along Lampson Avenue, looking northeast.



View 2: South of the Project site, along Lampson Avenue, looking north.



View 3: South of the Project site, along Lampson Avenue, looking northeast.



View 4: Southeast of the Project site, along Lampson Avenue, looking northwest.

Key Map



Figure 4.1-1

Not to Scale

Site Photographs 1-4

4.1.2 Regulatory Framework

The following is a brief description of local environmental laws and related regulations governing the protection of aesthetic resources.

A. State

1. California Scenic Highways

The California Department of Transportation (Caltrans) manages the State Scenic Highway Program, established in 1963 through Senate Bill 1467, Streets and Highways Code, §§ 260 through 263 to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated as scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Scenic corridors consist of land that is visible from, adjacent to, and outside the highway right-of-way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. Existing law provides Caltrans with full possession and control of all State highways, while this legislation places the Scenic Highway Program under the stewardship of Caltrans. The legislation further declares the intent of the State to assign responsibility for the regulation of land use and development along scenic highways to the appropriate State and local governmental agencies. Scenic highways are classified as either Officially Designated or Eligible for designation and Caltrans maintains the lists of these highways. There are no officially-designated scenic road or highway corridors within the City of Los Alamitos. (Caltrans, 2022)

B. Local

1. City of Los Alamitos General Plan

The City of Los Alamitos General Plan guides future development within the City. The General Plan's Land Use Element and Open Space, Recreation, and Conservation Element identify attributes that contribute form, character and quality of life in the communities and neighborhoods where people live and provide goals, policies, and programs that are intended to preserve the City's character and scenic resources while improving overall community design. The Project-applicable goals and policies and a discussion of the Project's potential to conflict with applicable General Plan policies with the purpose of avoiding or mitigating an environmental effect related to aesthetics are discussed in Section 4.10, *Land Use and Planning*, Table 4.10-2, *General Plan Consistency Analysis*, of this EIR.

2. City of Los Alamitos Municipal Code

The City of Los Alamitos Municipal Code (LAMC) identifies land use categories, development standards, and other general provisions that ensure consistency between the General Plan and proposed development projects. The following provisions from the municipal code are intended to minimize adverse aesthetic impacts associated with new development projects and are relevant to the proposed Project.

- **Architectural Review Committee (Chapter 2.52).** The purpose of the architectural review committee is to recognize the interdependence of land values and aesthetics, and to provide a method by which the City may implement this interdependence to its benefit, and to the benefit of its individual citizens.
- **Lighting Performance Standards (Chapter 8.48).** Among other considerations related to outdoor illumination, Chapter 8.48 addresses the visual impacts of exterior lighting on adjacent property owners and neighborhoods. The chapter outlines guidelines for the design, scale, location, and illumination level of lighting fixtures. The guidelines aim to reduce light trespass and prevent glare.
- **Standards of Design (Chapter 16.12).** LAMC Chapter 16.12 outlines requirements for the design of roadways, infrastructure, slopes, landscaping, and other elements of the built environment in Los Alamitos. Although the requirements largely focus on consistency with other local plans and state regulations, they address several aesthetic concerns. Provisions that directly relate to the visual environment of the City include the requirement that new development place utility lines underground, and provisions related to adequate landscaping and screening.
- **Residential Zones (Chapter 17.08).** LAMC Chapter 17.08 identifies the uses of land that may be allowed within the Residential Zone and indicates whether any special permit is required for each allowable use. In addition, this chapter also identifies development standards in residential zones to ensure that the scale and design of new development and alterations to existing structures are compatible with surrounding homes and appropriate to the physical characteristics of the site and the area where the project is proposed.
- **Landscaping (Chapter 17.18).** LAMC Chapter 17.18 establishes landscape standards to "mitigate the effects of urbanization on the environment and to provide for an aesthetically pleasing urban setting." Provisions of this Chapter establish a measure of uniformity in landscaping in existing developments when improvements are proposed. It is also the intent of this chapter to encourage optimum drought-tolerant plant materials (xeriscape) in conjunction with water-conserving automatic irrigation systems.
- **General Performance Standards (Chapter 17.24).** The purpose of LAMC Chapter 17.24 is to provide uniform performance standards, which are designed to minimize and mitigate the potential impacts of development in the City and promote compatibility with surrounding areas and land uses. Subsections 17.24.040, Light and Glare, and 17.24.070, Property Maintenance, address aesthetics concerns. Light and glare provisions require shielding of light sources to reduce impacts on surrounding land uses. Property maintenance provisions are related to the mitigation of public nuisances, which includes abatement of visual nuisances such as overgrown vegetation, accumulation of debris, and general neglect of property.
- **Signs (Chapter 17.26).** Among other goals, this chapter aims to "provide a balance between the city's economic needs and protecting the visual appearance of the

community's character." The chapter regulates the location, size, type, illumination, and number of signs in Los Alamitos.

- **Local Landmarks (Chapter 17.38).** LAMC Chapter 17.38 is established to assist in the identification and preservation of historic and cultural resources within the City. These regulations are necessary to preserve those elements of Los Alamitos' heritage which may now or in the future be endangered as to their very existence or in maintaining their historic or cultural integrity.

4.1.3 Methodology

The analysis of aesthetics impacts focus on changes to scenic vistas, viewsheds, scenic resources, visual character, and the introduction of new sources of light and glare.

The analysis of potential impacts to scenic vistas, viewsheds, and scenic resources will identify whether the Project would block or otherwise substantially and adversely affect a unique view of a scenic vista(s) or scenic resource as seen from a public viewing location(s), such as a public road, park, trail, and/or other publicly owned property at which the general public is legally authorized to use or congregate.

The U. S. Census Bureau defines an "urbanized area" as a densely settled core of census tracts and/or census blocks that have 50,000 or more residents and meet minimum population density requirements while also being adjacent to territory containing non-residential urban land uses. The Project site is located in an urbanized area and is within the boundaries of the Census-defined Los Angeles-Long Beach-Anaheim urban area (USCB, 2012); therefore, the analysis of potential impacts to visual character will consider whether the Project design conflicts with applicable zoning and other applicable regulations governing scenic quality.

Lastly, the analysis of light and glare will consider whether the Project would directly expose the surrounding area to bright lights or create unwanted light in the night sky including light trespass, sky glow, or over-lighting, or whether the Project would adversely affect day or nighttime views in the area.

4.1.4 Basis for Determining Significance

According to Section I of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to aesthetics if the Project or any Project-related component would (OPR, 2022):

- *Have a substantial adverse effect on a scenic vista;*

- *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*

- *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;*

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

4.1.5 IMPACT ANALYSIS

Threshold a: ***Would the Project have a substantial adverse effect on a scenic vista?***

Scenic vistas are generally described in two ways: (1) panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance); and (2) focal views (visual access to a particular object, scene, or feature of interest). Development projects have the potential to impact scenic vistas in two ways: 1) a development could physically alter a designated scenic resource (e.g., disturb or develop upon a ridgeline, hillside, peak or shoreline) and 2) could block or substantially obscure the public views of a scenic vista (e.g., designated scenic views from public roads, trails, parks, landmarks, etc.).

As previously identified, the Project site is located in the southwestern portion of the City immediately north of Lampson Avenue. It should be noted that the Project site is located approximately 1.4 miles south of Katella Avenue and 1.2 miles east of Los Alamitos Boulevard, which are identified as scenic corridors for the City and provide distant scenic views to the San Gabriel, San Bernardino, and San Jacinto Mountains. The City's General Plan does not designate any other scenic resources within the City and does not identify the Project site as a scenic resource nor Lampson Avenue as a scenic corridor. (City of Los Alamitos, 2015b, p. 5.1-2)

As shown on Figure 4.1-1, *Site Photographs 1-4*, the Project site is currently occupied by a vacant two-story, 88,000 sf commercial office building, surface parking lot, ornamental landscaping and open space. Views 1 through 4 depict the existing condition of the Project site as viewed from the Project site's frontage. Views of the Project site are described in detail below.

- View 1: View 1 depicts the view of the Project site from Lampson Avenue at the southwest portion of the Project site looking northeast. There is an existing median along Lampson Avenue. Ornamental trees, utility lines, and the existing surface parking lot on the Project site are visible in the background of this view.

- View 2: View 2 depicts the view of the Project from Lampson Avenue south of the Project site looking north. The view depicts the parking lot to the west and the existing commercial office building to the east with ornamental landscaping throughout the Project site. Mountain views associated with the San Gabriel Mountains are visible in the far distance

along the horizon, which are partially obstructed by existing mature ornamental trees, the vacant commercial office building, and Arbor Park.

- View 3: View 3 depicts the view of the Project from Lampson Avenue south of the Project site looking northeast. The existing median on Lampson Avenue is seen in the foreground of this view with a signage for the commercial office building and street trees. The Navy Golf Course is also partially visible in the distance background which is partially obstructed by existing mature ornamental trees.

- View 4: View 4 depicts the view of the Project at the intersection of Lampson Avenue and Rose Street looking northwest. The view depicts the western portion of the Project site that consists of open space. Distant views of Arbor Park can be seen in the background which are partially obstructed by existing mature ornamental trees and the vacant commercial office building.

Overall, the Project site is relatively flat and provides distant, partially obstructed views of the San Gabriel Mountains from Lampson Avenue. As shown in Figure 4.1-1, views of the San Gabriel Mountains from Lampson are not panoramic and do not provide a focal view (visual access to a particular object, scene, or feature of interest) of the landform.

The Project would demolish the existing building and surface parking lot and remove all ornamental trees on-site. The Project would result in the redevelopment of the Project site with two- and three-story residential buildings and extensive landscaping. The maximum building height for the Project is approximately 41 feet with the typical single family dwelling ranging from 25.9 feet to 36 feet in height, typical townhomes are approximately 35.5 to 37 feet in height, and typical multi-family ranging approximately 37 to 39 feet in height. As shown on Figure 3-18, a variety of trees, shrubs, accent plants, and ground cover are proposed along the perimeter of the Project site, in common areas, recreational amenities, open space areas, and parking areas. A total of 441 trees, including 51 36" box focal trees, 190 15-gallon trees, 5 10 x10'specimen canopy trees, and 195 24/36" box trees, would be planted throughout the Project site.

Figure 4.1-2, *Visual Renderings on Lampson Looking Northeast*, and *Figure 4.1-3, Visual Renderings on Lampson Looking Northwest*, provide visual simulations of the proposed Project from Lampson Avenue based on the existing conditions of the Project site. As shown in Figure 4.1-2, the multi-family units would be located along the western edge of the Project site and a wall would be constructed along the Project's perimeter. Figure 4.1-3 depicts the proposed single-family homes from the southeastern corner of the Project site. Upon implementation of the Project, views of the townhomes and cluster homes from Lampson Avenue would consist of the three-story buildings, street trees, shrubs and groundcover. The Project would be attractive and of quality design, and provide visual interest through varied architectural detailing, including but not limited to building massing, heights, building materials, and decorative features. Architectural materials include vertical siding, composite shingle roof, stucco light sand finish, faux wood trim, decorative faux vent, barge board, decorative gable end outlooker,

vinyl windows, wood railing, stone veneer, decorative fiberglass entry door, and metal utility door. Refer to Figures 3-12, 3-13, and 3-14 for a complete list of the materials.

In the existing condition, views of the San Gabriel Mountains from Lampson Avenue are partial and distant, and obscured by existing mature ornamental trees and the vacant commercial office building, Arbor Park, Navy Golf Course. The Project Site is not part of a designated scenic vista. The Project development would block the partial and distant views of the San Gabriel Mountains from Lampson Avenue along the project frontage. However, redevelopment of the Project site would not result in a substantial adverse effect on a scenic vista, because background views of the San Gabriel Mountains are distant and limited due to existing development and landscaping and the Project site is not considered to be part of a designated scenic vista. Therefore, impacts would be less than significant.

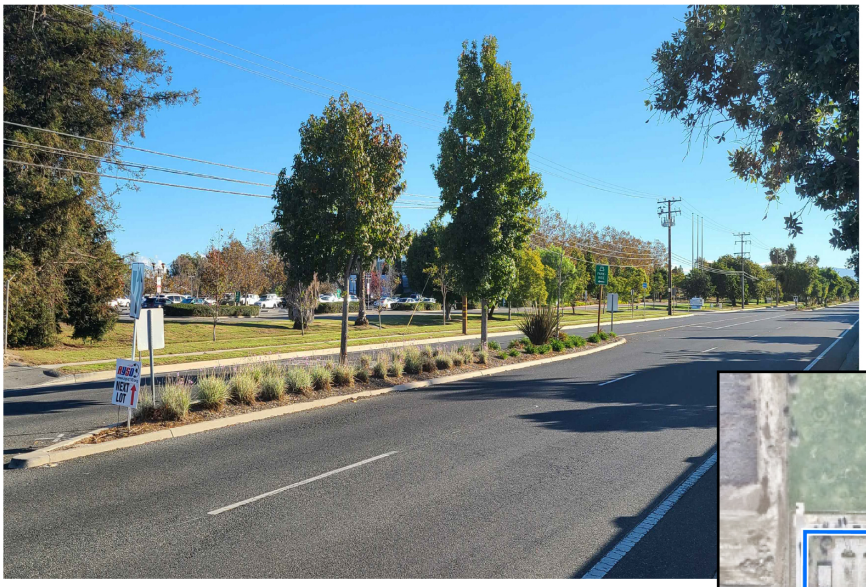
Threshold b:	***Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

As shown on Figure 4.1-1, *Site Photographs 1-4*, the Project site does not contain any special or unique scenic attributes, like rock outcroppings, native vegetation, or historic buildings. The Project site does contain a number of ornamental trees onsite that will be removed and replaced. As shown in Figure 3-18, *Landscape Plan*, a total of 441 trees would be planted throughout the Project site.

The Project site is not located near any designated State scenic highways (Caltrans, 2022). The closest State-eligible highway is State Route 1 (SR-1) located approximately 3.8 miles southwest of the Project site. Due to distance and intervening topography and development, the Project site is not visible from SR-1. Accordingly, implementation of the Project would not adversely impact the scenic resources within a State scenic highway corridor. No impact would occur.

Threshold c:	***In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

The Project Site is located in an area that meets the U.S. Census Bureau's definition of an "urbanized area" and is planned for urban uses by the City General Plan; therefore, for purposes of evaluation herein, the Project is considered to be located in an urbanized area. The following discussion analyzes the Project's potential to conflict with applicable zoning and other regulations governing scenic quality.



Existing View



Source(s): Esri, Nearmap Imagery (2023)



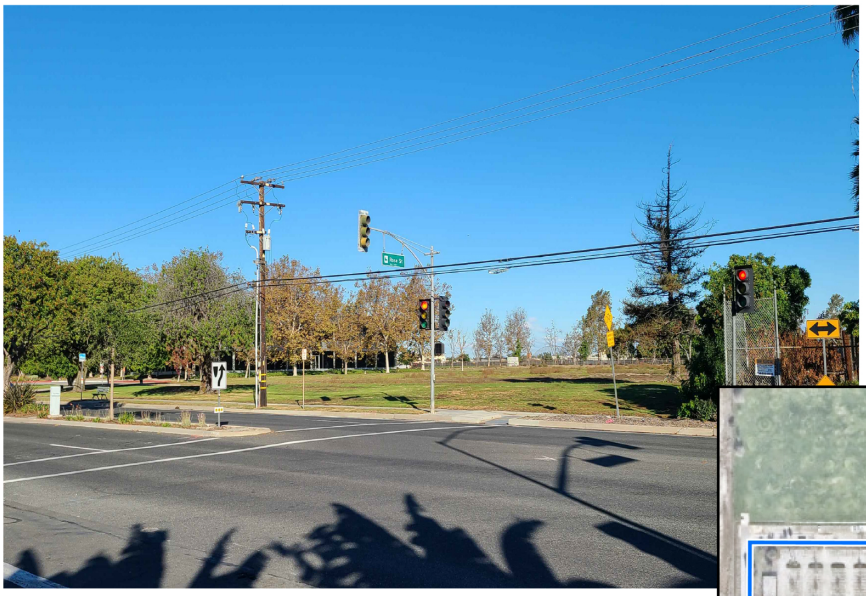
Proposed View

Source(s): KTGY Architecture (11-18-2022)

Figure 4.1-2

Not to Scale

Visual Renderings on Lampson Looking Northeast



Existing View



Source(s): Esri, Nearmap Imagery (2023)



Proposed View

Source(s): KTGY Architecture (11-18-2022)

Figure 4.1-3

Not to Scale

Visual Renderings on Lampson Looking Northwest

A. Construction

The Project would result in construction activities that would temporarily change the visual character of the Plan Area and its surroundings. Construction activities would involve demolition, grading and site clearing activities and building and site improvements. Construction staging areas on the Project site, 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.

Construction activities would occur over an approximate three-year timeframe with first occupancy occurring approximately one year following Project approval. Construction activities may be unsightly during the site preparation and construction phases; however, they are not considered significant because they are temporary in nature and would not conflict with zoning or other regulations governing scenic quality. Additionally, as a condition of approval, prior to the start of any construction activities, temporary construction chain link fencing with a privacy screen approximately eight feet in height would be erected to secure the site and shield the construction areas and public views.

B. Operation

The Project-applicable goals and policies and a discussion of the Project's potential to conflict with applicable General Plan policies with the purpose of avoiding or mitigating an environmental effect related to aesthetics are discussed in Section 4.10, *Land Use and Planning*, Table 4.10-2, *General Plan Consistency Analysis*, of this EIR. As shown, the Project would not conflict with General Plan policies governing scenic quality.

The Project's design, including the site layout, architecture, and landscaping is discussed and illustrated in detail in EIR Section 3.0, *Project Description*. The Project site's underlying zoning classification is Multi-Family Residential Zone (R-3). Table 4.1-1, *Zoning Development Standards Consistency Analysis*, discusses the Project's consistency with the development standards provided within LAMC Chapter 17.08.030 (Development Standards in Residential Zones). It should be noted that the Project Applicant submitted a Density Bonus Law Request pursuant to the State's Density Bonus Law and LAMC.

Table 4.1-1 Zoning Development Standards Consistency Analysis

Applicable Development Standard	Project Consistency
Multi-Family Residential Zone (R-3)	
Density Standard: • Maximum Density: 25 du/ac	**No Conflict.** The Project involves the redevelopment of the 12.3-acre Project site with 246 residential units. The Project would provide an overall density of 20 du/ac and would not exceed the maximum density of 25 du/ac allowed under the R-3 zone. The Project would not conflict with this standard.
Lot Standard:	**No Conflict.** The Project would not conflict with the minimum lot size, width, and depth

Applicable Development Standard	Project Consistency
• Minimum Lot Size: 7,200 sf • Minimum Lot Width: o Interior Lot: 60 ft o Corner Lot: 70 ft • Minimum Lot Depth: 100 ft • Maximum Lot Coverage: 50%	requirements. The Project proposes the creation of two lots with Lot 1 being 96,000 sf and Lot 2 being 442,720 sf in size, exceeding and complying with the minimum lot size of 7,200 sf. Additionally, both proposed lots well exceed the minimum lot width and depth requirements. Maximum lot coverage would be approximately 40%. The Project would comply with this standard.
Building Form and Location: • Minimum Dwelling Area o Studio: 450 sf o 1 Bedroom: 650 sf o 2+ Bedrooms: 800 sf	**No Conflict.** As shown on Figure 3-4, the Project would meet the minimum dwelling area standards of 650 sf for the 1-bedroom product type and 800 sf for the 2+ bedroom product type. There are no studio product types proposed. The Project would not conflict with this standard.
• Maximum Height o Main: 35 ft o Accessory: 15 ft	**No Conflict.** The maximum building height for the Project would be approximately 39 feet at the top of the roofline. However, according to LAMC Section 17.16.040.B certain building elements may exceed the allowed height of the zone in which they are located, up to an additional 6 feet above the maximum height limit (maximum height limit of 41 ft). These building elements include plumbing vents and chimneys; fire and parapet walls; roof structures for the housing of air conditioners, elevators, stairways, tanks, ventilating fans, and similar equipment; and skylights. The Project would not conflict with this standard.
• Minimum Setbacks o Front Yard: 20 ft o Turn-Around End of a Cul-de-Sac: 10 ft o Side Yard – Interior: 5 ft o Side Yard – Corner Lot: 10 ft o Rear Yard – 10 ft o Garage Setback: applies to garages with individual dwelling units o Street (Front): 20 ft o Alleyway: 10 ft o Street (side yard) (corner lot): 20 ft	**No Conflict.** The front yard setback exception for a minimum of 15 feet provided an average building setback of 20 is maintained along an entire block face would apply to the Project. As shown in Figure 3-4, the average front yard setback from Lampson Avenue is approximately 20 to 21 feet, which meets the required average setback of 20 feet. The Project does not include cul-de-sacs. Additionally, the side yard setback on both the east and western side and rear yard are at 10 feet, meeting the minimum 10 feet requirements. The Project would not conflict with this standard.

Applicable Development Standard	Project Consistency
Setback – Exceptions: • Front Yard Setback in R-3 Zone Minimum: 15 ft provided an average building setback of 20 is maintained along an entire block face	
• Distance (minimum) Between Structures on 1 Lot: 10 ft o When Main Structures Face Across a Court: 15 ft	**No Conflict.** Most of the Project's single-family residential setback distances between structures meet or exceed the minimum distances. Through a Density Bonus Law concession, the setback requirement in certain locations identified in the Project's site plan would be reduced to 6 feet. In accordance with the Density Bonus Law, the Project would not conflict with this standard.
• Storage Space in a Garage or Carport (minimum): 200 cubic ft/unit	**No Conflict.** For certain units within the Project, the storage space requirement will be difficult to satisfy because of limitations in garage and carport space. Through a Density Bonus Law concession, the minimum storage space requirement would be reduced to 175 cubic feet per unit for market rate units and 50 cubic feet per unit for affordable units identified on the Project's site plan. In accordance with the Density Bonus Law, the Project would not conflict with this standard.
Outdoor Living Space • Combination of Private and Common Area: 200 sf per unit of common area, with a minimum of 60 sf of private space per unit	**No Conflict.** Based on the City's requirements for outdoor living space, the Project is required to provide a total of 63,960 sf consisting of 14,760 sf of private area and 49,200 sf of common area. The Project proposes to provide a total of 67,480 sf of outdoor living space consisting of 51,320 sf private area and 16,160 sf of common area. The Project would exceed the City's private space requirements. The Project would be short of meeting the common area requirement by 33,040 sf due to requests from the City regarding the dedication of the northerly 10-foot strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 square feet of property, to the City. If this area is dedicated to the City, then the Project will be unable to meet the common area requirement because compliance with this

Applicable Development Standard	Project Consistency
	requirement would physically preclude construction of the Project at the densities allowed and with the concessions proposed. Through approval of a Density Bonus Law waiver, the 200 sf per unit requirement would be reduced to 150 sf per unit. In accordance with the Density Bonus Law, The Project would not conflict with this standard.
Building Design: • For buildings higher than two stories, the third story shall step back a minimum of five feet from the story below to minimize building bulk and create façade articulation.	**No Conflict.** LAMC Section 17.08.045.A.1 requires that for buildings higher than two stories, the third story must have a minimum 5-foot step back from the story below to minimize building bulk and create façade articulation. This requirement appears to govern regardless of building location within a project site along the edge of development. Through a Density Bonus Law concession, an exception from the required minimum 5-foot step back requirement for the structures identified on the Project's site plan would be granted. In accordance with the Density Bonus Law, the Project would not conflict with this standard.
• Building facades shall incorporate details such as window trim, window recesses, cornices, changes in material, color, or other design elements in an integrated composition.	**No Conflict.** As shown in Figures 3-12 through 3-14, the Project's buildings would incorporate various architectural features that would integrated the various types of residential buildings into a cohesive community. Architectural materials of the typical single family dwelling units include composite shingle roof (no rake tile), metal roof (standing seam), faux wood, French door, vinyl windows, decorative fiberglass entry door, and cantilever built-up deck/balcony. Architectural materials of the typical townhome unit include composite shingle roof, stucco light sand finish, faux wood trim, decorative faux vent, barge board, decorative gable end outlooker, vinyl windows, wood railing, decorative fiberglass entry door, and metal utility door. Architectural materials of the typical multi-family units include stucco, vertical siding, composite shingle roof, decorative gable end outlooker, vinyl windows, metal sectional garage door, and stone veneer. The Project would not conflict with this standard.

Applicable Development Standard	Project Consistency
• Roofs shall be designed to drain away from neighboring properties.	**No Conflict.** The Project's building roofs would be constructed to drain away from neighboring properties such as the JFTB, Arbor Park, and Navy Golf course**.** The Project would not conflict with this standard.
• On multi-story buildings, windows shall be placed to provide privacy for adjacent properties, such as avoiding having windows directly facing each other across lot lines.	**No Conflict.** Windows on each home would be placed in a manner to prevent windows directly facing each other. The Project would not conflict with this standard.
• Carport roofs visible from the public right-of-way or on-site buildings shall incorporate roof slopes and materials to match adjacent buildings.	**No Conflict.** The Project's carport would not be visible from the public right-of-way. The Project would not conflict with this standard.
Pedestrian Access: • Clearly marked pedestrian walkways shall be provided from parking areas to building entryways and shall be designed to minimize pedestrian/vehicle conflicts.	**No Conflict**. The Project would incorporate pedestrian walkways within the Project site. A 4-foot-wide community natural colored concrete sidewalk and 6-foot-wide public natural colored concrete sidewalk would be constructed throughout the Project site to link residential neighborhoods to open spaces and amenities. The Project would not conflict with this standard.
• Interior and exterior pedestrian walkways with access within and to the residential or mixed-use projects shall be defined by landscaping and lighting that are consistent with the scale and architecture of the buildings they serve.	**No Conflict**. As shown in Figure 3-21, *Lighting Plan*, the Project includes the installation of outdoor nighttime lighting throughout the Project site. Exterior light poles would be installed throughout the entry ways and parking areas to provide lighting for security and way-finding. Additionally, exterior lighting in the form of landscape accent tree up lighting would be installed in the common areas and floodlights would be installed at the Project's monument sign walls, located at the primary neighborhood and apartment entries. All exterior lights would be shielded where feasible and focused to minimize spill light into the night sky or adjacent properties. All lighting is required to comply with the light and glare standards set forth in LAMC Section 17.24.040, Light and Glare. The Project would not conflict with this standard.
Other Design Standards: • Transformers shall not be located within any required private open space area.	**No Conflict.** As shown in Figure 3-18, *Landscaping Plan*, Item 19, the final locations are to be determined, but would not be located within any

Applicable Development Standard	Project Consistency
	required private open space area. The Project would not conflict with this standard.
• Transformers, other on-site utility equipment, and on-site fire department connections shall be screened from view from public rights-of-way by landscaping or ground-mounted structures/fencing of materials and colors that match on-site architecture.	**No Conflict.** As shown in Figure 3-18, *Landscaping Plan*, Item 19 transformers and the proposed fire hydrants would be screened with landscaping. Figure 4.8-3, *Fire Master Plan*, depicts the locations of the proposed fire hydrants. The Project would not conflict with this standard.
• Stormwater retention ponds, where provided, shall be designed as a landscape feature.	**No Conflict.** The Project does not include the installation of stormwater retention ponds. The proposed Project site's stormwater runoff would be conveyed by roof downspouts or street surface flow to the proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. Once through the biofiltration vault, runoff will be conveyed into an underground detention system that will detain the runoff. Under the alternate stormwater drainage plan for the Project, the onsite pump system would allow for low flows to enter Lampson Avenue and peak flows would be detained onsite. The Project would not conflict with this standard.
Landscaping: • **Nonresidential and Multiple-Family Uses.** Each land use, except single-family residential, shall provide and maintain a minimum of 15 percent of the site in landscaped areas. The landscape area requirement may include setback areas and other unused areas of the site that are not intended for future use. Parking lot landscaping may be counted towards meeting this requirement	**No Conflict**. The Project includes a Project-specific landscape plan that is designed in accordance with the City's landscape requirements. The Project proposes to provide approximately 28 percent of landscaped area. The Project would not conflict with this standard.

Buildout of the Project would change the existing visual character of the site from a two-story, 88,000 sf commercial office building to a two- to three-story residential development consisting of 246 units. As shown in Figures 4.1-2 and 4.1-3, the Project would be attractive and of quality design and visually compatible with the existing residential and park uses in the Project site's vicinity. Additionally, as shown in Table 4.1-1, the Project would be compliant with the zoning development standards and City requirements pertaining to scenic quality. Accordingly, the Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

Threshold d: ***Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

Currently, the Project site is developed with a use that previously produced artificial light. The Project would redevelop the Project site with residential uses which would produce artificial light. The Project would be required to adhere to the light and glare requirements as set forth in t LAMC (Chapter 8.48 - Lighting Performance Standards and Section 17.24.040 Light and Glare). Chapter 8.48 addresses the visual impacts of exterior lighting on adjacent property owners and neighborhoods. The chapter outlines guidelines for the design, scale, location, and illumination level of lighting fixtures. The guidelines aim to reduce light trespass and prevent glare. Section 17.24.040 would require shielding of light sources to reduce impacts on surrounding land uses. The City would confirm compliance with applicable lighting requirements during future review of building permit applications/plans. Mandatory compliance with LAMC Chapter 8.48 and Section 17.24.040 would ensure that the Project would not introduce any permanent design features that would adversely affect day or nighttime views in the area. Thus, light and glare impacts from the Project would be less than significant.

4.1.6 Cumulative Impact Analysis

The CEQA Guidelines define a "cumulative impact" as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines § 15355). The Project's impacts to partial distant views of the San Gabriel Mountains, would be localized to the immediate Project site area and would not extend beyond the public viewing area that immediately abuts the Project site (Lampson Avenue). The views that would be affected only occur abutting the Project site and the Project site does not contain off-site components that could adversely affect scenic views that occur elsewhere in the City.

As noted under the analysis of Threshold b, the Project site is not located within close proximity to any designated State scenic routes. Therefore, the Project has no potential to contribute to a cumulatively significant impact to scenic resources within a designated scenic route corridor.

Under existing conditions, the area surrounding the Project site is entirely developed with residential land uses, the JFTB, Arbor Park, and the Navy Golf Course. It should be noted that there are portions of undeveloped land within the JFTB between and adjacent to its runways. However, these areas are not easily visible from elsewhere in the City and therefore do not have an existing substantial impact on the visual setting of other portions of Los Alamitos. No new or pending development projects are known to occur adjacent to the Project site. Accordingly, the Project would not contribute to cumulatively considerable impacts to local visual quality. Notwithstanding, as with the Project, any redevelopment in the surrounding area would be subject to applicable development regulation and design standards including, but not limited to LAMC and General Plan. Mandatory compliance with applicable development regulations and design standards would ensure that development would incorporate high quality building materials, site design, and landscaping to preclude potential conflicts with applicable zoning and other regulations governing visual quality.

With respect to potential cumulative light and glare impacts, the Project would be required to comply with LAMC Chapter 8.48 - Lighting Performance Standards and Section 17.24.040 Light and Glare. Development projects with artificial light sources in surrounding jurisdictions would be required to comply with the light reduction requirements applicable in their respective jurisdiction. Although cumulative development in the Project's surrounding area is expected to introduce new sources of lighting and potentially reflective materials, the required compliance with the applicable legal standard and code requirements would ensure that future cumulative development does not introduce substantial sources of lighting or glare. As such, the Project would not contribute to cumulatively-considerable, adverse impacts to the existing daytime or nighttime views of the Project site or its surroundings.

4.1.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project site does not provide scenic vistas to scenic resources or landform and the Project site is not part of a scenic resource or landform. Additionally, the Project site is not within a City designated scenic corridor. Redevelopment of the Project site with the Project would not substantially affect a scenic vista. Impacts would be less than significant.

Threshold b: No Impact. The Project site is not located within the viewshed of a designated State scenic highway and does not contain scenic resources. No impacts would occur.

Threshold c: Less-than-Significant Impact. The Project would comply with applicable zoning and other regulations governing scenic quality during Project construction or operation. Furthermore, the Project proposes a number of site design, architectural, and landscaping elements that would be consistent with the surrounding residential land uses. Impacts would be less than significant.

Threshold d: Less-than-Significant Impact. Compliance with LAMC Chapter 8.48 for light and glare requirements would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area from on-site lighting elements. Impacts would be less than significant.

4.1.8 Mitigation

No mitigation is required.

4.1.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.2 AIR QUALITY

The following analysis is based in part on information obtained from a technical report entitled, *4665 Lampson Avenue Air Quality Impact Analysis*, which was prepared by Urban Crossroads, Inc., is dated May 5, 2023, and is included as *Technical Appendix B1* to this EIR (Urban Crossroads, 2023a). Additionally, Urban Crossroads prepared the Health Risk Assessment (HRA), which is dated May 8, 2023, and is appended to this EIR as *Technical Appendix B2* (Urban Crossroads, 2023b). Refer to Section 8.0, *References*, for a complete list of reference sources.

4.2.1 EXISTING CONDITIONS

A. South Coast Air Basin

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of South Coast Air Quality Management District (South Coast AQMD). The SCAB encompasses a 6,745-square mile subregion of the South Coast AQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

B. Climate and Meteorology

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

C. Criteria Pollutants and Associated Health Effects

Criteria pollutants are pollutants that are regulated by federal and state laws through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below:

- **Carbon Monoxide (CO)** is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend

to be the highest in the winter during the morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. CO is emitted directly from internal combustion engines; therefore, motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Therefore, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk to the effects of CO include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic oxygen deficiency.

- **Sulfur Dioxide (SO_2)** is a colorless gas or liquid. SO_2 enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X). SO_2 is a respiratory irritant to people afflicted with asthma. After acute exposure to SO_2, asthma sufferers can experience breathing difficulties, including airway constriction and reduction in breathing capacity. Although healthy individuals do not exhibit similar acute breathing difficulties even after exposure to higher concentrations to SO_2, animal studies suggest that very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

- **Nitrogen Oxides (NO_X)** consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere, and reduced visibility. Of the nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitoring stations. Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels higher than ambient levels in Southern California. Short-term exposure to NO_2 can result in resistance to air flow and airway contraction in healthy subjects. Exposure to NO_2 can result decreases in lung functions in individuals with asthma or chronic obstructive pulmonary diseases (e.g., chronic bronchitis, emphysema), as these individuals are more susceptible to the effects of NO_X than healthy individuals.

- **Ozone (O_3)** is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, warm temperatures, and light wind conditions are favorable to the formation of this pollutant. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for ozone effects. An increased risk for asthma has been found in children who participate in multiple sports and reside in communities with high ozone levels.

- **Particulate Matter less than 10 microns (PM_{10})** is an air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. PM_{10} also causes reduced visibility. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to enter the lungs where they may be deposited, resulting in the adverse health effects discussed below for $PM_{2.5}$.

- **Particulate Matter less than 2.5 microns ($PM_{2.5}$)** is a similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). The chemical composition of fine particles is highly dependent on location, time of year, and weather conditions. Elevated ambient concentrations of fine particulate matter (PM_{10} and $PM_{2.5}$) have been correlated with an increase in respiratory infections, number, and severity of asthma attacks, and increased hospital admissions. Some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children, appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.

- **Volatile Organic Compounds (VOCs) and Reactive Organic Gasses (ROGs)** are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate) that exist in the ambient air. Both VOCs and ROGs are precursors to ozone and contribute to the formation of smog through atmospheric photochemical reactions. VOCs and ROGs have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to

photochemical processes. VOCs often have an odor, including such common VOCs as gasoline, alcohol, and the solvents used in paints. Breathing VOCs can irritate the eye, nose, and throat, which can cause difficulty breathing. In addition, studies have shown that some VOCs can cause damage to the central nervous system.

- **Lead (Pb)** is a heavy metal that is highly persistent in the environment. Historically, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. Currently, emissions of lead are largely limited to stationary sources such as lead smelters, battery manufacturers, and waste incinerators. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient in children. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure.

D. Existing Air Quality

Existing air quality is measured at established South Coast AQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 4.2-1, *Ambient Air Quality Standards*.

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of the Air Quality Impact Analysis (AQIA) was performed for this Project, the most recent state and federal standards were updated by the California Air Resources Board (CARB) on May 4, 2016, and are presented in Table 4.2-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO, SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not exceeded. All other pollutants are not to be equaled or exceeded. Attainment status for a pollutant means that the South Coast AQMD meets the standards set by the United States Environmental Protection Agency (EPA) or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area.

Table 4.2-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		---		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	---	---	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/ m^3)	---	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/ m^3)		9 ppm (10 mg/ m^3)	---	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m^3)		---	---	
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/ m^3)	Gas Phase Chemiluminescence	110 ppb (188 µg/ m^3)	---	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/ m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (665 µg/ m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/ m^3)	---	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	---		---	0.5 ppm (1300 µg/ m^3)	
	24 Hour	0.04 ppm (105 µg/ m^3)		0.14 ppm (for certain areas)	---	

Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
	Annual Arithmetic Mean	---		0.030 ppm (for certain areas)	---	
Lead (Pb)	30 Day Average	1.5 µg/ m^3	Atomic Absorption	---		High Volume Sampler and Atomic Absorption
	Calendar Quarter	---		1.5 µg/ m^3 (for certain areas)	Same as Primary Standard	
	Rolling 3-Month Average	---		0.15 1.5 µg/ m^3		
Visibility Reducing Particles	8 Hour	See Footnote 14 in *Technical Appendix B1*.	Beta Attenuation and Transmittance through filter tape	No National Standards		
Sulfates	24 Hour	25 µg/ m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/ m^3)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/ m^3)	Gas Chromatography			

See footnotes in Table 2-2, *Technical Appendix B1*.
Source: (Urban Crossroads, 2023a, Table 2-2)

E. Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O_3, particulate matter (PM_{10} and $PM_{2.5}$), NO_2, and SO_2 which are known as criteria pollutants. The South Coast AQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Pb air monitoring sites throughout the air district. On January 5, 2021, CARB posted the 2020 amendments to the state and national area designations. The attainment status for criteria pollutants within the SCAB is summarized in Table 4.2-2, *Attainment Status of Criteria Pollutants in the South Coast Air* Basin.

Table 4.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/ Attainment
NO_2	Attainment	Unclassifiable/ Attainment
SO_2	Attainment	Unclassifiable/ Attainment
Pb	Attainment	Unclassifiable/ Attainment

"—" The national 1-hour O_3 standard was revoked effective June 15, 2005.
Source: (Urban Crossroads, 2023a, Table 2-3)

F. Local Air Quality

The South Coast AQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents information about the air quality conditions within the region. The Project site is located within the Central Orange County area (SRA 17). The Central Orange County monitoring station is located approximately 7.1 miles northeast of the Project site and reports air quality statistics for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$. The most recent three (3) years of data available is shown in Table 4.2-3, *Project Area Quality Monitoring Summary 2019-2021*, and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2019 through 2021 was obtained from the South Coast AQMD Air Quality Data Tables. Data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

Table 4.2-3 Project Area Quality Monitoring Summary 2019-2021

Pollutant	Standard	Year		
		2019	2020	2021
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.156	0.136	0.137
Maximum Federal 8-Hour Concentration (ppm)		0.135	0.114	0.117
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	79	53	73
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	114	94	109
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	2.2	2.6	2.0
Maximum Federal 8-Hour Concentration	> 20 ppm	2.0	2.4	1.3
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.056	0.051	0.056
Annual Federal Standard Design Value		0.008	0.009	0.008

Pollutant	Standard	Year		
		2019	2020	2021
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	77	74	44
Annual Federal Arithmetic Mean (µg/m^3)		25.8	25.9	21.2
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	2	2	0
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	62.20	64.80	46.70
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	13.40	13.87	12.53
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	9	4	9

ppm = Parts Per Million
µg/m3 = Microgram per Cubic Meter
Source: (Urban Crossroads, 2023a, Table 2-4)

4.2.2 Regulatory Framework

The following is a brief description of the federal, State, and local environmental laws and related regulations governing air quality emissions.

A. Federal

1. Federal Clean Air Act

The Federal Clean Air Act (CAA; 42 U.S.C. Section 7401 et seq.) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 4.2-2 (previously presented) provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X.

NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

B. State

1. California Air Resources Board

The California Air Resources Board (CARB), which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (Assembly Bill [AB] 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the South Coast AQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS. Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

2. Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that went into effect on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

These are discussed in Title 24 Energy Efficiency Standards and California Green Building Standards of the *Technical Appendix B1* of this EIR.

C. Regional

1. South Coast AQMD Rule 402

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

As to odor emissions, all uses shall be operated in a manner such that no offensive odor is perceptible at or beyond the property line of that use.

2. South Coast AQMD Rule 403

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 and reduce 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.

As to dust control related to operations, any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel, shall conform to the requirements of the South Coast AQMD.

3. South Coast AQMD Rule 445

The requirement to only install gaseous-fueled fireplaces and stoves is applicable to any new residential or commercial development that begins construction on or after March 9, 2009.

No wood burning devices shall be installed in any dwelling units consistent with South Coast AQMD Rule 445.

4. South Coast AQMD Rule 1113

This rule serves to limit the VOC content of architectural coatings used on projects in the South Coast AQMD and applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use at the Project site.

D. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to air quality in Open Space, Recreation, and Conservation Element. These goals and polices and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Section 4.10, *Land Use and Planning*.

4.2.3 METHODOLOGY

In May 2022, the California Air Pollution Control Officers Associated (CAPCOA) in conjunction with other California air districts, including South Coast AQMD, released the latest version of California Emissions Estimator Model (CalEEMod) version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Refer Appendices 3.1 through 3.2 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* of this EIR) for Criteria Air Pollutant CalEEMod Output Files.

A. Project-Related Construction Emissions

1. Construction Activities

Construction activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities:

Demolition Activities

Under existing conditions, the Project site is developed with a vacant two-story, 88,000 sf commercial office building and surface parking lot while the remainder of the site consists of open space. Demolition of the existing 2-story slab, concrete, asphalt, landscape, and curbs/gutter would result in

a total of 9,314 tons of debris which results in fugitive dust and exhaust emissions from on-site equipment and hauling of demolished debris.

Grading Activities

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity, which assumes compliance with South Coast AQMD Rule 403. This analysis assumes that earthwork activities would require up to 6,280 cubic yards of soil import.

Off-Site Utility and Infrastructure Improvements

In addition, to support the Project development, there will be off-site improvements associated with roadway construction and utility installation for the Project. All off-site infrastructure and improvements would occur concurrently with the construction of the proposed Project. The Project would include replacement of the existing median curb/landscape on Lampson Avenue with new median and landscaping. In addition, the Project would include an 8-inch water line extension of approximately 1,200 feet along Lampson Avenue between the eastern driveway and the existing watermain at the intersection of Lunar and Lampson.

2. Construction Duration

For the purposes of evaluating the Project's construction-related air quality impacts, construction is expected to occur over approximately 39.5 months. The construction schedule utilized in the analysis, shown in Table 3-4, *Estimated Construction Schedule*, in Section 3.0, *Project Description*, of this EIR, represents a "worst-case" analysis scenario with the potential of overlap of construction of the phases, since emission factors for construction decrease as time passes and the analysis year advances[1] due to emission regulations becoming more stringent.

3. Construction Equipment

A summary of construction equipment by phase is provided at Table 3-5, *Project Construction Equipment*, in Section 3.0, *Project Description*, of this EIR. Consistent with industry standards and typical construction practices for other large-scale development, each piece of equipment listed in Table 3-4 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code. It should be noted that the Project will utilize Tier 4 Interim equipment. Off-road diesel construction equipment rated at 50 horsepower (hp) or greater will comply with Environmental Agency (EPA)/CARB Tier 4 off-road emissions

[1] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "Off-Road Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirement.

standards or equivalent to ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specification.

B. Project Operational Emissions

Operation activities associated with the Project would result in emissions of VOCs, NO_x, SO_x, CO, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from Area Source Emissions, Energy Emissions, and Mobile Source Emissions. For additional information regarding the calculation of Project operational emissions, please refer to Section 3.5 of the Project's Air Quality Analysis (*Technical Appendix B1* of this EIR).

1. Area Source Emissions

Area source emissions associated with the Project would occur as a result of architectural coatings, consumer products, and landscape maintenance equipment, as follows:

Architectural Coatings

Over a period of time the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emission associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

2. Energy Source Emissions

Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are generally excluded from the evaluation of significance. The Project will not use natural gas (see Section 4.7,

Greenhouse Gas Emissions, PDF GHG-2). As such, emissions from natural gas have not been calculated.

3. Mobile Source Emissions

Project operational vehicular impacts derive primarily from vehicle trips generated by the Project. Trip characteristics available from the Project's Traffic Analysis (*Technical Appendix N1* of this EIR) were utilized in this analysis. The mobile-source emissions were calculated based on trip rates and trip lengths. Detailed operational model outputs are presented in Appendix 3.2. Buildout of the Project is anticipated to generate 1,658 two-way trips-ends per day (829 trips inbound and 829 trips outbound).

Trip lengths were derived from the Orange County Transportation Model (OCTAM) which is a local travel demand model, for the Project's transportation analysis zone (TAZ) 634. Based on the travel demand modeling results, the trip length is estimated to be 12.15 miles per trip which was entered in CalEEMod.

The use of a travel demand model is supported by substantial evidence since the information contained in the model is specific to the region and for the land use type being proposed. Furthermore, the use of travel demand models is also a recommended practice that is being promoted by the Governor's Office of Planning and Research (OPR) in its updated CEQA guidelines with respect to Senate Bill 743. Specifically, the latest technical advisory documentation published by OPR (December 2018 see Page 30-31) explicitly states that:

> *"…agencies can use travel demand models or survey data to estimate existing trip lengths and input those into sketch models such as CalEEMod to achieve more accurate results. Whenever possible, agencies should input localized trip lengths into a sketch model to tailor the analysis to the project location."*

The procedure described by OPR in its SB 743 technical advisory is the method that has been used to calculate trip lengths and consequently Vehicle Miles Traveled (VMT) for the Project.

C. Localized Pollutant Emissions

Localized emissions associated with Project-related construction and operational activities were calculated and evaluated in accordance with South Coast AQMD's Final Localized Significant Threshold Methodology ("Methodology"). The South Coast AQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedance of the NAAQS and CAAQS. Collectively, these are referred to as Localized Significance Thresholds (LSTs).

For this Project, the appropriate SRA for the LST analysis is the South Coast AQMD Central Orange County (SRA 17). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The South Coast AQMD produced look-up tables for projects that disturb less than or equal to 5 acres per day in size. In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken:

- Identify the maximum daily on-site emissions that will occur during construction activity:

    - The maximum daily on-site emission could be based on information provided by the Project Applicant; or

    - The South Coast AQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds and CalEEMod User's Guide Appendix A: Calculation Details for CalEEMod, can be used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.

- If the total acreage disturbed is less than or equal to 5 acres per day, then the South Coast AQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in lbs/day that can be compared to CalEEMod outputs.

- If the total acreage disturbed is greater than 5 acres per day, then LST impacts may still be conservatively evaluated using the LST look-up tables for a 5-acre disturbance area. Use of the 5-acre disturbance area thresholds can be used to show that even if the daily emissions from all construction activity were emitted within a 5-acre area, and therefore concentrated over a smaller area which would result in greater site adjacent concentrations, the impacts would still be less than significant if the applicable 5-acre thresholds are utilized.

- Since total acreage disturbed for the Project is likely greater than 5 acres per day throughout the construction process, then the South Coast AQMD recommends dispersion modeling to be conducted to determine the actual pollutant concentrations for applicable LSTs in the air. In other words, the maximum daily on-site emissions as calculated in CalEEMod are modeled via air dispersion modeling to calculate the actual concentration in the air (e.g., parts per million or micrograms per cubic meter) in order to determine if any applicable thresholds are exceeded.

Based on South Coast AQMD's *LST Methodology*, emissions for concern during construction activities are on-site. The *LST Methodology* states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs. As such, for purposes of the construction LST analysis, only emissions included in CalEEMod on-site emissions outputs were considered." Detailed information about application of this methodology can found in the Project's Air Quality Impact Analysis (*Technical Appendix B1* of this EIR).

1. Project-Related Sensitive Receptors Relative to Construction and Operational Activities

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Sensitive receptors in the Project study area relative to construction and operational activities are described below and shown in Figure 4.2-1, *Sensitive Receptor Locations*. Localized air quality impacts were evaluated at receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- R1: Location R1 represents Arbor Dog Park at 4665 Lampson Avenue, approximately 173 feet north of the Project site. Receptor R1 is placed at the Park's open space.

- R2: Location R2 represents the existing residence at 12462 Lunar Drive, approximately 887 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R2 is placed at the building façade.

- R3: Location R3 represents the existing residence at 4625 Ironwood Avenue, approximately 82 feet south of the Project site. Receptor R3 is placed at the private outdoor living areas (backyards) facing the Project site.

- R4: Location R4 represents the existing residence at 12322 Provincetown Street, approximately 3,108 feet west of the Project site. Receptor R4 is placed at the private outdoor living areas (backyards) facing the Project site.

The South Coast AQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual a cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is represented by location R3, existing residence at 4625 Ironwood Avenue, approximately 82 feet/25 meters south of the Project site. As such, a 25-meter distance will be used for evaluation of localized emissions of PM_{10} and $PM_{2.5}$.



LEGEND:

Construction Activity | Receptor Locations | Distance from receptor to Project site boundary (in feet)

Source(s): Urban Crossroads (04-03-2024)

Figure 4.2-1

Not to Scale

Sensitive Receptor Locations

As previously stated, and consistent with LST Methodology, the nearest commercial/industrial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of one to 8 hours. As there are no commercial/industrial uses located at a closer distance than the existing residence at 4625 Ironwood Avenue, the same residential use will be used for evaluation of localized NO_X and CO impacts during rough grading activities. As such, a 25-meter distance will be used for evaluation of localized emissions of NO_X and CO.

D. Health Risk Assessment Methodology

The HRA was prepared based on applicable guidelines to produce conservative estimates of human health risk posed by exposure to diesel particulate matter, or "DPM." Construction related DPM emissions are expected to occur primarily as a function of the operation of heavy-duty construction equipment.

To support the Project development, there will be grading, trenching, and paving for off-site improvements associated with roadway construction and utility installation for the Project. However, it is expected that the off-site construction activities would not take place at one location throughout a single day or for the entire duration of construction. Construction emissions from this off-site work would, therefore, be relatively short term, not concentrated in one area, and would be reduced at any given location as construction work moves linearly along the existing public right-of-way and farther from sensitive uses. The modeled emission sources are illustrated on Figure 4.2-2, *Modeled Construction Emission Source*. For purposes of this analysis, the Lakes Air Quality Dispersion Modeling (AERMOD) View (Version 10.2.0) was used to calculate annual average particulate concentrations associated with site operations.

Refer to Section 2 of the Project's Health Risk Assessment (*Technical Appendix B2* of this EIR) for a detailed description of HRA methodologies and for the model inputs and equations used in the estimation of the Project related DPM emissions.



Source(s): Urban Crossroads (05-08-2023)

Figure 4.2-2

Not to Scale

Modeled Construction Emission Source

4.2.4 Basis for Determining Significance

According to Section III of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to air quality if the Project or any Project-related component would (OPR, 2022):

- *Conflict with or obstruct implementation of the applicable air quality plan;*
- *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;*
- *Expose sensitive receptors to substantial pollutant concentrations;*
- *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

The South Coast AQMD has developed regional significance thresholds for regulated pollutants, which are summarized in Table 4.2-4, *Maximum Daily Regional Emissions Thresholds*. The South Coast AQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

Table 4.2-4 Maximum Daily Regional Emissions Thresholds

Pollutant	Regional Construction Threshold (lbs/day)	Regional Operational Thresholds (lbs/day)
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Pb	3	3

Source: (Urban Crossroads, 2023a, Table 3-1)

4.2.5 Project Design Features

The Project includes the following Project Design Features (PDFs) that serve to reduce the Project's impacts. This will also be included as a Conditional of Approval for the Project.

PDF AQ-1 The Project will utilize Tier 4 Interim construction equipment during construction activities.

4.2.6 IMPACT ANALYSIS

Threshold a: ***Would the Project conflict with or obstruct implementation of the applicable air quality plan?***

In December 2022, the South Coast AQMD released the *Final 2022 AQMP* (*2022 AQMP*). The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements. The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below.

Criteria for determining consistency with AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the 1993 CEQA Handbook.[2] These indicators are discussed below:

- ***Consistency Criterion No. 1:*** *The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significant thresholds were exceeded. As evaluated under Thresholds b and c below, the Project's localized and regional construction-source and operation-source emissions would not exceed applicable regional significance thresholds. As such, the Project is consistent with this criterion, and impacts would be less than significant.

- ***Consistency Criterion No. 2:*** *The Project will not exceed the assumptions in the AQMP based on the years of project build-out phase.*

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by the applicable cities are provided to SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Los Alamitos General Plan is considered to be consistent with the AQMP.

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would

[2] The most recent South Coast AQMD CEQA Air Quality Handbook was prepared in April 1993, and minor revisions were added in November 1993.

likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, the Project is consistent with this criterion, and a less than significant impact would result.

The City of Los Alamitos General Plan designates the Project site for "Multi-Family Residential-25" land uses. The "Multi-Family Residential-25" land use designation is defined as "single family detached and attached residences, including all development permitted in other residential categories as well as stacked flats and other building types with 4 or more units. Other uses such as convalescent hospitals, churches, and mobile home parks are also permitted subject to special procedures.

The Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). The Project's proposed uses are consistent with the site's land use designations. Development consistent with the growth projections in City of Los Alamitos General Plan is considered to be consistent with the AQMP. As such, the Project is determined to be consistent with the second criterion.

A. Conclusion

The Project does not have the potential to result in or cause NAAQS or CAAQS violations. Construction and operational-source emissions would not exceed the applicable South Coast AQMD regional thresholds for emissions of any criteria pollutant. Additionally, the Project is consistent with the City's General Plan. As such, the Project is considered to be consistent with the AQMP. (Urban Crossroads, 2023a, pp. 46-47). Impacts would be less than significant and no mitigation is required.

Threshold b:	***Would the Project 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?***

A. Construction Emissions Impact Analysis

As discussed above in the Methodology Section, 4.2.3, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Refer to Appendices 3.1 through 3.2 of the Project's Air Quality Impact Analysis (*Technical Appendix B1* of this EIR) for Criteria Air Pollutant CalEEMod Output Files. Construction emissions impacts could result from demolition activities, grading activities, and offsite utility and infrastructure improvements.

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized in Table 4.2-5, *Overall Construction Emission Summary*. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant. No mitigation is required.

Table 4.2-5 Overall Construction Emission Summary

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2024	4.02	20.86	37.76	0.07	3.31	1.28
2025	3.99	13.01	29.08	0.03	2.79	0.76
2026	3.95	12.90	28.46	0.03	2.79	0.76
2027	3.86	12.87	27.83	0.03	2.79	0.76
Winter						
2024	4.02	20.90	37.60	0.07	6.01	2.85
2025	3.99	13.13	27.67	0.03	2.79	0.76
2026	3.95	13.02	27.10	0.03	2.79	0.76
2027	3.85	12.91	26.53	0.03	2.79	0.76
Maximum Daily Emissions	**4.02**	**20.90**	**37.76**	**0.07**	**6.01**	**2.85**
South Coast AQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2023a, Table 3-5)

B. Operational Emissions Impact Analysis

As discussed above in the Methodology Section, 4.2.3, operational emissions would be expected from Area Source Emissions, Energy Emissions, and Mobile Source Emissions. For additional information regarding the calculation of Project operational emissions, please refer to Appendix 3.2 of the Project's Air Quality Analysis (*Technical Appendix B1* of this EIR). Operational emission impacts from the Project would include area source emissions as a result of architectural coatings, consumer products, and landscape maintenance equipment, and mobile source emissions, as identified in Section 4.2.3 above.

Project mobile source emissions impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The estimated operational-source emissions from mobile sources and area sources for the Project are summarized on Table 4.2-6, *Summary of Peak Operational Emissions*. As shown, Project operations would not exceed criteria pollutant thresholds established by the South Coast AQMD for emissions of any criteria pollutant and impacts would be less than significant. No mitigation is required.

Table 4.2-6 Summary of Peak Operational Emissions

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	7.16	5.90	70.78	0.20	7.56	1.43
Area Source	9.40	4.08	1.74	0.03	0.33	0.33
Total Maximum Daily Emissions	**16.56**	**9.98**	**72.51**	**0.23**	**7.89**	**1.76**
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter						
Mobile Source	7.10	6.41	64.91	0.19	7.56	1.43
Area Source	9.40	4.08	1.74	0.03	0.33	0.33
Total Maximum Daily Emissions	**16.50**	**10.49**	**66.65**	**0.22**	**7.89**	**1.76**
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2023a, Table 3-6)

C. Special Considerations

Due to comments received during the NOP public review period, Walker Consultants prepared an analysis to evaluate the parking need at Arbor Park and Arbor Dog Park, including American Youth Soccer Organization (AYSO) Region 159 uses at Arbor Park for soccer practices on weeknights and soccer games on weekends (see *Technical Appendix Q* of this EIR). AYSO parking demand is highest during their Saturday soccer games with a parking demand that fluctuates between 97 to 339 spaces between the hours of 8:00 AM and 2:00PM and a peak parking demand of 339 spaces at noon. AYSO currently uses parking spaces on the Project site for soccer games, many of which would not be available upon Project implementation. Walker evaluated two options for AYSO parking following Project buildout: 1) assuming the Project commitment to provide 10-foot strip of land along the north boundary, and 2) assuming the Project's 10-foot dedication in addition to improvements 2'-10" to 4'-3" in width on the north side of the Arbor Park parking lot (see Figures 1 and 4 of *Technical Appendix Q* of this EIR for the proposed parking layouts). These options would allow for up to 154 or 200 parking spaces for users of Arbor Park, respectively. Following implementation of these options, if there were not adequate parking spaces for an AYSO soccer game event, vehicles would have the option of dropping off players/visitors at the park and/or driving a short distance to available parking off-site and walking to the park. These scenarios would not result in the addition of new vehicle trips attributable to the Project. Additionally, any change in vehicle trip distance would be negligible, as it would only occur on Saturdays during soccer season. Because these vehicles are arriving at certain appointed times to watch or participate in these events, they are not expected to circle the parking lot to wait until a parking space became available. As such, vehicles unable to find adequate parking

would not result in any significant traffic impacts related to congestion at the site or air quality impacts related to emissions.

Threshold c: ***Would the Project expose sensitive receptors to substantial pollutant concentrations?***

As discussed previously, localized emissions associated with the Project-related construction and operational activities were calculated and evaluated in accordance with South Coast AQMD's Final Localized Significance Threshold Methodology ("Methodology"). The South Coast AQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedance of the NAAQS and CAAQS. Collectively, these are referred to as LSTs.

A. Construction Localized Emissions Impact Analysis

1. Criteria Pollutant Emissions

For analytical purposes, emissions associated with peak demolition, site preparation, and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. Any other construction phases of development, such as the building phase, would result in lesser emissions and consequently lesser impacts than what is disclosed herein. Table 4.2-7, *Localized Construction-Source Emissions*, identifies the localized impacts at the nearest receptor location in the vicinity of the Project. As shown, localized construction emissions would not exceed the applicable South Coast AQMD LSTs for emission of any criterial pollutant, and as such, impacts would be less than significant and no mitigation is required.

Table 4.2-7 Localized Construction-Source Emissions

Construction Activity	Scenario	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	**Maximum Daily Emissions**	11.91	18.17	2.20	0.49
	South Coast AQMD Localized Threshold	81	485	4	3
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Site Preparation	**Maximum Daily Emissions**	15.69	29.96	5.77	2.79
	South Coast AQMD Localized Threshold	149	984	10	6
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading	**Maximum Daily Emissions**	19.91	36.17	2.85	1.16
	South Coast AQMD Localized Threshold	160	1,074	11	6
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2023a, Table 3-9)

2. DPM Source Cancer and Non-Cancer Risks Impact Analysis

The land use with the greatest potential exposure to Project construction-source DPM emissions is Location R3 which is located approximately 86 feet south of the Project site at an existing residence

located at 4625 Ironwood Avenue. R3 is placed in the private outdoor living areas (backyard) facing the Project site. At the Maximally Exposed Individual Receptor (MEIR), the maximum incremental cancer risk attributable to Project construction-source DPM emissions is estimated at 2.59 in one million, which is less than the South Coast AQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be less than 0.01, which would not exceed the applicable threshold of 1.0. Location R3 is the nearest receptor to the Project site and would experience the highest concentrations of DPM during Project construction due to meteorological conditions (wind speed and direction) at the site. Because all other modeled receptors would experience lower concentrations of DPM during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified for location R3 (Urban Crossroads, 2023b). As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity. Accordingly, impacts would be less than significant and no mitigation is required.

B. Operation Localized Emissions Impact Analysis

1. Criteria Pollutant Emissions

As previously stated, the Project consists of the development of 55 single family detached residential dwelling units (cluster homes), 114 multifamily (low-rise) residential dwelling units, and 77 affordable apartment dwelling units (total of 246 dwelling units). According to South Coast AQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized analysis is needed.

2. CO "Hot Spot" Analysis

An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment.

To establish a more accurate record of baseline CO concentration affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any exceedance of the 1-hour (20.0 ppm) or 8-hour (9.0 ppm) CO standards. For example, of the 8.4 ppm 8-hr CO concentration measured

at the Long Beach Boulevard/Imperial Highway intersection (i.e., the highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. In contrast, an adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 1.9 ppm and 1.5 ppm, respectively (data from Central Orange County station for 2021). Therefore, even if the traffic volumes for the proposed Project were ten times the traffic volumes generated at the Long Beach Boulevard/Imperial Highway intersection, due to the on-going improvements in ambient air quality and vehicular emissions controls, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections. As noted above, only 0.7 ppm were attributable to the traffic volumes and congestion at one of the busiest intersections in the SCAB. Therefore, if these traffic volumes were multiplied by ten times, it could be expected that the CO attributable to traffic would increase tenfold as well, resulting in 7 ppm – even if this were added to either the 1-hour or 8-hour CO concentrations within the Project study area, this would result in 9.1 ppm and 8.5 ppm for the 1-hr and 8-hr timeframes, respectively. Neither of which would exceed the applicable 1-hr standard of 20 ppm or the 8-hr standard of 9 ppm. As discussed further below, the Project would not result in an increase of traffic in these amounts.

Furthermore, the Bay Area Air Quality Management District (BAAQMD) concluded that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph)—or 24,000 vph where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The busiest intersection evaluated in South Coast AQMD's 2003 AQMP was that at Wilshire Blvd and Veteran Ave., which had AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively.

The highest trips on a segment of road for the Project operation is the intersection of Driveway 2 and Lampson Avenue with traffic volumes of 91 vph during AM peak hours and 133 vph during PM peak hours. As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. The proposed Project would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Localized air quality impacts related to mobile-source emissions would therefore be less than significant. Based on the foregoing analysis, the Project would result in less-than-significant impacts related to the creation of CO Hot Spots. No mitigation is required.

C. Potential Health Impact of the Project

Based on the foregoing analysis, the Project would not exceed the South Coast AQMD localized significance thresholds for assessing localized health impacts from criteria air pollutants during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Further, Project traffic would not create or result in a CO

"hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations due to the Project, and impacts would be less than significant. No mitigation is required.

Threshold d: ***Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

Land uses generally associated with odor complaints include agricultural uses (livestock and farming), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, diaries, and fiberglass molding facilities. The Project does not contain land uses typically associated with emitting objectionable odors.

A. Construction Emissions Impact Analysis

Potential odor sources associated with the Project may result from construction equipment exhaust and the application of asphalt and architectural coating during construction activities. The Project would be subject to standard construction requirements, including the use of low-VOC architectural coatings as required by South Coast AQMD Rule 1113, Table of Standards; and compliance with South Coast AQMD Rule 402, *Nuisance*, which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public. Compliance with these standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and thus would be less than significant. No mitigation is required.

B. Operational Emissions Impact Analysis

Potential sources of operational odors generated by the Project would include temporary storage of typical solid waste (refuse). Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed would also be required to comply with South Coast AQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Project operations would be less than significant and no mitigation is required.

4.2.7 Cumulative Impact Analysis

With exception of the issue of odors, the cumulative study area for air quality includes the City of Los Alamitos and the SCAB. The SCAB is designated as a nonattainment area for State standards of O_3, PM_{10}, and $PM_{2.5}$. The region is also designated as a nonattainment area for federal standards of O_3 and $PM_{2.5}$. Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain ambient air quality standards. Thus, with the exception of odors, the setting for this cumulative analysis consists of the SCAB and associated growth and development anticipated in the air basin. For the issue of odors, the cumulative study area includes the Project site and lands in the immediate vicinity to the Project site, as odors diminish rapidly with distance from the source.

According to South Coast AQMD, projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. As previously shown in Table 4.2-5, *Overall Construction Emission Summary*, construction activities associated with the Project would not exceed South Coast AQMD thresholds for any criteria pollutants. Therefore, impacts associated with Project-related construction emissions would be less than cumulatively considerable.

Similarly, as shown in Table 4.2-6, *Summary of Peak Operational Emissions*, Project operation-source emissions would not exceed the South Coast AQMD regional thresholds of significance for any criteria pollutants. Therefore, impacts associated with the Project-related operational emissions would be less than cumulatively considerable.

As previously shown in Table 4.2-7, *Localized Construction-Source Emissions*, emissions would not exceed the South Coast AQMD Localized Threshold for CO, NO_x, PM_{10}, or $PM_{2.5}$. Pursuant to the South Coast AQMD's CEQA Air Quality Significance Thresholds, projects with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant impact; therefore, the Project's emissions during construction would be less than significant on a direct and cumulative basis.

As previously discussed, the Project does not include uses that generate stationary sources, or that attract mobile sources that may spend long periods queuing and idling at the site. Therefore, the Project would have a less-than-cumulatively considerable LST impact during long-term operation. Additionally, the Project would have no potential to result in or contribute to a CO "Hot Spot." Accordingly, impacts associated with CO "Hot Spots" would be less than cumulatively considerable.

Cumulatively considerable odor impacts could occur if the Project in combination with other nearby projects resulted in combined construction- or operational-related odor impacts. However, the Project's compliance with South Coast AQMD Rules 1113 and 402 would ensure that the Project does not generate substantial odors adversely affecting a substantial number of people during construction and operation. Additionally, there are no nearby related projects that generate substantial odors that could combine to create a cumulatively considerable odor impact. Therefore, impacts associated with odors would be less than cumulatively considerable.

4.2.8 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would not emit air pollutants that would contribute to a delay in the attainment of federal and State ozone standards in the SCAB. As such, the Project would not conflict with and could obstruct implementation of the AQMP, and impacts would be less than significant.

Thresholds b: Less-than-Significant Impact. Project-related activities would not exceed the applicable South Coast AQMD regional thresholds of significance during construction and operations. As such,

Project-related emissions would not violate South Coast AQMD air quality standards or contribute to the non-attainment of ozone standards in the SCAB, and impacts would be less than significant.

Threshold c: Less-than-Significant Impact. Implementation of the Project would not: 1) exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation; 2) would not cause or measurably contribute to the formation of a CO "hot spot;" and 3) would not result in a health risk for nearby residents during construction.

Threshold d: Less-than-Significant Impact. The Project would not generate substantial odors. Compliance with standard construction requirements and regulations established by the City of Los Alamitos and South Coast AQMD would ensure odor impacts are less-than-significant levels. Near- and long-term odor impacts would be less than significant.

4.2.9 Mitigation

No mitigation is required.

4.2.10 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.3 BIOLOGICAL RESOURCES

This Subsection evaluates the potential for Project-related activities to impact sensitive biological resources. The analysis in this Subsection is based on information contained in a biological technical report prepared by Glen Lukos Associates, Inc. (hereinafter, "GLA") titled, "Biological Technical Report for 4665 Lampson Avenue Project," dated April 1, 2024, and a Jurisdictional Delineation prepared by GLA, dated October 16, 2023. These technical reports are included as *Technical Appendix C1 and C2* to this EIR (GLA, 2024), (GLA, 2023).

4.3.1 METHODOLOGY

The biological resources impact was evaluated through initial site reconnaissance, a review of the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) 8th edition online inventory, Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified below. Table 4.3-1, *Summary of Biological Surveys for the Project Site*, provides a summary list of survey dates, survey types.

Table 4.3-1 Summary of Biological Surveys for the Project Site

Survey Type	2022 Survey Dates
General Biological Survey/Habitat Assessment/Jurisdictional Determination	2/11, 3/31, 5/2, 5/20, 7/13, 9/19
Focused Bat Surveys	3/31, 5/2, 7/13, 9/6

Source: (GLA, 2024, Table 4-1)

A. General Biological Survey

A site-specific survey program was designed to accurately document the botanical resources within the Project site, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; (3) general field reconnaissance surveys; (4) vegetation mapping according to the List of Vegetation Alliances and Associations; and (5) habitat assessment for special-status plants.

1. Botanical Resources

GLA biologist surveyed the site on February 11, March 31, May 2, May 20, and July 13, 2022 and conducted general plant surveys. Surveys were conducted in accordance with accepted botanical survey guidelines. As applicable, surveys were conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project site. Surveys were conducted by following meandering transects within areas not already developed with buildings and paved parking lots. All plant species

encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS and California Department of Fish and Wildlife (CDFW).

2. Wildlife Resources

Wildlife species were evaluated and detected during field surveys by direct observation, calls, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the surveys. During the general biological and reconnaissance survey within the Project site, birds were detected opportunistically by direct observation and/or by vocalizations, with identifications recorded in field notes. In addition, birds observed flying over the site or observed adjacent to the site were also recorded in the field notes and included in the faunal compendium.

Mammals were identified and detected opportunistically by direct observations and/or by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.). Reptiles and amphibians were identified opportunistically during surveys. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

B. Focused Bat Surveys

Due to the number of onsite and adjacent offsite potential roost trees, GLA biologists conducted focused bat surveys within the Project site. Prior to the focused surveys, a diurnal roost assessment was conducted throughout the Project site to identify potential natural roosting habitat (e.g., trees with cavities, trees with loose bark, dead trees, palm trees, etc.) and man-made roosting structures (e.g., buildings, sheds, etc.) that could support roosting onsite, including diurnal, nocturnal, maternity roost and hibernacula. Inspection of potential roost areas included a search for evidence of occupation including urine staining, guano or culled insect concentrations, audible social bat vocalizations and odors often associated with occupied roosts. Those trees and/or structures identified as having the greatest potential of supporting roosting bats, received the focus during the emergence surveys.

Bat emergence surveys incorporated a combination of acoustic and emergence (out flight or exit) surveys. Biologists used a Seek Compact Pro Thermal imager attached to an iPhone or iPad to assist in detecting heat signatures of bats within and exiting potential roost areas. In addition, up to four ultrasonic acoustic recording devices were deployed throughout the Study. Recording devices utilized included two Pettersson M500-384 microphones attached to two Microsoft Surface Pros running Sonobat Live recording software, two Wildlife Acoustics EchoMeter 2 Pro microphones attached to an Apple iTouch and an Apple iPad. Microphones were attached to telescoping poles between six and 25 feet in height. Spotlights were used to aid in visual identification of bat species.

Four focused bat surveys were conducted by GLA biologists Jeff Ahrens and Stephanie Cashin on March 31, May 2, July 13, and September 6, 2022. All acoustic data was recorded in full spectrum and was processed and analyzed with Sonobat 4.2.2 bat call analysis software using the California

Southwest classifier. All acoustic calls were manually reviewed and vetted using multiple Sonobat acoustic reference libraries and reference materials including Echolocation Call Characteristics of California Bats and Echolocation Call Characteristics of Western U.S. Bats. Only the best quality calls that included the appropriate call characteristics for each species were used for species identification.

C. Jurisdictional Determination

A desktop review of recent aerial photographs of the Project site as well as historic aerial photography was performed prior to the site visit. On February 11, 2022, GLA biologist Jeff Ahrens performed a Project site visit to evaluate the site for the presence of potential jurisdictional waters and wetlands regulated under the Corps pursuant to Section 404 of the CWA, the CDFW pursuant to Section 1602 of the Fish and Game Code, and the Regional Board pursuant to Section 401 of the CWA or Section 13260 of the CWC [the Porter-Cologne Water Quality Control Act].

4.3.2 Existing Conditions

The Project site is currently occupied with a single large two-story office building, parking lot and over one hundred ornamental trees, shrubs, and ground cover. A majority of the ornamental trees onsite, especially American sweetgum (*Liquidambar styraciflua*) with some London plane trees (*Platanus x. acerifolia*) appear to be in declining health from possibly a variety of reasons including but not limited to an unknown disease and stress from drought.

As shown in Figure 4.3-1, *Vegetation and Land Cover Types*, the Project site supports the following vegetation and land-cover types: approximately 5.97 acres of Developed/Ornamental land and approximately 6.40 acres of Disturbed/Ornamental land.

Developed/ornamental lands include a single large office building, parking lot, storage containers, and ornamental trees and vegetation occurring within these developed areas. Ornamental vegetation within this area is largely comprised of London plane tree, American sweetgum, and natal plum (*Carissa macrocarpa*). Other common ornamental species include lily of the Nile (*Agapanthus sp.*), Italian cypress (*Cupressus sempervirens*), and Brazilian peppertree (*Schinus terebinthifolia)*, and Aleppo pine (*Pinus halepensis*).

Disturbed/ornamental lands predominately include turf grass with a mixture of weedy vegetation to the north and east; turf grass with a mixture of ornamental trees to the south; and numerous ornamental ground cover and trees west of the parking lot. Some of the ornamental vegetation and trees occurring within disturbed/ornamental areas includes crab grass (*Digitaria sanguinalis*), Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), dwarf nettle (*Urtica urens*), African daisy (*Osteospermum sp.*), crystalline iceplant (*Mesembryanthemum crystallinum*), pale dewplant (*Drosanthemum floribundum*), Bermuda-buttercup (*Oxalis pes-caprae*), common sow-thistle (*Sonchus oleraceus*), New Zealand flax (*Phormium tenax*), English ivy (*Hedera helix*), carob tree (*Ceratonia siliqua*), carrotwood (*Cupaniopsis anacardioides*), camphor tree (*Cinnamomum camphora*), coast redwood (*Sequoia sempervirens*), Eastern redbud (*Cercis canadensis*), Peruvian pepper tree (*Schinus molle*), and Brazilian pepper tree (*Schinus terebinthifolia*).



Property Boundary
Developed/Ornamental
Disturbed/Ornamental

Source(s): Glenn Lukos Associates (08-10-2023)

Figure 4.2-1

Not to Scale

Vegetation and Land Cover Types

A. Wildlife

A total of 29 animal species, including one invertebrate species, one reptile species, 23 bird species and 4 mammal species were recorded onsite during the general and focused bat surveys.

Common avian species detected were Anna's hummingbird (*Calypte anna*), Say's phoebe (*Sayornis saya*), Cassin's kingbird (*Tyrannus vociferans*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), and mourning dove (*Zenaida macroura*). The common mammal species detected was Botta's pocket gopher (*Thomomys bottae*). A complete faunal compendium is included in Appendix B of *Technical Appendix C1* of this EIR.

B. Special-Status Vegetation Communities

The California Natural Diversity Database (CNDDB) identifies the following five special-status vegetation communities for the Los Alamitos and surrounding quadrangle maps including Anaheim, La Habra, Long Beach, Newport Beach, South Gate, and Whittier: California Walnut Woodland, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, and Southern Foredunes. The Project site does not contain any special-status vegetation types, including those identified by the CNDDB.

C. Special-Status Plants

Table 4.3-2, *Special-Status Plants Evaluated for the Project Site*, provides a list of special-status plants evaluated for the Project site through general biological surveys, habitat assessments, and focused bat surveys. This list was based on the following factors: 1) species identified by the CNDDB and California Native Plant Society (CNPS) as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site. No special-status plants, however, were determined to have potential to occur on the Project site.

Table 4.3-2 Special-Status Plants Evaluated for the Project Site

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Aphanisma *Aphanisma blitoides*	Federal: None State: None CNPS: Rank 1B.2	Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub.	Does not occur.
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CNPS: Rank 1B.1	Coastal dunes and coastal sage scrub.	Does not occur.
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CNPS: Rank 1B.1	Vernal pools	Does not occur.
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	Federal: None State: None CNPS: Rank 1B.2	Coastal dunes	Does not occur.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur.
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Does not occur.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur.
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal scrub (sandy, often in disturbed areas)	Does not occur.
Estuary seablite *Suaeda esteroa*	Federal: None State: None CNPS: Rank 1B.2	Coastal salt marsh and swamps. Occurring in sandy soils	Does not occur.
Gambel's water cress *Nasturtium gambelii*	Federal: FE State: ST CNPS: Rank 1B.1	Marshes and swamps (freshwater or brackish).	Does not occur.
Horn's milk-vetch *Astragalus hornii* var. *hornii*	Federal: None State: None CNPS: Rank 1B.1	Lake margins with alkaline soils, meadows and seeps, and playas.	Does not occur.
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur.
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	Federal: None State: None CNPS: Rank 1A	Marshes and swamps (coastal salt and freshwater).	Does not occur.
Lucky morning-glory *Calystegia felix*	Federal: None State: None CNPS: Rank 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Does not occur.
Lyon's pentachaeta *lyonii*	Federal: FE State: SE CNPS: Rank 1B.1	Chaparral (openings), coastal sage scrub, valley and foothill grassland.	Does not occur.
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Mud nama *Nama stenocarpum*	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps	Does not occur.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1	Chenopod scrub, playas, vernal pools.	Does not occur.
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur.
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Does not occur.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur.
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur.
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur.
San Diego button-celery *Eryngium aristulatum* var. *parishii*	Federal: FE State: SE CNPS: Rank 1B.1	Mesic soils in vernal pools, valley and foothill grasslands, coastal sage scrub.	Does not occur.
Sanford's arrowhead *Sagittaria sanfordii*	Federal: None State: None CNPS: Rank 1B.2	Marshes and swamps (assorted shallow freshwater).	Does not occur.
South coast saltscale *Atriplex pacifica*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Does not occur.
Southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Does not occur.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	Federal: FE State: SE CNPS: Rank 1B.1	Coastal dunes, coastal scrub, marshes and swamps (edges, coastal salt or brackish)	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Lucky morning-glory Calystegia felix	Federal: None State: None CNPS: Rank 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Does not occur.
Lyon's pentachaeta lyonii	Federal: FE State: SE CNPS: Rank 1B.1	Chaparral (openings), coastal sage scrub, valley and foothill grassland.	Does not occur.
Many-stemmed dudleya Dudleya multicaulis	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur.
Mud nama Nama stenocarpum	Federal: None State: None CNPS: Rank 2B.2	Marshes and swamps	Does not occur.
Parish's brittlescale Atriplex parishii	Federal: None State: None CNPS: Rank 1B.1	Chenopod scrub, playas, vernal pools.	Does not occur.
Plummer's mariposa lily Calochortus plummerae	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur.
Prostrate vernal pool navarretia Navarretia prostrata	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Does not occur.
Salt marsh bird's-beak Chloropyron maritimum ssp. maritimum	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Does not occur.
Salt Spring checkerbloom Sidalcea neomexicana	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur.
San Bernardino aster Symphyotrichum defoliatum	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur.
San Diego button-celery Eryngium aristulatum var. parishii	Federal: FE State: SE CNPS: Rank 1B.1	Mesic soils in vernal pools, valley and foothill grasslands, coastal sage scrub.	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Sanford's arrowhead Sagittaria sanfordii	Federal: None State: None CNPS: Rank 1B.2	Marshes and swamps (assorted shallow freshwater).	Does not occur.
South coast saltscale Atriplex pacifica	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Does not occur.
Southern tarplant Centromadia parryi ssp. australis	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Does not occur.
Ventura Marsh milk-vetch Astragalus pycnostachyus var. lanosissimus	Federal: FE State: SE CNPS: Rank 1B.1	Coastal dunes, coastal scrub, marshes and swamps (edges, coastal salt or brackish)	Does not occur.

[1]Status: FE – Federally Endangered; FT – Federally Threatened; FC – Federal Candidate; ST – State Threatened; SE – State Endangered

CNPS: Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere; Rank 1B – Plants rare, threatened, or endangered in California and elsewhere; Rank 2A – Plants presumed extirpated in California, but common elsewhere; Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere; Rank 3 – Plants about which more information is needed (a review list); Rank 4 – Plants of limited distribution (a watch list).

CNPS Threat Code extension

.1 – Seriously endangered in California (over 80% occurrences threatened); 2 – Fairly endangered in California (20-80% occurrences threatened); 3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

[2]Occurrence

•Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.

•Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.

•Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.

•Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.

•Present – The species was detected onsite incidentally or through focused surveys.

Source: (GLA, 2024,Table 4-2)

D. Special-Status Animals

Table 4.3-3, *Special Status Animals Evaluated for the Project Site*, provides a list of special-status animals evaluated for the Project site through general biological surveys, habitat assessments, and focused bat surveys. This list was based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site. One merlin (*Falco columbarius*), which is on the State's watch list and not federally listed, was observed briefly in March 2022 flying over the southwest corner of the parking lot to the JFTB.

Table 4.3-3 Special Status Animals Evaluated for the Project Site

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Invertebrates			
Crotch bumble bee *Bombus crotchii*	Federal: None State: CE (candidate endangered)	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert. Generally found in open grasslands and scrub habitats.	Not expected to occur. Not detected during all surveys.
Monarch butterfly (California overwintering population) *Danaus plexippus pop. 1*	Federal: FC State: None	Roosts in winter in wind-protected tree groves along the California coast from northern Mendocino to Baja California, Mexico.	Not expected to occur.
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *Plantago erecta* and *Castilleja exserta*. Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Does not occur.
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur.
San Diego fairy shrimp *Branchinecta sandiegonensis*	Federal: FE State: None	Seasonal vernal pools	Does not occur.
Fish			
Southern steelhead - southern California DPS *Oncorhynchus mykiss irideus*	Federal: FE State: None	Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county.)	Does not occur.
Amphibians			
Western spadefoot *Spea hammondii*	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur.
Reptiles			
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur.
Green sea turtle *Chelonia mydas*	Federal: FT State: None	Inhabits the shallow waters of lagoons, bays, estuaries, mangroves, eelgrass and seaweed beds. Prefers areas with abundant aquatic vegetation, such as pastures of sea grasses and algae, in shallow, protected water.	Does not occur.
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans	Not expected to occur.
Western pond turtle *Emys marmorata*	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Does not occur.
Birds			
American peregrine falcon (nesting) *Falco peregrinus anatum*	Federal: Delisted State: Delisted, FP	Breeding habitat consists of high cliffs, tall buildings, and bridges along the coast and inland. Foraging habitat primarily includes open areas near wetlands, marshes, and adjacent urban landscapes.	Potential to forage opportunistically onsite. Not expected to nest onsite due to lack of suitable habitat. Not detected onsite during all surveys.
Bank swallow (nesting) *Riparia*	Federal: None State: ST	Low areas along rivers, streams, ocean coasts or reservoirs. Often use human-made sites.	Does not occur.
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	Federal: None State: SE	Coastal Marshes	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Black skimmer (nesting colony) *Rynchops niger*	Federal: None State: SSC	Open sandy beaches, gravel or shell bars with sparse vegetation, mats of sea wrack (tide-stranded debris) in saltmarsh.	Does not occur.
Burrowing owl (burrow sites & some wintering sites) *Athene cunicularia*	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Not expected to occur. The Project site does not support ground squirrel burrows onsite. No evidence of burrowing owl or sign during all surveys.
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST, FP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur.
California brown pelican (nesting colony & communal roosts) *Pelecanus occidentalis californicus*	Federal: Delisted State: Delisted, FP	Breed on dry, rocky offshore islands. Forage in estuaries and coastal marine habitats. Nests on islands free of land predators.	Does not occur.
California horned lark *Eremophila alpestris actia*	Federal: None State: WL	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Potential to forage onsite. Not expected to nest onsite due to proximity of large trees adjacent to the open field. Not detected onsite during all surveys.
California least tern (nesting colony) *Sterna antillarum browni*	Federal: FE State: SE, FP	Flat, vegetated substrates near the coast. Occurs near estuaries, bays, or harbors where fish is abundant.	Does not occur.
Coastal cactus wren (San Diego & Orange County only) *Campylorhynchus brunneicapillus sandiegensis*	Federal: None State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Does not occur.
Coastal California gnatcatcher *Polioptila californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Does not occur.
Cooper's hawk (nesting) *Accipiter cooperi*	Federal: None State: None CDFW: WL	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and commercial.	Observed flying over site; expected to forage.
Grasshopper sparrow (nesting)	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Ammodramus savannarum			
Least Bell's vireo (nesting) *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur.
Light-footed clapper rail *Rallus longirostris levipes*	Federal: FE State: SE, FP	Marsh vegetation of coastal wetlands.	Does not occur.
Merlin (wintering) *Falco columbarius*	Federal: None State: WL	Nest in forested openings, edges, and along rivers. Winter in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	Present. One merlin was observed briefly in March 2022 flying over the southwest corner of the parking lot to the JFTB. Would be expected to forage opportunistically within and adjacent to the Project site from approximately between September to May. Does not breed in California.
Northern harrier (nesting) *Circus hudsonius*	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Potential to forage opportunistically onsite. Not expected to nest onsite. Not detected onsite during all surveys.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur.
Swainson's hawk (nesting) *Buteo swainsoni*	Federal: None State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Potential to forage opportunistically onsite. Confirmed nesting in 2019 at the Seal Beach NWS. One Swainson's hawk reported perched onsite (by Lampson Avenue) in 2018 (eBird) and numerous reported observations reported at Arbor Park, JFTB and environs within Seal Beach (CNDDB, eBird & iNaturalist). Not expected to nest onsite as this species prefers to nest in solitary trees.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: CE, SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Vermilion flycatcher (nesting) *Pyrocephalus rubinus*	Federal: None State: SSC	Scrub, desert, cultivated lands, and riparian woodlands.	Potential to forage and nest onsite. Known to occur at locations adjacent to Project site. Not detected onsite during all surveys.
Western snowy plover (nesting) *Charadrius alexandrinus nivosus*	Federal: FT State: SSC	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Does not occur.
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur.
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: FP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Not expected to nest onsite. Potential to forage onsite opportunistically. One pair detected by GLA on several surveys between 400 and 2,000 feet offsite, west of the Project site's western boundary. Numerous occurrences reported at JFTB, Arbor Park, and environs (eBird & iNaturalist).
Yellow rail *Coturnicops noveboracensis*	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	Does not occur.
Yellow warbler (nesting) *Setophaga petechia*	Federal: None State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Does not occur.
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur.
Mammals			
American badger *Taxidea taxus*	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Does not occur.
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC WBWG: MH	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.	Not detected during focused bat surveys. Suitable roosting habitat does not occur onsite.

Species Name	Status[1]	Habitat Requirements	Occurrence[2]
Pacific pocket mouse *Perognathus longimembris pacificus*	Federal: FE State: SSC	Fine, alluvial soils along the coastal plain. Scarcely in rocky soils of scrub habitats.	Does not occur.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC WBWG: M	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Not detected during focused bat surveys. Suitable roosting habitat does not occur onsite.
South coast marsh vole *Microtus californicus stephensi*	Federal: None State: SSC	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.	Does not occur.
Southern California saltmarsh shrew *Sorex ornatus salicoricus*	Federal: None State: SSC	Coastal marshes. Requires dense vegetation and woody debris for cover.	Does not occur.
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC WBWG: H	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Not detected during focused bat surveys. Suitable roosting habitat does not occur onsite.
Western red bat *Lasiurus blossevillii*	Federal: None State: SSC WBWG: H	Prefers riparian areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores where they roost in broad-leafed trees.	Detected foraging offsite on one occasion during focused bat surveys. Not detected roosting onsite during focused bat surveys. Not expected to roost onsite due to low quality roosting habitat.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly in dead fronds of palms. Forages over water and among trees.	Detected foraging offsite during focused bat surveys. However, not detected roosting onsite during focused bat surveys. Potential roosting habitat occurs onsite.

[1]Status: FE – Federally Endangered; FT – Federally Threatened; FPT – Federally Proposed Threatened; FC – Federal Candidate; BGEPA– Bald and Golden Eagle Protection Act; SE – State Endangered; ST – State Threatened; SC– State Candidate; CFP – California Fully-Protected Species; SSC – Species of Special Concern; WL – Watch List Western Bat Working Group (WBWG): H – High Priority; LM – Low-Medium Priority; M – Medium Priority; MH – Medium-High Priority

[2]Occurrence

•Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused bat surveys have confirmed the absence of the species.

•Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.

•Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.

•Present – The species was detected onsite incidentally or through focused bat surveys.

Source: (GLA, 2024, Table 4-3)

E. Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Site

1. Bats

During the focused bat surveys, no bat species including sensitive bat species were detected roosting (including maternity roosting) onsite. Two common bat species, the Mexican free-tailed bat (*Tadarida brasiliensis*) and Yuma myotis (*Myotis yumanensis*) were confirmed flying over the site.

In addition, a number of bat species were detected acoustically offsite to the east within the adjacent Navy golf course, which contains hundreds of trees and numerous water features. The water features would be particularly attractive to bats due to insect populations associated with such features and the presence of water, which bats require. Bat species detected acoustically offsite include big brown bat (*Eptesicus fuscus*), western red bat (*Lasiurus blossevillii*), western yellow bat (*Lasiurus xanthinus*), and the phonic group 50kHz Myotis which includes both the California myotis (*Myotis californicus*) and Yuma myotis (*Myotis yumanensis*). Bat species that are combined by frequency into a phonic group (e.g., 50 kHz myotis) may lack call characteristics and structure parameters that usually allow for confident species identification.

Two of the bat species detected offsite, the western red bat and western yellow bat are California Department of Fish and Wildlife (CDFW) species of special concern and are both foliage roosting species. The western red bat was detected offsite acoustically during one of the four bat surveys and prefers to roost in riparian habitat and trees including (but not limited to) cottonwoods, sycamores, ash, willows, oaks, and walnuts. This species has potential to be found roosting (it is a solitary roosting species) on site and suitable habitat (trees) is available. The Project site does provide some suitable London plane trees onsite for roosting, but as previously stated, some of these trees and other broad-leaved trees onsite are in declining health and roosting was not detected anywhere onsite during four focused bat surveys.

The western yellow bat was detected offsite during two of the four bat surveys. This species is strongly tied to palm trees (especially the fronds) for roosting habitat and have an affinity for dead fronds of untrimmed palm tree skirts. Although the western yellow bat was not detected roosting onsite, the Project site does provide some suitable palm tree roosting habitat onsite.

2. Birds (Non Raptors)

The vermilion flycatcher (*Pyrocephalus obscurus*) is designated as a CDFW Species of Special Concern (SSC) when nesting. The vermilion flycatcher generally occurs in more open areas, including arid scrublands, farmlands, deserts, parks, cemeteries, open woodland, and canyon mouths.

The vermilion flycatcher is well documented in Los Angeles, Orange, and San Diego Counties and is known to occur and breed adjacent to the Project site and environs including (but not limited to) Arbor dog park, Arbor Park, the Navy golf course, Old Ranch Country Club, Seal Beach Naval Weapons Station and El Dorado Park. The vermilion flycatcher was not detected onsite during any of the surveys,

however, the Project site is estimated to provide up to four acres of potentially suitable foraging and nesting habitat.

The California horned lark *Eremophila alpestris actia* is designated as a Watch List species in California and is widespread in southern California in areas such as agricultural fields and areas of open ground. There is potential to forage onsite. Not expected to nest onsite due to proximity of large trees adjacent to the open field. Not detected onsite during all surveys.

F. Raptors

Southern California exhibits a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has substantially declined in the region, affecting many species, but especially raptors. A few species, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), and American Kestrel (*Falco sparverius*), have shown the ability to adapt to various levels of human presence and can be readily observed within and adjacent to urban neighborhoods and other types of development. These species still require appropriate foraging habitat and generally low levels of disturbance in vicinity of nesting sites.

Raptor nesting was not detected during the biological surveys. The Project site may provide suitable nesting habitat for the American kestrel, and red-tailed hawk (neither of which have special status) and Cooper's hawk, a watch list species. Approximately half of the Project site is developed and adjacent offsite lands to the west, north and east provide higher quality foraging and nesting habitat. Nonetheless, the Project site provides some foraging resources for raptors. Five raptor species, specifically, the American kestrel, barn owl (*Tyto alba*), Cooper's hawk, merlin (*Falco columbarius*), and red-tailed hawk were detected by GLA biologists flying over or in proximity to the Project site. These species were not observed foraging on site but would be expected to utilize the Project site for foraging on an occasional basis. The peregrine falcon (*Falco peregrinus anatum*) was not detected on the site and foraging potential is very limited and nesting sites are absent.

Sensitive raptor species including the burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*) were not detected onsite by GLA biologists, but these species are known to occur within the area, on the adjacent properties. Discussion on observations of white-tailed kite within the proximity of the Project site is discussed further below.

1. Burrowing Owl

The burrowing owl is a CDFW Species of Special Concern that breeds in open grassland areas and historically has bred at the Seal Beach Naval Weapons Station (NWS). In 1995, one burrowing owl was reported on the JFTB approximately 3,500 feet west of the Project site (eBird). At the time of the surveys, the Project site did not support suitable burrows for this species and no owl or burrowing owl sign (e.g., whitewash, cast pellets, feathers) was detected during the general biological surveys.

Although not currently suitable for breeding, the burrowing owl may opportunistically use the Project site and surrounding areas for foraging.

2. Norther Harrier

The northern harrier is a CDFW Species of Concern that utilizes a variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands. The northern harrier would be expected to forage opportunistically over the onsite open field area of the Project site and surrounding areas but would not be expected to nest on site. Northern harriers generally place nests near the ground in areas of dense grass or shrubby vegetation, and often in wet areas, to reduce the risk of predation. The Project site does not provide suitable habitat for nesting and associated avoidance from disturbance or predation.

3. Swainson's Hawk

The Swainson's hawk is State listed as Threatened and predominantly nests in solitary trees, but often forages in open agricultural lands for small mammals such as voles. In 2019, a Swainson's hawk pair successfully bred in a solitary pepper tree on the Seal Beach NWS and successful nesting was also confirmed locally in 2021 (Winkleman 2022). Other failed nesting attempts were believed to have occurred locally in 2019 and 2021 (Winkleman 2022). Since 2018, numerous sightings of Swainson's hawks have been reported yearly flying over and occasionally perched within the JFTB, Old Ranch Country Club, Arbor Park and environs of Los Alamitos and Seal Beach (CNDDB, eBird, and iNaturalist).

In 2018, one Swainson's hawk was reported perched on a light pole and subsequently on the ground in the southeastern corner of the Project site (eBird). The Swainson's hawk would not be expected to nest onsite due to the lack of solitary trees and level of nearby human disturbance such as development and traffic, but would be expected to forage opportunistically onsite, but primarily over large open fields, including open areas within the JFTB, Seal Beach Naval Weapons Station, Old Ranch Country Club and the Navy golf course.

4. White-Tailed Kite

The white-tailed kite is a State Fully Protected species and generally occurs in low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. White-tailed kites often use dense canopies for nesting. In February 2022, GLA observed a pair of white-tailed kites perched offsite within the JFTB, approximately 400 feet west of the Project site. In September 2022, GLA biologists observed an individual kite foraging within the JFTB, approximately 2,000 feet northwest of the Project site. Numerous white-tailed kite eBird detections over the last few years have also been recorded for the same general areas of the JFTB. The white-tailed kite is not expected to nest onsite due primarily to the level of human disturbance onsite (such as development and traffic) and adjacent Arbor dog park, which exhibits regular human and canine use but would be expected to forage opportunistically within the onsite open field.

G. Nesting Birds

The Project site contains trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, California Department of Fish and Game Code Sections 3505, 3503.5, and 3800 prohibit the take, possession, or destruction of birds, their nests or eggs.

H. Critical Habitat

The Project site is not located within areas designated by USFWS as critical habitat.

I. Wildlife Linkages/Corridors and Nursery Sites

Habitat linkages are areas which provide a connection between two or more habitat areas which are often larger or superior in quality to the linkage. Such linkages can be quite small or constricted but can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of "gene flow" between populations, with movement occurring in single event or taking potentially many generations. The Project site does not support a habitat linkage, as historically, the Project site and surrounding lands were used for agricultural practices and the larger surrounding areas in Los Alamitos and adjoining Seal Beach are largely developed. The Project site also lacks natural habitat communities with approximately half of the property being developed while the other half consists of urbanized open space. Finally, a chain linked fence surrounds the perimeter of the Project site to the north, east and west, with Lampson Avenue and residential areas adjacent to the south.

Corridors are similar to linkages but provide specific opportunities for individual animals to disperse or migrate between areas, which are generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. The Project site does not contain a wildlife corridor for the same reasons mentioned above under Habitat Linkages, which include that the site is entirely disturbed or developed, lacks natural habitat, its perimeter is mostly surrounded by chain linked fence and residential areas and a major vehicular thoroughfare. Finally, while the Project site falls within the Pacific Flyway, the constraints associated with both linkages and corridors discussed above limits the suitability of the site for migration stopovers during annual migration. To the extent that that such stopovers occur, they would be of short duration by mostly common species. The Pacific Flyway is one of four major North American migration routes for birds, especially waterfowl, and extends from Alaska and Canada, through California, to Mexico and South America.

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. The Project site has the potential to support common species of nesting birds but does not support bird species that require nesting in rookeries.

J. Jurisdictional Waters and Wetlands

The Project site does not contain any jurisdictional waters subject to the jurisdiction of the Corps, Regional Board, or CDFW. The site lacks any channelized features that exhibit an ordinary high water mark (Corps/Regional Board jurisdiction) and a bed, bank and channel (CDFW jurisdiction), and the site does not support any wetlands as defined by the Clean Water Act or State of California and contains no riparian habitat.

The southern portion of the Project site includes an approximately three-foot-wide shallow concrete V-Ditch that begins offsite on the JFTB and extends onsite parallel to Lampson Avenue for approximately 840 feet before terminating on site within the southeastern portion of the Project site. The concrete drainage ditch and adjacent areas were field checked during a site visit on September 26, 2023, for evidence of a drainage course and/or wetland vegetation, soils, and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)[1] to identify the width of Corps jurisdiction, and suspected federal wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[2] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).[3] Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.[4] While in the field, the potential indicators of jurisdiction were recorded on a color aerial photograph using visible landmarks.

The shallow concrete drainage ditch is approximately 36 inches wide and only about two inches deep. The areas on both sides of the ditch consist of maintained turf/lawn. At the southwest corner of the site, there is a 24-inch culvert that discharges water from the adjacent off-site area and an eight-inch pipe that collects flows from areas north of the site discharges to the ditch. Because it is concrete, the feature supports no vegetation except for a few opportunistic plants growing in a thin layer of sediment at the point where the 24-inch pipe discharges. The discharge point also exhibits a layer of leaf litter from overhanging coast redwood, which is growing as an ornamental tree.

[1] U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States
[2] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.
[3] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
[4] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

The feature is not a jurisdictional water of the United States based on two specific factors. First, the concrete feature it is not a wetland as it has no soils or vegetation[5] and, by Corps' definition is not a wetland. Second, the area is excluded from Corps jurisdiction by rule under 328.3(b)(3) as "*Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water*". In addition to the concrete feature having no wetland characteristics it also does not carry relatively permanent flow.

The concrete feature is not a wetland under the Regional Board's definition which states: *(1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.* First the area lacks soil which is assumed in the term "saturation" since concrete cannot become saturated.

Under the "Procedures" the Regional Board also excludes areas excluded by the Corps such as artificial waters constructed and currently used and maintained primarily for the detention, retention, infiltration, or treatment of stormwater runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program (Procedures, Section II.3.d.iii).

In addition to the feature lacking wetland characteristics, the feature is not a "stream" in accordance with the definitions of a stream in the California Fish and Game Code as the drainage feature does not exhibit a bed, bank, or channel as the feature is an approximately two-inch-deep linearly shaped concrete slab that also support no vegetation.

4.3.3 REGULATORY FRAMEWORK

A. Federal

1. Endangered Species Act (ESA)

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Fish and Wildlife Service (USFWS) and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. (USFWS, 2017)

[5] At the southwest corner where a thin layer of sediment has accumulated there were two individuals of tall umbrella sedge (*Cyperus eragrostis*, FACW) and one individual of Canada horseweed (*Lessingia canadensis*, FACW) were noted growing in the sediment and leaf litter from the overhanging coast redwood growing on the lawn area. Because of the underlying concrete and lack of soil this area is not considered to be wetland under any definition of wetlands.

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants. (USFWS, 2017)

Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. During consultation, the "action" agency receives a "biological opinion" or concurrence letter addressing the proposed action. In the relatively few cases in which the USFWS or NMFS makes a jeopardy determination, the agency offers "reasonable and prudent alternatives" about how the proposed action could be modified to avoid jeopardy. It is extremely rare that a project ends up being withdrawn or terminated because of jeopardy to a listed species. (USFWS, 2017)

Section 10 of the ESA may be used by landowners including private citizens, corporations, tribes, states, and counties who want to develop property inhabited by listed species. Landowners may receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to avoid, minimize, and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat and by addressing economic development with a focus on species conservation. (USFWS, 2017)

2. Clean Water Act Section 401

Clean Water Act (CWA) § 401 water quality certification provides states and authorized tribes with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. Under § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived § 401 certification. The central feature of CWA § 401 is the state or tribe's ability to grant, grant with conditions, deny, or waive certification. Granting certification, with or without conditions, allows the federal permit or license to be issued consistent with any conditions of the certification. Denying certification prohibits the federal permit or license from being issued. Waiver allows the permit or license to be issued without state or tribal comment. States and tribes make their decisions to deny, certify, or condition permits or licenses based in part on the proposed project's compliance with Environmental Protection Agency (EPA)-approved water quality standards. In addition, states and tribes consider whether the activity leading to the discharge will comply with any applicable effluent limitations guidelines, new source performance

standards, toxic pollutant restrictions, and other appropriate requirements of state or tribal law. (EPA, 2023)

Many states and tribes rely on § 401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources. However, § 401 is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a water of the U.S. If a federal permit or license is not required or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to the CWA § 401. (EPA, 2023)

3. Clean Water Act Section 404

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities). (EPA, n.d.)

The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment; or (2) the nation's waters would be significantly degraded. Applications for permits must, to the extent practicable: (l) demonstrate steps have been taken to avoid wetland impacts; (2) demonstrate that potential impacts on wetlands have been minimized; and (3) provide compensation for any remaining unavoidable impacts. Proposed activities are regulated through a permit review process. (EPA, n.d.)

An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Army Corps of Engineers (USACE), which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption. (EPA, n.d.)

On January 18, 2023 the Corps issued new definitions for waters of the United States pursuant to Section 404 of the Clean Water Act The Corps regulates the discharge of dredged and/or fill material

into waters of the United States. The new definitions became effective on March 20, 2023. Under the new definitions, the term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as set forth below. On May 25, 2023, the U.S. Supreme Court issued a decision in *Sackett et ux. V. Environmental Protection Agency et al.* that addressed the jurisdictional status of wetlands that are not directly connected to traditionally navigable waters or relatively permanent waters. Under the *Sackett* decision, the Supreme Court determined that wetlands not connected to traditionally navigable waters or relatively permanent waters are not subject to regulation under Section 404.

4. Executive Order 11990 – Protection of Wetlands

The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, the Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. (FEMA, 2024) The Order applies to:

- Acquisition, management, and disposition of federal lands and facilities construction and improvement projects which are undertaken, financed, or assisted by federal agencies;

- Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. (FEMA, 2024)

The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. If so, a wetlands assessment must be prepared that describes the alternatives considered. The procedures include a requirement for public review of assessments. (FEMA, 2024)

5. Migratory Bird Treaty Act (16 USC Section 703-712)

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, n.d.)

B. State

1. California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife (CDFW) works with interested persons, agencies, and organizations to protect and preserve such sensitive

resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met (CDFW, n.d.).

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs). (CDFW, n.d.)

If a species is listed by both the federal ESA and CESA, CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA. (CDFW, n.d.)

A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, n.d.)

2. Natural Community Conservation Planning Act (NCCP)

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly. (CDFW, n.d.)

An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP. CDFW and the USFWS provide the necessary support, direction, and guidance to NCCP participants. (CDFW, n.d.)

There are currently 17 approved NCCPs (includes 6 subarea plans) and more than 9 NCCPs in various stages of planning (includes 2 subarea plans), which together cover more than 8 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, n.d.) The Project site is not located with an NCCP.

3. Native Plant Protection Act (NPPA) of 1977

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, n.d.)

4. Unlawful Take or Destruction of Nests or Eggs (CFGC Sections 3503.5-3513)

Section 3503.5 of the CFGC specifically protects birds of prey, stating: "It is unlawful to take, possess, or destroy any . . . [birds-of-prey] 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." Section 3513 of the CFGC duplicates the federal protection of migratory birds, stating: "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act." (CA Legislative Info, n.d.)

5. Unlawful Take of Aigrette or Egret, Osprey, Bird of Paradise (CFGC Sections 3505)

Section 3505 of the CFGC specifically protects native birds, stating: "It is unlawful to take, sell, or purchase any aigrette or egret, osprey, bird of paradise, goura, numidi, or any part of such a bird." (CA Legislative Info, n.d.)

6. Unlawful Take of Nongame Birds (CFGC Sections 3800)

Section 3800 of the CFGC specifically protects nongame birds, stating: "All birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds are nongame birds. It is unlawful to take any nongame bird except as provided in this code or in accordance with regulations of the commission or, when relating to mining operations, a mitigation plan approved by the department." (CA Legislative Info, n.d.)

7. Porter-Cologne Water Quality Act

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and

- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous Non-Point Source (NPS)-related responsibilities, including monitoring and assessment, planning, financial assistance, and management (SWRCB, 2014).

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the State Water Board. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and have been updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the EPA, when approved they become water quality standards under the CWA. (SWRCB, 2014)

4.3.4 Basis for Determining Significance

Section IV of Appendix G to the CEQA Guidelines addresses typical adverse effects to biological resources, and includes the following threshold questions to evaluate the Project's impacts to biological resources (OPR, 2022):

- *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans,*

policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;*

- *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

- *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;*

- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;*

- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

4.3.5 Project Design Features

The Project includes the following Project Design Features (PDFs) that have the effect of minimizing and avoiding environmental impacts.

PDF B-1 Pursuant to Figure 3-18, *Landscape Plan*, the Project will incorporate larger sized box tree species (including the western sycamore and cottonwood trees) that foliage specialist bats prefer and will plant the trees on the fringes of the development, adjacent to open space areas.

PDF B-2 Pursuant to Figure 3-18, *Landscape Plan*, the Project will plant approximately 441 trees onsite (excluding shrubs and ground cover), including the western sycamore (*Platanus racemosa*), paperbark melaleuca (*Melaleuca quinquenervia*), olive (*Olive sp.*), southern magnolia (*Magnolia grandiflora*), Crape myrtle (*Lagerstroemia indica*), Brisbane box (*Lophostemon confertus*), Australian willow (*Geijera parviflora*), Italian cypress (*Cupressus sempervirens*), yew pine (*Podocarpus macrophyllus*) and other species. No plants listed on the California Invasive Plant Council (Cal-IPC)[6] Inventory species will be planted and a list of approved species to planted shall be reviewed by a qualified biologist prior to planting.

[6] https://www.cal-ipc.org/

4.3.6 IMPACT ANALYSIS

The following discussion examines the potential impacts to plant and wildlife resources that could potentially be caused if the Project is implemented. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are those that involve the loss, modification, or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other offsite areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasive species, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Threshold a:	***Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

A. Direct Impacts to Special-Status Plants

1. Temporary Construction-Related Activities

No special-status plants were determined to have potential to occur on the Project site. Therefore, Project temporary-construction related activities would not impact special-status plants. No mitigation is required.

2. Long-Term Operation

As discussed above, no special-status plants were determined to have potential to occur on the Project site. Long-term operation would not impact special-status plants. No mitigation is required.

B. Direct Impacts to Special-Status Animals

As discussed above, two special-status animals (State watch list) and Cooper's hawk and merlin (fly over only) were detected on the Project site during the general and focused biological studies. In

addition, although the vermilion flycatcher was not detected onsite (foraging or nesting) during the biological studies, the Project site does provide some suitable habitat for nesting (trees). Should vermilion flycatchers nest on the site during construction, construction activities could adversely impact nesting vermilion flycatchers in the absence of measures to protect the nesting individuals. Conservatively, this impact would be potentially significant before implementation of mitigation.

The Project site is estimated to provide approximately four acres of marginal foraging habitat for sensitive raptor species including the Cooper's hawk, northern harrier, wintering merlin, peregrine falcon, Swainson's hawk, and white-tailed kite as well as other common raptor species that are not identified as special status species. Raptor nesting was not documented during the biological surveys, but the Project site would be expected to support nesting by common raptor species. The Project is not expected to provide suitable nesting raptor habitat for the above-mentioned special-status raptor species due to species specific nesting habitat requirements, and level of existing anthropogenic disturbance from vehicles and people within and immediately adjacent to the Project site.

Moreover, one merlin was observed briefly in March 2022 flying over the southwest corner of the parking lot to the JFTB. However, since the species is a winter resident, no impact is expected.

Given the limited area (approximately four acres) of marginal foraging area, the Project would not result in significant impacts on raptor foraging, including for the special-status raptors noted above. The Project does not exhibit suitable nesting habitat for special-status raptors and there would thus be no significant impacts to nesting habitat for special-status raptors. However, there is a limited potential for nesting common raptor species on the Project site; impacts are potentially significant.

Two sensitive bat species, the western red bat and the western yellow bat were detected foraging offsite within the adjacent Navy golf course. However, no evidence of roosting by any bat species was detected onsite during the four focused bat surveys performed for this analysis. As shown in Figure 3-18, *Landscape Plan*, (project design feature PDF B-1), the Project will incorporate larger sized box tree species (including the western sycamore) along the fringes of the development, adjacent to open space areas. The planting of trees preferred by bats adjacent to open space areas would minimize potential impacts to roosting bats because it would provide habitat for potential roosting.

Nonetheless, because sensitive bat species were detected adjacent to the Project site and have the limited potential to establish a maternity roost onsite (specifically, the western yellow bat in suitable palm trees), conservatively, this impact would be potentially significant before implementation of mitigation.

C. Direct Impacts to Critical Habitat

1. Temporary Construction-Related Activities

Temporary construction-related activities would not impact lands designated as critical habitat by the USFWS. No impact would occur and no mitigation is required.

2. Long-Term Operation

Long-term operation would not impact lands designated as critical habitat by the USFWS. No impact would occur and no mitigation is required.

D. Indirect Impacts to Biological Resources

Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other offsite areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasive species, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated with development include water quality impacts from associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc.

The Project site is not surrounded by or is adjacent to natural open space; rather, adjacent facilities include Arbor Dog park, Arbor Park and the Navy Golf Course which are recreational facilities subject to regular human uses and associated disturbances. The Project is not expected to result in indirect effects to biological resources as the Project site is currently predominantly developed with existing outdoor lighting in place and the proposed Project would incorporate measures to minimize indirect light spillover into the adjacent areas including Arbor Park, Navy Golf Course, and JFTB. The Project would comply with any applicable lighting plan requirements of the Los Alamitos Municipal Code to ensure that light spillage is reduced to the maximum extent possible. Additionally, the Project's landscaping plan excludes invasive exotic species as listed on the California Invasive Plant Council (Cal-IPC) website. Impacts would be less than significant and no mitigation is required.

Threshold b:	***Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?***

1. Temporary Construction-Related Activities

The project site contains no 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. Thus, construction-related activities would not result in significant impacts on any riparian or special-status vegetation alliances.

The Project site does not support natural vegetation communities, only non-native ornamental vegetation. The development of the proposed Project would remove 5.97 acres of Developed/Ornamental lands and 6.40 acres of Disturbed/Ornamental lands. Removal of 12.37 acres of developed/ornamental and disturbed/ornamental lands would not result in a substantial adverse effect on any sensitive communities. No impact would occur and no mitigation is required.

2. Long-Term Operation

As discussed above, the Project site contains no 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. The Project site does not support natural vegetation communities, only non-native ornamental vegetation. Long-term operation would not result in significant impacts on any riparian or special-status vegetation alliances. No impact would occur and no mitigation is required.

Threshold c:	***Would the Project have substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The Project site does not contain any wetlands as defined under the federal CWA or by the State of California. As discussed in Section 4.3.1 above, based on the results of the Jurisdictional Delineation prepared by GLA, the shallow concrete drainage ditch does not meet the Corps' definition of wetland or other waters of the U.S. because the concrete feature has no soils or vegetation.[7] In addition, the area is excluded from Corps jurisdiction by rule under Section 328.3(b)(3) of Title 33 of the Code of Federal Regulations as "*Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water*". In addition to the concrete feature having no wetland characteristics, it also does not carry relatively permanent flow.

[7] At the southwest corner where a thin layer of sediment has accumulated there were two individuals of tall umbrella sedge (*Cyperus eragrostis*, FACW) and one individual of Canada horseweed (*Lessingia canadensis*, FACW) were noted growing in the sediment and leaf litter from the overhanging coast redwood growing on the lawn area. Because of the underlying concrete and lack of soil this area is not considered to be wetland under any definition of wetlands.

Additionally, the concrete feature is not a wetland under the SWRCB's definition, and the feature also would not be considered a water of the state. In particular, the concrete feature is not a wetland under the SWRCB's definition which states: *(1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.* The area comprising the concrete feature lacks soil which is assumed in the term "saturation" since concrete cannot become saturated. Moreover, the SWRCB does not consider artificial features to be waters of the state if they were constructed and currently used and maintained primarily for the detention, retention, infiltration, or treatment of stormwater runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program (Procedures, Section II.3.d.iii). The concrete ditch serves these purposes of accommodating stormwater runoff.

In addition, the concrete feature is not a "stream" in accordance with the definitions of a stream in the California Fish and Game Code as the drainage feature does not exhibit a bed, bank, or channel. The feature is an approximately two-inch-deep linearly shaped concrete slab that support no vegetation. As such, the concrete feature is not subject to CDFW jurisdiction under Fish and Game Code Section 1602.

Therefore, the Project would not result in a substantial adverse effect on state or federally protected wetlands during both construction and operational activities. No impact would occur and mitigation is not required.

Threshold d:	***Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

1. Temporary Construction-Related Activities

The Project requires removal of existing ornamental trees that have the potential to provide suitable nesting opportunities for nesting birds. Therefore, the Project has the potential to impact active bird nests during construction activities, if vegetation is removed during the nesting season (February 1 to August 31). Construction activities could adversely impact nesting birds in the absence of measures to protect the nesting individuals. Moreover, as discussed above, two sensitive bat species, the western red bat and the western yellow bat were detected foraging offsite within the adjacent Navy golf course. Since sensitive bat species were detected adjacent to the Project site and have the limited potential to establish a maternity roost onsite (specifically, the western yellow bat in suitable palm trees), impacts are potentially significant during breeding season. Therefore, construction-related impacts to nesting birds and roosting bats are considered potentially significant before implementation of mitigation.

2. Long-Term Operation

The Project site is not located within or part of a wildlife movement corridor. The site is located within the Pacific flyway; however, given the small area of the site, lack of native habitats and levels of

disturbance, there is no potential for significant impacts to the Pacific flyaway. The Project site is developed and is adjacent to developed areas that do not contribute to wildlife movement. Therefore, the Project would not substantially interfere with an established migratory wildlife corridor. Additionally, MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in Code of Federal Regulations Title 50 Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. Moreover, California Department of Fish and Game Code Sections 3505, 3503.5, and 3800 prohibit the take, possession, or destruction of birds, their nests or eggs. The Project would be required to comply with existing laws including but not limited to MBTA and California Department of Fish and Game Code Sections 3505, 3503.5, and 3800. Therefore, no impact would occur, and mitigation is not required.

The Project has no area designated or recognized as wildlife nurseries, rookeries, or maternal bat roosts. Therefore, the Project would not impede the use of native wildlife nursery sites. No impact would occur and mitigation is not required.

Threshold e:	***Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

On April 18, 2022, the City of Los Alamitos adopted a Parkway Tree Master Plan as part of its Urban Forest Program. This plan addresses City parkway trees. There are currently no parkway trees along the Project's frontage. The Project would not result in an impact to the City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur and mitigation is not required.

Threshold f:	***Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The Project site is not subject to any Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans. No impact would occur and mitigation is not required.

4.3.7 Cumulative Impact Analysis

As stated in CEQA Guidelines Section 15130(a)(1), "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts". The phrase "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project.

A. Special Status Species

The Project site does not contain any special-status plant species nor does the site have the potential to support such species. Therefore, the Project would not impact any special-status plant and, thus, the Project would have no potential to contribute to a cumulative impact to special-status plant species.

The Project site currently supports approximately just over four acres of open field, previously consisting of maintained turf, that may be used occasionally by raptor species for foraging. Nevertheless, the site does not constitute regionally important foraging habitat for raptors, given the large range (a few to many squire miles depending on the species) required by raptors and limited size of the potential foraging area. Thus, the loss of the approximate four acres of potential foraging raptor habitat would not be a significant impact. Additionally, the adjacent and surrounding areas to the Project site including Arbor Park, Navy golf course, Old Ranch Country Club, JFTB and the Seal Beach Naval Weapons Station provide larger (approximately over 5,000 acres combined nearly all of which is undeveloped and includes agricultural lands and wetland habitats) and generally better quality raptor foraging habitat associated with lack of developed areas.

The Project site and surrounding areas consist of mostly developed lands. The Project site is developed and is adjacent to residential and other urban developed areas. An approximately 100-acre solar farm is currently under construction within the JFTB. Although undeveloped land, the site for the solar farm on the JFTB is disturbed with limited habitat capacity or potential. Other future developments relevant to this analysis and within the area, depicted on Figure 4.0-1, *Cumulative Location Development Map*, include LA 1-4 in Los Alamitos, GG 1-4 in Garden Grove, and SB 1-7 in Seal Beach. These projects are already developed or are proposed for redevelopment and are part of the existing built environment.

Two sensitive (State watch list) animal species, Cooper's hawk and wintering merlin were detected onsite but would not be subject to significant impacts. No sensitive plant species or sensitive habitats were detected onsite. Two CDFW special-status bat species, the western red bat and western yellow bat were detected acoustically offsite within the Navy golf course but did not roost onsite based on focused emergent surveys on the project site. The Project would not result in an impact to special-status bat species on and project-specific or cumulative level, because the Project site supports limited potential roosting habitat onsite for these two species, the Project will incorporate larger sized box tree species as a project design feature (including the western sycamore and cottonwood trees) that foliage specialist bats prefer and will plant the trees on the fringes of the development adjacent to current open space areas.

One CDFW special-status bird species, the Vermilion flycatcher was not detected on site, but is known to breed adjacent to the Project site and environs. The Project will incorporate larger sized box tree species (including the western sycamore) as a project design feature and will plant these trees on the fringes of the development, adjacent to Arbor Park and the Navy golf course (PDF B-1). Additionally, as shown in Figure 3-18, *Landscape Plan*, and pursuant to PDF B-2, the Project will plant approximately 441 trees onsite (excluding shrubs and ground cover), including the western sycamore (*Platanus racemosa*), paperbark melaleuca (*Melelauca quinquenervia*), olive (*Olive sp.*), southern magnolia (*Magnolia grandiflora*), Crape myrtle (*Lagerstroemia indica*), Brisbane box (*Lophostemon confertus*), Australian willow (*Geijera parviflora*), Italian cypress (*Cupressus sempervirens*), yew pine (*Podocarpus macrophyllus*) and other species. When mature, these tree species are expected to provide nesting habitat for numerous nesting bird species, with some potential for the Vermilion flycatcher. Therefore, with the above-mentioned project design features incorporated, no cumulative impacts to these species would occur.

Additionally, other developments would be subjected to regulations related to biological resources such as MBTA, California Fish and Game Codes, CESA, Clean Water Act, and other statutes that protect biological resources.

Given the surrounding built environment, the fact that unbuilt nearby properties include better habitat for species located in the area, the Project would not result in any significant impacts to biological resources, and redevelopment would occur on an already built site; the Project would not result in a cumulative impact to biological resource, nor would any incremental effect of the Project be cumulatively considerable.

B. Riparian Habitat

The Project would not impact any riparian or sensitive natural communities; therefore, there is no potential for the Project to contribute to a cumulatively considerable impact to these resources.

C. Wetlands

The Project would not impact any State-protected or federally-protected wetlands. Accordingly, the Project has no potential to contribute to a cumulatively considerable impact to State or federally protected wetlands.

D. Wildlife Corridor

The Project would remove ornamental trees on site that have the potential to support nesting birds protected by federal and State regulations. The Project would not result in the removal of trees off-site or in the surrounding area and would therefore not cumulatively contribute to impacts to nesting birds. Additionally, related projects are required to comply with the MBTA (Mitigation Measure 4.3-2), which protects nesting birds. Therefore, the Project would not result in a cumulatively considerable impact to nesting birds.

E. Tree Preservation Ordinance

The Project would not conflict with any local policies or ordinances protecting biological resources. Other development projects in the cumulative study area would be required to comply with applicable local policies and/or ordinances related to the protection of biological resources as a standard condition of review/approval. Because the Project and cumulative development would be prohibited from violating applicable, local policies or ordinances related to the protection of biological resources, a cumulatively considerable impact would not occur.

F. Habitat Conservation Plan

The Project site is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Because there is no conservation plan applicable to the Project impact area, there is no potential for the Project to contribute to the violation of a conservation plan. No cumulative impact would occur.

4.3.8 Significance of Impacts Before Mitigation

Threshold a: Potentially Significant Direct Impact. No special-status plants were detected on the Project site. However, the Project does provide limited suitable habitat for nesting birds and common raptor species. Construction activities have the potential to adversely impact nesting birds and raptors and roosting bats. Potentially significant impacts could occur.

Threshold b: No Impact. The Project site contains no 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 would occur.

Threshold c: No Impact. No State- or federally-protected wetlands are located on the Project Site; therefore, no impact to wetlands would occur.

Threshold d: Potentially Significant Direct Impact. The Project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31) and roosting bats including the western red bat and the western yellow bat.

Threshold e: No Impact. The Project is not expected to impact City parkway trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impact would occur.

Threshold f: No Impact. The Project site is not subject to any Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans. Therefore, no impact would occur.

4.3.9 Mitigation

The following mitigation measures would address the potential for Project construction to impact nesting birds, including migratory species and bats.

MM 4.3-1 Vegetation clearing should be conducted outside of the nesting season (February 1 through September 15). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a pre-construction nesting bird survey within three days prior to any disturbance to the Project site. Site disturbance includes disking, demolition activities, vegetation removal and grading. If active nests are identified, the biologist shall establish appropriate avoidance buffers around the nest (based on the species detected), and the buffer areas shall be avoided until the nests are no longer occupied (through routine nest monitoring by the qualified biologist) and the juvenile birds can survive independently from their nest(s). In addition, if portions of the Project site have not been disturbed within three days after the initial nesting bird survey, additional nesting bird surveys will be conducted (within the nesting bird season, February 1 to September 15) until all portions of the Project site have been disturbed

appropriately (as determined by a qualified biologist) as to not provide potential nesting habitat.

MM 4.3-2 If tree removal or ground disturbance occurs during the raptor nesting season (from approximately January 1 to July 31), pre-removal/disturbance surveys shall be conducted by a qualified biologist. The surveys shall include areas of suitable nesting trees within 300-feet from the limits of disturbance (to the extent that access is available). The survey shall be conducted no more than three days prior to disturbance. Should nesting raptors be detected either onsite or offsite, work would be delayed until fledglings have left the nest and area no longer dependent on the nest at which time, work could proceed.

MM 4.3-3 A qualified biologist shall conduct a pre-construction bat roost survey for roosting bats no more than 14 days prior to site disturbance. The pre-construction bat roost survey will consist of a minimum of two bat surveys (conducted consecutively or as determined by the biologist). If roosting bats are detected onsite outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. This may include using mechanical equipment to gently nudge the tree trunk multiple times prior to removal or for palm trees and other species, to de-frond or de-branch the tree using a mechanical lift and gently lower the cut fronds or branches to the ground. Regardless of the method, the fallen tree and/or material will be left undisturbed overnight until at least the next morning to give roosting bats time to exit before site disturbance.

If roosting bats are detected onsite during the maternity season, the Project shall avoid the subject roost(s) and incorporate an avoidance buffer (as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. Once the qualified biologist approves removal of the subject roost tree(s), the same tree removal procedures as outlined above shall be implemented prior to tree removal.

4.3.10 Significant of Impacts After Mitigation

Threshold a: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 would ensure that pre-construction surveys are conducted for nesting birds, nesting raptors, and bat roosts prior to site disturbance. If nesting birds or raptors are present on the Project site, mitigation requires avoidance of active nests. With implementation of the required mitigation, potential impacts to nesting birds and common raptors would be reduced to below a level of significance.

If roosting bats are detected on site outside of the bat maternity season, the roost tree will be removed in a manner to avoid and/or minimize injury to roosting bats. If roosting bats are detected onsite during the maternity season, the Project will avoid the subject roost(s) and incorporate an avoidance buffer

(as determined by a qualified biologist) until after the maternity season or until a qualified biologist determines no maternity roosting is occurring. With implementation of the required mitigation, potential direct and cumulatively considerable impacts to bats would be reduced to below a level of significance.

Threshold d: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.3-1 would ensure that pre-construction surveys are conducted for nesting birds protected by State and federal regulations if vegetation is removed from the Project site during the breeding season. If nesting birds are present on the Project site, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential impacts to nesting birds protected by State and federal regulations would be reduced to below a level of significance.

4.4 CULTURAL RESOURCES

The analysis in this Subsection is based on the cultural resources report prepared for the Project by BFSA Environmental Services, a Perennial Company (hereinafter, "BFSA") and titled "Phase I Cultural Resources Study for the 4665 Lampson Avenue Project," (Cultural Resources Study) dated April 7, 2023 (BFSA, 2023). This report is included as *Technical Appendix D1* to this EIR. In addition, a historical resources evaluation for the property was prepared by LSA Associates (hereinafter, "LSA") to evaluate the historical significance of the existing two-story, 88,000 sf commercial office building. The report is titled "Historical Resources Evaluation – Primary Record and Building, Structure, and Object Form for 4665 Lampson Avenue in Los Alamitos, Orange County, California" (Historic Resources Evaluation), dated December 1, 2022 (LSA, 2022), and is included as *Technical Appendix D2* to this EIR.

Confidential information has been redacted from *Technical Appendix D1* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the City, and BFSA is considered confidential in respect to places that may have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archaeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

4.4.1 EXISTING CONDITIONS

A. Prehistoric and Protohistoric Resources

1. Regional Setting

The Project site is located within the Southern California region, specifically in Orange County. In northern San Diego, Orange, and Riverside counties, most researchers organize prehistory into the Paleo Indian, Archaic, and Late Prehistoric Periods and history into the Mission, Rancho, and American Settlement periods. The San Dieguito Complex, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex are the archaeological manifestations that have been used to describe the Archaic and Late Prehistoric periods in the region. These cultural periods are summarized briefly below. Refer to *Technical Appendix D1* for a more detailed discussion about the prehistoric cultural periods in Orange County (BFSA, 2023).

- Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 years before the present [YBP]): The San Dieguito Complex/Paleo Indian Period is associated with the terminus of the late Pleistocene (11,500 to 9,000 years before the present [YBP]). The term "San Dieguito Complex" is a cultural distinction used to describe a group of people that occupied sites in the region between 11,500 and 7,000 YBP. Initially believed to have been big game hunters, the San Dieguito are better typified as wide-ranging hunter/gatherers. Diagnostic San Dieguito artifacts include finely crafted scraper planes, choppers, scrapers, crescentics, elongated bifacial knives, and intricate leaf-shaped points.

- Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP): The Archaic Period begins with the onset of the Holocene around 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change throughout North America. In Southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and rising sea levels. The warming trend and rising sea levels generally continued until the late Holocene. Archaeological research indicates that southern California was occupied between 9,000 and 1,300 YBP by a population(s) that utilized a wide range of both marine and terrestrial resources. A number of different archaeological manifestations based upon geographical setting, tool kit, and/or chronology are recognized during the Archaic Period, including the Milling Stone Horizon and San Dieguito, La Jolla, Encinitas, and Pauma complexes. Archaic sites generally contain milling tools, especially manos and metates, cobble and flake tools, dart projectile points and the concomitant use of the atlatl, crescents, shell, fish bone, and animal bone representing large and small game. Additionally, Archaic groups buried their dead as flex inhumations, a religious and cultural practice that is distinct from the succeeding Late Prehistoric groups.

- Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790): Late Prehistoric Period, sometimes referred to as San Luis Rey I and II, began approximately 1,300 YBP. Cremation, ceramics, the bow and arrow, small triangular points, the use of Obsidian Butte obsidian, and the reliance upon the acorn as a main food staple are the defining characteristics of the Late Prehistoric Period. These characteristics are thought to represent the movement of Shoshonean speaking groups into northern San Diego, Orange, Riverside, and Los Angeles counties. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, cremation of the dead, the use of shell-bead currency, and the appearance of more labor intensive, yet effective, milling technologies such as the bedrock mortar for use in acorn processing.

- Protohistoric Period (Late Holocene: 1790 to Present): This period begins with the Hispanic intrusion into southern California and the founding of the Mission San Juan Capistrano near what is currently the Lake Forest area in 1776. Ethnohistorical and ethnographic evidence indicates that three Shoshonean-speaking groups that occupied the southern and eastern portions of Orange County were the Luiseño, Gabrielino, and Acjachemen (Juaneño), each of which is culturally similar but that possess slight dialectic differences. The Luiseño, Gabrielino, and Juaneño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. For the remainder of the year, most would remain at the village sites, where food resources were within a day's travel.

- Ethnohistoric Period: The historic period began on July 16, 1769, when the first Spanish exploring party commanded by Gaspar de Portolá arrived in San Diego to secure California for the Spanish Missions were constructed from San Diego to as far north as San Francisco. Mission San Juan Capistrano, located near the present Lake Forest area, exerted much influence over the Acjachemen (Juaneño), who either adapted to mission life, rebelled and ran away, or died from European diseases. As increasing numbers of Spanish and Mexican people, and the later Americans during the Gold Rush, settled in the area, the Native populations diminished as they were displaced or decimated by disease.

  The Rancho Period represents the time between 1821 and 1848. By 1821, Mexico had gained independence from Spain and the northern territories were subject to political repercussions. By 1834, all of the mission lands had been removed from the control of the Franciscan Order under the Acts of Secularization. Numerous Mexican land tracts, or rancheros, were established throughout coastal and interior California. California was invaded by United States troops during the Mexican-American War of 1846 to 1848.

  In 1848, the Treaty of Guadalupe Hidalgo granted sovereignty over Alta California, New Mexico, and Arizona to the United States, which began the American Settlement Period. The new colonial order soon seized power in California with disastrous results for the native people. Conflicts between the Native Americans and the intruding white colonists led to the establishment of reservations for some villages by executive order.

  The cattle ranchers of the "counties" of southern California prospered during the cattle boom of the early 1850s. Raising cattle soon declined, however, contributing to the expansion of agriculture. The completion of the transcontinental railroad in 1869 encouraged developers, land speculators, and colonists to invest and live in southern California. Orange County's economy changed from stock raising to farming, and growing grain or citrus crops replaced the raising of cattle in many of the county's inland valleys.

2. Project Site Conditions

BFSA conducted an intensive pedestrian survey on May 26, 2022. The property includes a vacant commercial building, associated hardscape and landscaping, and a graded area east of the building, and the entire property appears to have been previously rough-graded. A boat storage area that is fenced off and a shipping container are located in the northwest corner of the property. The survey did not identify any archaeological resources within the property.

The archaeological investigation of the Project also included the review of an archaeological records search from the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project boundaries or in the immediate vicinity. BFSA also requested a Sacred Lands File (SLF) review by the Native American Heritage Commission (NAHC).

The results of the records search indicated that 12 cultural resources have been recorded within one mile of the Project site, one of which, Site P-30176854, the historic Navy Golf Course, Seal Beach, includes the Project site. Site P-30-176854 consists of various buildings that were part of the Navy Golf Course facility constructed between 1967 and 1968. The golf course covers an area of approximately 175 acres, and the subject property is situated at the southern limits of the old golf course. Eight additional historic sites were identified and mostly include military structures associated with the nearby United States Naval Weapons Station at Seal Beach. The remaining three resources are prehistoric shell scatters.

The records search results also indicated that 33 cultural resource studies have been conducted within a one-mile radius of the Project site, one of which includes a portion of the subject property. However, the study, conducted in 2011 was for the development of a T-Mobile cellular tower and included an extremely limited portion of the Project site. No resources were identified within the Project site as a result of that study.

B. Historical Resources

1. Regional Setting

The historic period in California is divided into three periods: Spanish/Mission Period (1769-1821), Mexican/Rancho Period (1821-1848), and the American Period (1848-Present). Each period had common goals of land gain, assimilation of the native population, and the attainment of wealth. These cultural periods are summarized briefly below. Refer to *Technical Appendix D2* for a more detailed discussion about the historic cultural periods in Orange County (LSA, 2022).

In 1784, during the Spanish/Mission Period, the subject property was part of a 300,000-acre land grant known as Los Nietos that was owned by Manuel Perez Nieto. After Nieto's death in 1804, the land was divided among his four surviving children and Juan Jose Nieto received the acres called Los Alamitos (approximately 28,000 acres), which include what would become the City of Los Alamitos. The Nieto grant/Rancho Los Alamitos changed hands numerous times during the Spanish and Mexican periods with Abel Stearns acquiring it in 1842. Eventually Stearns also acquired Rancho Los Coyotes and "built up the largest land and cattle empire in the area"

In 1848, Alta California came under control of the United States and in 1850 it was admitted to the Union. In the mid-1860s, Stearns lost a portion of his land to Michael Reese as part of a foreclosure. Reese eventually leased the land to the Bixbys, who used it to grow grain and raise sheep. In 1896, former Montana Senator William Clark bought approximately 8,150 acres of the land for raising sugar beets. He laid out the town of Los Alamitos, built the first sugar refinery in Southern California, and built housing and recreation facilities for workers; most of the land between the Santa Ana River and today's Lakewood was used for growing sugar beets. However, an insect infestation led to the death of the sugar beet industry, and in 1921 the refinery was leased for processing of dog food. After the 1933 earthquake, the old refinery was shut down and eventually demolished.

In 1941, after the attack on Pearl Harbor, the United States (U.S.) Navy moved its training field for aircraft from Terminal Island in Long Beach to a 1,300-acre tract in Los Alamitos. The Project site was within those 1,300 acres. In 1943, when it became an active-duty station, the name was changed from Naval Reserve Air Base Los Alamitos to Naval Air Station Los Alamitos. In the 1,300-acre tract that was commissioned, the Navy and Marine fliers were trained. When the war ended, the base continued to be used as a military training facility under control of the Navy. The presence of the air base reinvigorated the small town and attracted new businesses and settlers to the area. Many of the military personnel stayed in Los Alamitos, maintaining the tract housing development of the 1950s, and Los Alamitos became a charter city in 1960.

In February 1971, a news article stated that Los Alamitos City Councilmen viewed plans "for a $2.25 million educational research laboratory to be built on a 12-acre site at Los Alamitos Naval Air Station", which was aiming to close out all flight operations by July 1971. The two-story, 87,000 square-foot building would be paid for by the United States Department of Health, Education, and Welfare and would house the Southwest Regional Laboratory for Educational Research and Development, then located in Inglewood. The building was designed by Skidmore, Owings & Merrill (SOM) and Turner Construction Company was the construction manager. In 1972, when the subject building was constructed, the base was turned over to the California National Guard; today, the Joint Forces Training Base is currently used as a reserve training center for all branches of the military. The base and the subject property are within the city of Los Alamitos.

2. Architectural Context

The existing two-story 88,000 sf commercial office building features the Corporate International style. The Corporate International style, sometimes also called Corporate Modernism or Miesian International, gained popularity in Southern California generally between 1949 and 1975 and was most often applied to large-scale commercial office buildings and government facilities. The International style evolved mainly from the 1920s-1930s Bauhaus interdisciplinary design school in Germany and migrated to the U.S. with some of the German architects who relocated here during the Depression era. The style garnered interest in America around 1932 when the Museum of Modern Art featured a "Modern Architecture" exhibit highlighting buildings from around the world that shared a stark simplicity and vigorous functionalism. Henry Russell Hitchcock and Philip Johnson coined the term International Style in their catalog for the exhibit. The first major example of the style in the U.S. was the 1932 Philadelphia Savings Fund Society Building designed by George Howe and Swiss-born, William Lescaze. In Southern California, the first truly International style building was Columbia Square by Lescaze and E. T. Heitschmidt. However, the distinctive cadre of characteristics that defined the Corporate International style would not fully come to fruition until the period after the war, with early examples appearing in the late 1940s. The Corporate International style, then, represented an evolution of the earlier International style, adapted and modified to account for technological advances and evolving public sentiment and taste.

In the post-World War (WW) II years, two trends emerged, both based on philosophies associated with Bauhaus leaders Walter Gropius and Mies van der Rohe. The Gropius-influenced trend focused on

expressing the building's function and featured screen walls, steel frames, and external glass walls without interruption. The Miesian-influenced trend reflected a "less is more" aesthetic that typically followed one of three subtypes: glass curtain wall skyscrapers, glass and steel pavilions, or the modular office building.

The Corporate International style came of age in Southern California in the 1960s and 1970s, a time when many downtown areas were undergoing large-scale redevelopment efforts in an effort to replace depressed areas with a clean, modern aesthetic. These areas typically included a mix of commercial and government buildings and the Corporate International style "became the face of many major American companies" and civic centers that conveyed a sense of "bureaucratic diligence and monumentality". There are numerous outstanding examples of the style in Southern California and across the nation, many of which have been recognized as historically significant at the local, state, and national levels.

Character-defining features of the Corporate International style include:

- Simple geometric forms, often box-shaped;
- Constructed of concrete, steel, and glass;
- Flat roof without eaves;
- Balance and regularity, but not necessarily symmetry;
- Unadorned, smooth wall surfaces;
- Complete absence of ornamentation and decoration;
- Articulated ground story, often double-height and set back behind columns or pilotis; and
- Horizontal bands of flush, metal-framed windows, or curtain walls

3. Project Site Conditions

This approximately 12.3-acre Project site is currently developed with a vacant approximately two-story 88,000 sf commercial office building, surface parking lot, landscaped walkways, and a large, undeveloped field (east and north sides) in a campus-like setting. The building was constructed in 1972 as a research center for Southwest Regional Laboratory for Educational Research and Development.

The building was constructed in the Corporate International style, which is oriented to the south, has a rectangular plan with an off-center atrium that is not visible from the exterior. The roof is flat with no overhang and the exterior walls are composed of smooth concrete, glass, and metal with a horizontal emphasis. On the first and second floors, the south-facing façade features several pairs of large, fixed windows separated by slightly projecting, narrow, metal columns. The window arrangement creates the perception of two horizontal bands of glass extending the length of the building separated by several feet of smooth concrete. Near each end of the building on the ground level, there is an aluminum-framed glass entrance with double doors flanked by large, fixed windows. Each entrance is sheltered by a metal awning attached to the building wall. The pattern of paired windows and metal columns is repeated on the east and north elevations, but the east elevation has only one entrance with double doors and no awning and the north elevation has three double-door entrances, one single-door entrance,

and one metal awning. All of the doors have fixed transom windows. The west elevation maintains the same window pattern on the second floor, but on the ground level the windows are either covered (north and south ends) or have been removed to accommodate a projecting, one-story metal addition, a pedestrian ramp, a door, and a truck loading area with two bay doors. Other features include pebblestone, concrete, and asphalt walkways that encircle the building (with the exception of the loading area) and ornamental landscaping that, on the south side, includes small shrubs, grass, groundcover, and mature sycamore and liquid amber trees. There are several mature sycamore trees on the east and north sides as well.

4.4.2 Regulatory Framework

A. Federal

1. National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) was passed primarily to acknowledge the importance of protecting our nation's heritage. While Congress recognized that national goals for historic preservation could best be achieved by supporting the drive, enthusiasm, and wishes of local citizens and communities, it understood that the federal government must set an example through enlightened policies and practices. In the words of the Act, the federal government's role would be to "provide leadership" for preservation, "contribute to" and "give maximum encouragement" to preservation, and "foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony." (NPS, 2023a)

NHPA and related legislation sought a partnership among the federal government and the states that would capitalize on the strengths of each. The federal government, led by the National Park Service (NPS) provides funding assistance; basic technical knowledge and tools; and a broad national perspective on America's heritage. The states, through State Historic Preservation Officers (SHPOs) appointed by the governor of each state, would provide matching funds, a designated state office, and a statewide preservation program tailored to state and local needs and designed to support and promote state and local historic preservation interests and priorities. (NPS, 2023a)

An Advisory Council on Historic Preservation (ACHP), the first and only federal entity created solely to address historic preservation issues, was established as a cabinet-level body of Presidentially-appointed citizens, experts in the field, and federal, state, and local government representatives, to ensure that private citizens, local communities, and other concerned parties would have a forum for influencing federal policy, programs, and decisions as they impacted historic properties and their attendant values. (NPS, 2023a)

Section 106 of NHPA granted legal status to historic preservation in federal planning, decision-making, and project execution. Section 106 requires all federal agencies to take into account the effects of their actions on historic properties and provide ACHP with a reasonable opportunity to comment on those actions and the manner in which federal agencies are taking historic properties into account in their decisions. (NPS, 2023a)

A number of additional executive and legislative actions have been directed toward improving the ways in which all federal agencies manage historic properties and consider historic and cultural values in their planning and assistance. Executive Order 11593 (1971) and, later, Section 110 of NHPA (1980, amended 1992), provided the broadest of these mandates, giving federal agencies clear direction to identify and consider historic properties in federal and federally assisted actions. The National Historic Preservation Amendments of 1992 further clarified Section 110 and directed federal agencies to establish preservation programs commensurate with their missions and the effects of their authorized programs on historic properties. (NPS, 2023a)

2. National Register of Historic Places (NRHP)

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the NHPA of 1966, the NPS's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. (NPS, 2023a)

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance, as follows:

- Age and Integrity. Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?

- Significance. To be eligible for listing in the NRHP, a resource must meet at least one of the following criteria: A. It is associated with events that have made a significant contribution to the broad patterns of our history; B. It is associated with the lives of persons significant in our past; C. It embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; D. It has yielded, or may be likely to yield, information important in history or prehistory. (NPS, 2023a)

Nominations can be submitted to a SHPO from property owners, historical societies, preservation organizations, governmental agencies, and other individuals or groups. The SHPO notifies affected property owners and local governments and solicits public comment. If the owner (or a majority of owners for a district nomination) objects, the property cannot be listed but may be forwarded to the NPS for a Determination of Eligibility (DOE). Listing in the NRHP provides formal recognition of a property's historical, architectural, or archaeological significance based on national standards used by every state. (NPS, 2023a)

Under Federal Law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives Federal assistance, usually in the form of funding or licensing/permitting. National Register listing does not lead to public acquisition or require public access. (NPS, 2023a)

3. National Historic Landmarks Program

National Historic Landmarks (NHLs) are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, over 2,600 historic places bear this national distinction. Working with citizens throughout the nation, the NHL Program draws upon the expertise of NPS staff who guide the nomination process for new Landmarks and provide assistance to existing Landmarks. (NPS, 2022)

4. Native American Graves Protection and Repatriation Act (NAGPRA)

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation. (NPS, 2023c)

One major purpose of this statute is to require that federal agencies and museums receiving Federal funds inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies and museums must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. Once lineal descent or cultural affiliation has been established, and in some cases the right of possession also has been demonstrated, lineal descendants, affiliated Indian Tribes, or affiliated Native Hawaiian organizations normally make the final determination about the disposition of cultural items. Disposition may take many forms from reburial to long term curation, according to the wishes of the lineal descendent(s) or culturally affiliated Tribe(s). (NPS, 2023c)

The second major purpose of the statute is to provide greater protection for Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on Federal and tribal lands. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archaeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on Federal or tribal lands. Excavation or removal of any such items also must be done under procedures required by the Archaeological Resources Protection Act. This NAGPRA requirement is likely to encourage the in-situ preservation of archaeological sites, or at least the portions of them that contain burials or other kinds of cultural items. (NPS, 2023c)

Other provisions of NAGPRA: (1) illegal trafficking in human remains and cultural items may result in criminal penalties; (2) authorizes the Secretary of the Interior to administer a grants program to assist museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; authorizes the Secretary of the Interior to penalize museums that fail

to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with this Review Committee. (NPS, 2023c)

B. State

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (NPS, n.d.)

2. California Code of Regulations Title 14, Section 1427

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (NPS, n.d.)

3. California Register of Historic Resources

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archaeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. (OHP, n.d.)

The California Register of Historical Resources (CRHR) consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The CRHR automatically includes the following:

- California properties listed in the NRHP and those formally Determined Eligible for the NRHP.
- California Registered Historical Landmarks from No. 0770 onward.
- California Points of Historical Interest that have been evaluated by the Office of Historic Preservation (OHP) and have been recommended to the State Historical Resources Commission for inclusion on the CRHR.

The criteria for eligibility of listing in the CRHR are based on the NRHP criteria. To be eligible for listing in the CRHR, a property must be at least 50 years of age and possess significance at the local, state, or national level under one or more of four criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).

- It is associated with the lives of persons important to local, California or national history (Criterion 2).
- It embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).

- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4). (OHP, n.d.)

Historical resources eligible for listing in the CRHR may include buildings, sites, structures, objects, and historic districts. Resources less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand their historical importance. Although the enabling legislation for the CRHR is less rigorous with regard to the issue of integrity, properties are expected to reflect their appearance during their period of significance, as stated in Public Resources Code Section 4852.

The CRHR may also include properties identified during historical resource surveys. However, in accordance with Public Resources Code Section 5024.1, the survey must meet all of the following criteria:

- The survey has been or will be included in the State Historical Resources Inventory.

- The survey and the survey documentation were prepared in accordance with OHP procedures and requirements.

- The resource is evaluated and determined by OHP to have a significance rating of Category 1 to 5 on a Department of Parks and Recreation (DPR) Form 523.

If the survey is five or more years old at the time of the resource's nomination for the CRHR, the survey is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource. (OHP, n.d.)

4. California Public Resources Code

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

- **California Public Resources Code 5020–5029.5** 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 the designation of State Historical Landmarks and Historical Points of Interest.

- **California Public Resources Code 5079–5079.65** defines the functions and duties of the OHP. The OHP is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.

- **California Public Resources Code 5097.5** prohibits a person from moving, destroying, injuring, or defacing, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

- **California Public Resources Code 5097.9–5097.991** provides protection to Native American historical and cultural resources, and sacred sites and identifies the powers and duties of the Native American Heritage Commission. It also requires notification of discoveries of Native American human remains to descendants and provides for treatment and disposition of human remains and associated grave goods.

5. State Health and Safety Code

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery…" until the coroner can determine the circumstances regarding the manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from "internment or a place of storage while awaiting internment" with the intent to sell them or to dissect them with "malice or wantonness" is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that "all California Indian human remains and cultural items are to be treated with dignity and respect." It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (OHP, n.d.)

6. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural Resources under CEQA are defined in CEQA Guidelines § 15064.5, as follows:

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:*
    - *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
    - *Is associated with the 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.*
- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

C. Local

1. City of Los Alamitos General Plan

The City of Los Alamitos General Plan identifies goals and policies related to cultural resources in the Open Space, Recreation, and Conservation Element. These goals and policies and a discussion of the Project's consistency with those goals and policies is provided in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Section 4.10, *Land Use and Planning*.

4.4.3 METHODOLOGY

The analysis of pre/protohistoric archaeological resources is based on a cultural resources records search through SCCIC at CSU Fullerton, historic background research, a review of historic aerial photographs, and a survey of the Project site. Additionally, a SLF search was requested from the NAHC, which did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the Project site (see *Technical Appendix D1*).

The analysis of historical resources is based on research and an intensive-level field survey. The evaluation was documented on Department of Parks and Recreation (DPR) 523A (Primary Record) and 523B (Building, Structure, and Object Record) forms, and the property was identified on a DPR Location Map (see *Technical Appendix D2*).

4.4.4 BASIS FOR DETERMINING SIGNIFICANCE

Section V of Appendix G to the CEQA Guidelines addresses typical adverse effects to cultural resources, and includes the following threshold questions to evaluate the Project's impacts on cultural resources (OPR, 2022):

- *Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5;*
- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;*
- *Disturb any human remains, including those interred outside of formal cemeteries.*

4.4.5 IMPACT ANALYSIS

Threshold a: ***Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?***

Under CEQA, a project has a significant impact on a historical resource if it "would result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resources would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1)). A resource is "historically significant" if it meets the criteria for listing on the CRHR.

A. Temporary Construction-Related Activities

Implementation of the Project would require demolition of all structures that are located on the Project site under existing conditions. Because the existing building on site was constructed in 1972, a historical resources evaluation was prepared by LSA to determine the historical significance of the property based on CRHR criteria.

Criterion 1: Is it associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States?

The Southwest Regional Laboratory was part of a post-WWII shift by the federal government to actively support R&D but was not at the forefront of this trend and does not appear to have made any significant contributions to it. Although the 1972 building was the first non-campus facility constructed solely for educational research and development in the nation, no evidence was found that it started a trend for off-campus facilities or that such a trend would be an important historical event. The project also used an experimental fast-tracking construction process that was intended to be a model for future similar projects, but no evidence was found that this model was employed in subsequent similar projects. For these reasons, the building is not significant under this criterion.

Criterion 2: Is it associated with the lives of persons important to local, California, or national history?

No evidence was found indicating that the building is directly associated with the lives of any person or persons important to local, State, or national history. It is not significant under this criterion.

Criterion 3: Does it embody the distinctive characteristics of a type, period, region, or method or construction, or represent the work of a master, or possess high artistic values?

The existing building retains a high degree of integrity and embodies many of the characteristics of the Corporate International style such as the boxy form, flat roof with no eave, smooth exterior wall surfaces lacking ornamentation and decoration, and the flush metal-framed windows arranged in horizontal bands. It is a nice example of a comparatively modest Corporate International style building, but it does not express the design concepts of the Corporate International style more fully than the many other buildings of its type. Because of the prevalence of outstanding examples of the style, the Southwest Regional Laboratory building does not rise to a level beyond the ordinary. Although it was designed by the master architectural firm SOM, it is not one of the best or most representative examples of the firm's highly awarded work. SOM is credited with solidifying the aesthetic of the Corporate International style. The firm, which has won over 1,700 awards, is especially known for their Corporate International style skyscrapers. Noteworthy historic-period buildings by SOM include the Manhattan House (1951), the National Register-listed Lever House (1952), Inland Steel building (1956), One Chase Manhattan Plaza (1961), One Wilshire (1966), John Hancock Center (1969), and Willis Tower (1973). The design and scale of the Southwest Regional Laboratory building does not reach the same level of exceptionalism as these buildings or many others designed by SOM and the firm does not list the Southwest Regional Laboratory building among its many noteworthy and influential designs. The building does not possess high artistic values because it does not express the design concepts of the Corporate International style more fully than other buildings of its type. For these reasons, it is not significant under this criterion.

Criterion 4: Has it yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation?

This building was constructed in 1972 using common methods and materials and is unlikely to yield any important information to the history of the local area, California, or the nation. It is not significant under this criterion.

Summary

The existing building is not eligible for listing in the CRHR under any criteria and therefore does not qualify as a historical resource as defined by CEQA. No evidence was found that the property has any important associations with significant historical trends, events, or people, and it does not appear to have the potential to yield important historical information. Although it retains a high degree of architectural integrity and was designed by the master architectural firm SOM, it is not a particularly distinctive example of the Corporate International style or an important example of SOM's work. Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource. No impacts would occur and no mitigation is required.

Threshold b: ***Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?***

The Project site is currently developed. The site was subject to construction and ground-disturbing activities similar to that which would occur under the Project.

A. Temporary Construction-Related Activities

As stated previously, BFSA conducted a cultural resources inventory of the Project site, which included a records search through the SCCIC at CSU Fullerton and an intensive pedestrian survey of the site. The survey did not identify any archaeological resources within the property. The Project site is located in an area of Orange County and the City of Los Alamitos that reflects very few recorded cultural resources, due to past agricultural uses and subsequent commercial and residential developments. Most of the recorded resources in the area are associated with historic development of the region.

Given the highly disturbed condition of the Project site and its surroundings, the potential for the Project's construction activities to affect an unidentified archaeological resource is considered low. However, while unlikely, the presence of previously undiscovered subsurface archaeological resources on the Project site remains possible during grading activities in native soils (e.g. previously undisturbed soils due to deeper excavation). The Project would result in grading to depths of 5 feet below existing grades with deeper excavations (8 to 10 feet) for underground utilities or localized removals. The depth of grading for the existing building and improvements are unknown. Conservatively, this impact would be potentially significant before implementation of mitigation.

Threshold c: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

A. Temporary Construction-Related Activities

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity (Google Earth, n.d.). Nevertheless, the limited potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 "Disturbance of Human Remains." According to Section 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code Section 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

Given prior ground disturbances at the site, the likelihood of discovering human remains is low. In the unlikely event that human remains are discovered, disturbance would result in a significant impact. Conservatively, this impact would be potentially significant before implementation of mitigation.

4.4.6 Cumulative Impact Analysis

The potential for implementation of the Project to contribute to cumulative impacts to historical resources was analyzed in conjunction with other projects located in the immediate vicinity of the Project site. The Project site does not contain historical resources, and there are no related projects in the immediate vicinity that would have an effect on historical resources. Therefore, implementation of the Project has no potential to contribute towards a cumulative impact to significant historical sites and/or resources.

As discussed, implementation of the Project would not impact any known archaeological resources and the likelihood of uncovering previously unknown archaeological resources during Project

construction are low due to past grading activities associated with the existing development. Impacts to previously undiscovered subsurface archeological resources are typically site specific from ground disturbing activities at the site and generally do not combine to result in cumulative impacts unless resources are identified immediately adjacent to the Project site. Nonetheless, the potential exists that a significant archaeological resource could be discovered during grading into native soils. There are no related projects in the vicinity that would affect archaeological resources. It should be noted that site-specific archeological resource investigations would be required for other projects before the City would permit ground disturbances or demolition or substantial alteration of existing structures. Such investigations would include some degree of surface-level surveying and identify resources on the affected project sites that are or appear to be eligible for listing on the national or state registers for historic resources. Such investigations would also recommend mitigation measures to protect and preserve cultural resources. Therefore, cumulative impacts to archaeological resources would be less than significant.

Mandatory compliance with the provisions of California Health and Safety Code Section 7050.5 as well as Public Resources Code Section 5097 et seq., would assure that all future development projects within the region treat human remains that may be uncovered during development activities in accordance with prescribed, respectful and appropriate practices, thereby avoiding significant cumulative impacts.

4.4.7 Significance of Impacts Before Mitigation

Threshold a: No Impact. The existing on-site building does not qualify as a historical resource defined by the CEQA and no impact would occur with regard to built environment historical resources. The Project would not cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5. No impacts would occur and no mitigation is required.

Threshold b: Potentially Significant Impact. No known archaeological resources are present on the Project site. Nonetheless, the potential exists for Project-related construction activities to result in a direct impact to significant subsurface archaeological resources should such resources be discovered during Project-related construction activities. Impacts would be potentially significant and therefore require mitigation.

Threshold c: Potentially Significant Impact. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, disturbance of the remains would result in a significant impact and therefore require mitigation.

4.4.8 Mitigation

The following mitigation measure addresses the potential for Project construction to impact significant archaeological resources that may be present beneath the Project site and that may be discovered during ground-disturbing activities.

MM 4.4-1 Discovery of Inadvertent Resources. Prior to the issuance of any grading permits, the Project Applicant/Developer shall submit proof that a qualified consulting archaeologist meeting the Secretary of Interior's (36 CFR 61) Professional Qualifications Standards has been retained to conduct periodic spot checks during ground disturbing activities. Spot check should occur at initial ground exposure within the project; upon a 50 percent completion milestone of ground disturbance; upon an 80 percent milestone of ground disturbance; or at any other time determined necessary by the consulting archaeologist. If any potentially historic or archaeological resources are encountered during ground-disturbing activities, the archaeologist shall halt construction work within 50 feet of the find and assess the nature of the find for importance.

a. If the discovery is determined to not be important by the archaeologist (e.g. isolates and clearly non-significant deposits), work will be permitted to continue in the area. If a find is determined to be potentially important by the archaeologist, the Lead Agency shall be notified, and additional investigation by the archaeologist would be required. Additional investigation work would include scientific recordation and excavation.

b. At the conclusion of ground disturbing activities, the archaeologist shall draft a report detailing the monitoring process and summarize any additional field study and analysis of resources, should any be discovered. The completed report shall be approved by the Planning Department prior to the issuance of an occupancy permit.

c. Excavated finds shall be curated at a repository determined by the archaeologist and approved by the City with verification of curation provided to the City prior to the issuance of an occupancy permit.

MM 4.4-2 Discovery of Human Remains. If human burial or skeletal remains are identified during excavation or construction, work in that location shall stop immediately until the find can be properly treated. The construction contractor would be required by law to comply with California Health and Safety Code Section 7050.5 “Disturbance of Human Remains.” The County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Once the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the Site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make

recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

4.4.9 Significance of Impacts After Mitigation

Threshold b: Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.4-1 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with implementation of the Project. With implementation of the required mitigation, the Project's potential impacts to archaeological resources would be reduced to less than significant.

Threshold c: Less-than-Significant Impact with Mitigation Incorporated. Mitigation Measure 4.4-2 will ensure mandatory compliance with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Mandatory compliance with State law would ensure that any discovered human remains are appropriately treated and any potential impacts to human remains, including human remains of Native American ancestry, that may result from development of the Project would be reduced to less than significant.

4.5 ENERGY

The analysis in this section is primarily based on a technical report prepared by Urban Crossroads titled *Energy Analysis*, dated May 12, 2023, and is included as *Technical Appendix E* to this EIR (Urban Crossroads, 2023c). Refer to Section 8.0, *References*, for a complete list of reference sources.

4.5.1 EXISTING CONDITIONS

A. Electricity Consumption

The Project site is located within the service area of Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2018 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers. Under existing conditions, the Project site is developed with a vacant two-story, 88,000 square foot commercial office building and surface parking lot while the remainder of the site consists of open space.

B. Natural Gas Consumption

The Project site is located within the service area of the Southern California Gas Company (SoCalGas) which is regulated by the California Public Utilities Commission (CPUC). Based on information provided by the Project Applicant, no natural gas would be used as a result of the Project and as such, use of natural gas is not considered in this analysis.

C. Transportation Energy/Fuel Consumption

Gasoline (and other vehicle fuels) are commercially provided commodities and are available to the Project patrons and employees via commercial outlets. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California, and those vehicles consume an estimated 17.2 billion gallons of fuel each year.

4.5.2 REGULATORY FRAMEWORK

A. Federal

1. Intermodal Surface Transportation Efficiency Act (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. The applicable MPO

for the City of Los Alamitos is the Southern California Association of Governments (SCAG). SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the applicable planning document for the area. (FHWA, 2020)

2. The Transportation Equity Act for the 21st Century (TEA-21)

TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3. Federal Energy Independence And Security Act Of 2007 (EISA)

On December 19, 2007 President Bush signed the Energy Independence and Security Act of 2007 (EISA) which reinforces energy reductions put forth in Executive Order 13423 as well as introduces more aggressive requirements. The three enacted provisions are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard and the Appliance/Lighting Efficiency Standards. Additionally, the EISA aims to move the United States towards greater energy independence and energy security, improving the Federal Governments energy performance, increase the production rate of renewable fuels and efficiency of vehicles, products and buildings, and promote research on greenhouse gas capture and storage options.

B. State

1. Integrated Energy Policy Report (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR). (CEC, 2023)

The 2022 IEPR was adopted February 2023, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2022 IEPR introduces a new framework for embedding equity and environmental justice at the CEC and the California Energy Planning Library which allows for easier access to energy data and analytics for a wide range of users.

Additionally, energy reliability, western electricity integration, gasoline cost factors and price spikes, the role of hydrogen in California's clean energy future, fossil gas transition and distributed energy resources are topics discussed within the 2022 IEPR (CEC, 2023)

2. State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3. California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that will be effective on January 1, 2023. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. (CEC, 2022)

4. California Renewable Portfolio Standards (RPS)

The CEC implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to a 50% renewable resources target by December 31, 2026, and to a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California

Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and California Air Resources Board (CARB) to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal. (CEC, n.d.)

5. Pavley Fuel Efficiency Standards (AB 1493)

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

6. Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions: (CA Legislative Info, n.d.)

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.

- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the CPUC, the CEC, and local publicly owned utilities.

- Reorganize the Independent System Operator (ISO) to develop more regional electric transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

C. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals and policies related to energy resources in the Open Space, Recreation, and Conservation Element. The following goals and policies from the Open Space, Recreation, and Conservation Element applicable to the Project include:

- **Goal 4: Air, water, and energy resources that are protected from pollution and overuse.**

    - Policy 4.4: **Low and zero emission vehicles**. Support development of private and public parking infrastructure facilitating the use of alternative fuel vehicles.

    - Policy 4.5: **Energy and water conservation**. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the City's zoning ordinance and the California Building Code.

    - Policy 4.9: **Renewable Energy.** Promote the use of renewable energy sources to serve public and private sector development.

4.5.3 Methodology

The impact analysis provided in Subsection 4.5 contains an evaluation of the Project's potential impacts on energy consumption. The analysis presented herein details the energy demand associated with Project-related construction equipment, transportation energy demands, and operational energy demands and efficient use of energy as required by CEQA Guidelines Appendix F.

In order to calculate Project energy demands, information from the CalEEMod Version 2022.1 outputs for the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) was utilized to provide Project-related construction equipment, transportation energy demands, and operational energy demands. Outputs from the annual model runs are provided in Appendices 4.1 through 4.2 of the Project's Energy Analysis (see *Technical Appendix E* to this EIR). Additionally, CARB's Emissions Factor Model (EMFAC) 2021 was used to calculate emission rates, fuel consumption, VMT for each vehicle class during construction and operational activities. For purposes of analysis, the 2024 through 2027 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Outputs from the EMFAC2021 model run is provided in Appendix 4.3 (*Technical Appendix E* to this EIR).

4.5.4 Basis for Determining Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the CEQA Guidelines. Therefore, significance determinations utilized in this section are from Appendix G and Appendix F of the CEQA Guidelines.

According to Section VI of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to energy if the Project or any Project-related component would (OPR, 2022):

- *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;*

- *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

According to Appendix F to the CEQA Guidelines, an EIR should consider potentially significant energy impacts of a project caused by wasteful, inefficient, or unnecessary consumption of energy, and the wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, that may result in a significant environmental impact. Appendix F(II) lists possible energy impacts and potential conservation measures that should be considered in an EIR when they are "applicable or relevant to the project" and the impacts are "potentially significant."

The following factors identified in Appendix F are relevant to this Project and have been evaluated below in the context of whether the Project would result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.

3. The effects of the project on peak and base period demands for electricity and other forms of energy.

4. The degree to which the project complies with existing energy standards.

5. The effects of the project on energy resources.

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

4.5.5 Project Design Features

The Project includes the following Project Design Features (PDFs) that serve to reduce the Project's impacts.

PDF GHG-1 The Project will include solar photovoltaic panels with the capability to generate up to 1,229,520 kWh/annually.

PDF GHG-2 The Project will be 100% electric and will not include natural gas.

PDF GHG-3 The Project will provide a community electric vehicle for the affordable housing component for residents to drive short distance trips to the local grocery store.

PDF GHG-4 The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

4.5.6 IMPACT ANALYSIS

Threshold a: ***Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

A. Construction

The Project's construction process would consume electrical energy and fuel. Project-related construction would represent a short-term energy demand and would not require on-going or permanent commitment of electricity or fuel resources. Construction of the Project is expected to commence in January 2024 and would last through April 2027. Project construction-related activities are estimated to consume approximately 593,784 kilowatt hours (kWh) of electricity and approximately 188,030 gallons of diesel fuel. Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 90,130 gallons of fuel. Additionally, fuel consumption from construction vendor trips will total approximately 30,928 gallons. Detailed calculations are provided in subsection 4.3 of the Project's Energy Analysis (refer to *Technical Appendix E*).

Construction equipment fuel use would be typical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards. In 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel- powered equipment and are enforced by the Air Resources Board (ARB). Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, construction-related impacts related to electricity and fuel consumption would be less than significant. No mitigation is required.

B. Operation

Energy consumption in support of or related to Project operations would include transportation fuel demands (fuel consumed by passenger car and truck vehicles accessing the Project site), fuel demands from operational equipment, and operational energy demands (energy consumed by building operations and site maintenance activities).

1. Transportation Energy

Energy that would be consumed by operational Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluating the vehicle fleet mix and the total VMT. As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB.

The estimated transportation energy demands are summarized on Table 4.5-1, *Total Project-Generated Traffic Annual Fuel Consumption*. The Project would result in 9,655,902 annual VMT and an estimated annual fuel consumption of 353,819 gallons of fuel.

Table 4.5-1 Total Project-Generated Traffic Annual Fuel Consumption

Vehicle Type	**Average Vehicle Fuel Economy** (mpg)	**Annual VMT**	**Estimated Annual Fuel Consumption** (gallons)
LDA	35.67	4,776,329	133,917
LDT1	26.76	386,114	14,428
LDT2	26.65	2,278,699	85,512

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
MDV	21.86	1,402,317	64,155
LHDT1	17.30	268,787	15,534
LHDT2	16.21	70,486	4,349
MHDT	7.91	149,968	18,968
HHDT	6.32	55,686	8,811
OBUS	6.48	5,790	894
UBUS	47.29	3,433	73
MCY	42.49	214,240	5,042
SBUS	6.65	9,330	1,403
MH	47.29	34,722	734
TOTAL (ALL VEHICLES)		***9,655,902***	***353,819***

Source: (Urban Crossroads, 2023c, Table 4-9)

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other residential, park, and commercial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod.

The Project is located on an infill site that is surrounded by existing urban uses; the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the Project access to a mix of land uses in close proximity to the Project, thus further reducing fuel consumption demand. Additionally, the Project will also be providing a community electric vehicle for use by residents of the affordable housing component (PDF-GHG-3) as well as providing parking and EV infrastructure (PDF-GHG-4) that would further promote fuel efficient vehicles. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. The location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations. As such,

Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

2. Operational Energy Demands

Project building operations would result in the consumption of electricity, which would be supplied to the Project by SCE. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. As summarized on Table 4.5-2, *Project Annual Operational Energy Demand Summary*, operations for the Project would result in approximately 1,131,132 kWh of electricity annually and would offset the demand through the use of on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually (PDF-GHG-1) – which results in a net electricity demand of 98,388 kWh/year of electricity. No natural gas will be used as the Project will be all electric (PDF-GHG-2).

Future development projects would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. The Project would incorporate the PDFs GHG-1 through GHG-4. Therefore, the Project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant. No mitigation is required.

Table 4.5-2 Project Annual Operational Energy Demand Summary

Land Use	**Electricity Demand** (kWh/year)	**Solar Generation** (kWh/year)	**Net Electricity Demand** (kWh/year)
Single Family Detached	379,233		
Multifamily Housing	437,195		
Affordable Housing	282,269		
Parking Lot	32,435		
Other Asphalt Surfaces	0		
TOTAL PROJECT ENERGY DEMAND	***1,131,132***	***1,229,520***	***98,388***

Source: (Urban Crossroads, 2023c, Table 4-10)

3. *CEQA Guidelines Appendix F*

An analysis of the factors identified in CEQA Guidelines Appendix F is provided in Table 4.5-3, *CEQA Guidelines Appendix F Energy Analysis.* As shown, the Project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation; and impacts would be less than significant. No mitigation is required.

Table 4.5-3 CEQA Guidelines Appendix F Energy Analysis

CEQA Guidelines Appendix F Factors	Analysis
The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed. The effects of the project on energy resources. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.	The Project's energy requirements by fuel type during construction and operation are analyzed above. As discussed, construction equipment fuel use would be typical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards. Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. The Project is located on an infill site that is surrounded by existing urban uses; the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the Project access to a mix of land uses near the Project, thus further reducing fuel consumption demand. Additionally, the Project will be providing a community electric vehicle for use by residents of the affordable housing component (PDF-GHG-3) as well as providing parking and EV infrastructure (PDF-GHG-4) that would further promote fuel efficient vehicles. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations. For these reasons, both construction-related and operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts related to vehicle fuel consumption would be less than significant.
The effects of the project on local and regional energy supplies and on requirements for additional capacity.	As discussed above, Project building operations would result in the consumption of electricity, which would be supplied to the Project by SCE. The Project site is an

CEQA Guidelines Appendix F Factors	Analysis
The effects of the project on energy resources.	infill development, and electricity was previously provided to the site by SCE for the prior commercial use. As summarized on Table 4.5-2, *Project Annual Operational Energy Demand Summary*, operations for the Project would result in approximately 1,131,132 kWh of electricity annually and would offset the demand using on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually – which results in a net electricity demand of 98,388 kWh/year of electricity. Furthermore, the Project would be required to obtain a will serve letter from SCE, which would ensure that there is no impact on local or regional energy supplies. No natural gas will be used as the Project will be all electric (PDF-GHG-2). Therefore, the Project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.
The effects of the project on peak and base period demands for electricity and other forms of energy.	The Project's total energy demand is evaluated above. The Project consists of a residential development and would affect peak and base period demands for electricity typical of other residential uses. The Project would offset the demand using on-site photovoltaic solar power (PDF-GHG-1). Furthermore, the Project would be required to obtain a will serve letter to ensure that SCE will serve the Project's electricity requirements per the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs. SCE considers effects on peak and base period demands for electricity when issuing will serve letters. No natural gas will be used as the Project will be all electric (PDF-GHG-2). Impacts would be less than significant.
The degree to which the project complies with existing energy standards.	As analyzed under Threshold b, below, the Project would comply with and not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. For example, during construction, the Project would comply with California Code of Regulations Title 13, Sections 2449 and 2485, which limit idling from both on- road and off-road diesel-powered equipment and are enforced by the ARB. During operation, the Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of

CEQA Guidelines Appendix F Factors	Analysis
	energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Impacts would be less than significant.

Threshold b: ***Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

The following section analyzes whether the Project would conflict with or obstruct applicable plans and regulations for renewable energy or energy efficiency.

A. Construction

As discussed in Threshold a, above, the Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on- road and off-road diesel-powered equipment and are enforced by the ARB. The Project would be required to comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; and impacts would be less than significant. No mitigation is required.

B. Operation

California's RPS establishes a goal of renewable energy for local providers to be 44 percent by 2040. Similarly, the State is promoting renewable energy targets to meet the 2022 Scoping Plan greenhouse gas emissions reductions. As discussed in Threshold a, above, the Project would result in approximately 1,131,132 kWh of electricity demand annually and would offset the demand through the use of on-site photovoltaic solar power which is expected to generate 1,229,520 kWh of electricity annually – which results in a net electricity demand of 98,388 kWh/year of electricity. No natural gas will be used as the Project will be all electric.

The Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Additionally, the Project would incorporate project design features PDFs GHG-1 through GHG-4.

1. City of Los Alamitos General Plan

The Project's consistency with the City's General Plan is shown in Table 4.5-4, *General Plan Consistency Analysis*. As shown, the Project would not result in any inconsistency with any of the applicable General Plan goals and policies.

Table 4.5-4 General Plan Consistency Analysis

General Plan Policy	Consistency
Policy 4.4 Low and zero emission vehicles. Support development of private and public parking infrastructure facilitating the use of alternative fuel vehicles.	**No conflict.** As discussed in EIR Section 3.0, *Project Description*, the Project would provide EV charging stations that would equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1. Therefore, the Project would not conflict with Policy 4.4.
Policy 4.5 Energy and water conservation. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the City's zoning ordinance and the California Building Code.	**No conflict.** As discussed above and in EIR Section 4.17, *Utilities and Service Systems*, the Project would result in a less than significant impact to energy and water supply. The Project would be required to comply with the City's zoning ordinance and the California Building Code regarding energy and water conservation and reduction standards. Additionally, the Project would exceed energy standards through installation of solar photovoltaic rooftops, use of 100% electricity, and EV charging stations (see PDF GHG -1, -2, and -4). Therefore, the Project would not conflict with Policy 4.5.
Policy 4.9 Renewable Energy. Promote the use of renewable energy sources to serve public and private sector development.	**No conflict**. As discussed in EIR Section 4.7, *Greenhouse Gas Emissions*, the Project would include installation of solar photovoltaic panels with the capability to generate up to 1,229,520 kWh/annually. Therefore, the Project would not conflict with Policy 4.9.

Source: (Urban Crossroads, 2023c, Table 5-1)

Compliance with the aforementioned mandatory measures would ensure that the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; and impacts would be less than significant. No mitigation is required.

4.5.7 Cumulative Impact Analysis

Cumulative impacts result if the Project, along with cumulative projects, taken together could result in wasteful, inefficient, or unnecessary use of energy. The areas considered for cumulative impacts to electricity and natural gas supplies are the service areas of the SCE and SoCalGas, respectively, described above in Section 4.5.1.

The Project, related projects, and additional forecasted growth in SCE's service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. As with the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features and comply with applicable regulations including CALGreen and state energy standards under Title 24, which would contribute to minimizing wasteful energy consumption. As such, the Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant.

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As with the Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. Therefore, the Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and, thus, would be less than significant.

As indicated above, the Project would not conflict with or obstruct a federal or State plan for renewable energy or energy efficiency. The Project and other new development projects within the cumulative study area would be required to comply with all of the same applicable federal, State, and local regulatory measures aimed at reducing fossil fuel consumption and the conservation of energy. Accordingly, the Project would not cause or contribute to a significant cumulatively considerable impact related to conflicts with a State or local plan for renewable energy or energy efficiency.

4.5.8 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy evidenced by compliance with applicable 2022 Title 24 Standards. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. As such, Project impacts due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant.

Threshold b: Less-than-Significant Impact. The Project would not conflict with or obstruct a federal or State plan for renewable energy or energy efficiency and impacts would be less than significant.

4.5.9 Mitigation

No mitigation is required.

4.5.10 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.6 GEOLOGY AND SOILS

The following analysis in this Subsection is based primarily on information contained in the technical report prepared by LGC Geotechnical, Inc. (LGC) titled, "Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California" (Geotechnical Report) and dated December 21, 2021. The technical report is included as *Technical Appendix F1* to this EIR (LGC, 2021).

In addition, a paleontological resources assessment prepared by BFSA titled "Paleontological Assessment for the 4665 Lampson Avenue Project" (Paleontological Assessment) and dated September 21, 2022. The technical report is included as *Technical Appendix F2* to this EIR (BFSA, 2022). All references used in this Subsection are listed in EIR Section 8.0, *References*.

4.6.1 EXISTING CONDITIONS

The elevation of the Project site ranges from approximately 21 feet to 26 feet above mean sea level (amsl) (C&V, 2023). The Geotechnical Report for the Project site (see *Technical Appendix F1*) details the existing geologic and soils conditions on the Project site, which are described below.

A. Geologic Setting

The Project site is within the Orange County coastal plain, more generally located on the broad southern margin of the Los Angeles Basin. The Project site is located more specifically within the Santa Ana River drainage basin, and it is underlain at depth by poorly consolidated alluvial sediments mapped as Quaternary Young Alluvial Fan deposits. The Project site is underlain by a thin veneer of topsoil and older artificial fill over young alluvial deposits of Holocene age.

B. Earthquake Faults

The Project site is located in an area of southern California that is subject to strong ground motions due to seismic events (i.e., earthquakes). The geologic structure of southern California is dominated mainly by northwest-trending faults associated with the San Andreas system. The Project site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo) and no faults were identified on the site during the site evaluation. The closest known active faults to the subject site are the Newport-Inglewood (3.5 miles to the southwest), Puente Hills (13 miles to the northeast), Palos Verdes (12.7 miles to the southwest) and Elsinore (13 miles to the northeast) Fault Zones. An active fault is defined by the California Geological Survey as a fault that has experienced surface displacement within the Holocene Epoch (roughly the last 11,000 years).

C. Soils

Soil conditions on the Project site generally consist of interbedded layer of gray and brown, silty clay, clay silty sand, and clayey sand. The materials were observed to be very moist to wet with depth, soft to very stiff and medium dense to dense.

D. Groundwater

Groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. Seasonal fluctuations of groundwater elevations should be expected over time. In general, groundwater levels fluctuate with the seasons and local zones of perched groundwater may be present due to local seepage caused by irrigation and/or recent precipitation. Local perched groundwater conditions or surface seepage may develop once site development is completed.

E. Secondary Seismic Hazards

Secondary seismic hazards generally associated with severe ground-shaking during an earthquake include liquefaction, seiches and tsunamis, and landslides, each of which is described below.

1. Liquefaction

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater; 2) low density noncohesive (granular) soils; and 3) high-intensity ground motion. The Project site is located within a liquefaction hazard zone. Subsurface field data indicates that the Project site contains isolated sandy layers susceptible to liquefaction interfingered with fine-grained non-liquefiable soils and dense sands.

2. Seiches and Tsunamis

The Project site is not located in a coastal area and reservoirs are not located up gradient from or in close proximity to the Project site. There is no potential for the Project site to be affected by a seiche or tsunami (earthquake-generated wave) due to the absence of any large bodies of water near the Project site.

3. Seismically-Induced Landslides

The Project site is generally flat and does not contain, nor is it adjacent to any, steep natural or manufactured slopes and there is no evidence of historical landslides or rockfalls on the site. As such, the Project site is not susceptible to seismically-induced landslides and rockfalls.

F. Paleontological Setting

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state and local guidelines.

The Project is located within a broad, flat coastal plain composed of Holocene and late Pleistocene-aged young alluvium at the surface, within the southern part of the Los Angeles Basin. These deposits are described as “poorly consolidated, poorly sorted, permeable flood-plain deposits consisting of soft clay, silt and loose to moderately dense sand and silty sand.” During the Holocene, activity of the Santa Ana River points to widespread sheet flooding and wandering, as indicated by extensive and continuous “younger” sand and silt deposits. The depth of the geologic age transition from Holocene to Pleistocene within the alluvial deposits is not known.

Based on a paleontological collections and locality records search by the Natural History Museum of Los Angeles County, there were no known fossil localities in the vicinity of the Project. The nearest known fossil locality reported is located approximately 4.3 miles south-southwest of the Project site at Sunset Beach, where Pleistocene deposits at the Pleistocene surface yielded bone(s) of a camel.

A review of published and unpublished literature was conducted for potential paleontological resources that are known in the vicinity of the Project. The sources reviewed did not indicate any known nearby fossil localities within the vicinity of the Project.

Moreover, the Project site was observed as 100 percent developed, consisting of structures, paved surfaces, and landscaping. No bedrock outcrops were exposed that might indicate the presence of fossils. No paleontological resources, or evidence of paleontological resources, were observed during the survey.

4.6.2 Regulatory Framework

The following is a brief description of the federal, State, and local environmental laws and related regulations governing issues related to geology, soils, and paleontological resources.

A. Federal

1. Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man- made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2022d)

2. Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act (PRPA) was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11). PRPA directs the Department of Agriculture (U.S. Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to implement comprehensive paleontological resource management programs. (NPS, 2023e) Regulations implementing the PRPA were published in the Federal Register on August 2, 2022, and those regulations became effective on September 1, 2022. (87 Fed. Reg. 47296) The PRPA and its regulations provide for the management, preservation, and protection of paleontological resources on lands administered by the Bureau of Land Management, the National Park Service, and the U.S. Fish and Wildlife Service.

B. State

1. Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. (CA Legislative Info, n.d.)

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). (CA Legislative Info, n.d.)

2. Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. (CDC, n.d.)

Staff geologists in the Seismic Hazards Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake–induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. (CDC, n.d.)

The SHMA requires site-specific geotechnical investigations be conducted within the ZORI to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CDC, n.d.)

3. Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. (CA Legislative Info, n.d.)

The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers. (CA Legislative Info, n.d.)

4. Essential Services Building Seismic Safety Act

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "…designed and constructed to minimize fire hazards and to resist…the forces generated by earthquakes, gravity, and winds." This enabling legislation can be found in the California Health and Safety Code, Chapter 2, § 16000 through 16022. In addition, the California Building Code defines how the intent of the act is to be implemented in Title 24, Part 1 of the California Building Standards Administrative Code, Chapter 4, Articles 1 through 3. (CAB, n.d.)

5. California Building Standards Code (Title 24)

California Code of Regulations (CCR) Title 24 is reserved for state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC). (CBSC, 2022, p. 1)

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the State of California. Cities and counties are required by state law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (CBSC, 2022, p. 1)

C. Regional

1. South Coast Air Quality Management District Rule 403

The South Coast AQMD is responsible for enforcing air pollution control measures in the South Coast Air Basin, within which the Project site is located. Rule 403 (Fugitive Dust) addressed blowing dust from construction sites and is applicable to the Project due to the potential for wind erosion during Project grading and construction activities.

D. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to geology and soils in the Public Facilities and Safety Element. These goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Section 4.10, *Land Use and Planning*, of this EIR.

2. City of Los Alamitos Municipal Code

The City of Los Alamitos Municipal Code (LAMC) identifies provisions that are intended to minimize adverse geology and soil impacts associated with new development projects. Below are the regulations relevant to the proposed Project.

- **Stormwater and Urban Runoff Pollution Controls (Chapter 8.44).** The purpose of this chapter is to protect the health and safety of the waters of the state and the United States, those who recreate in and consume food from those waters, and to protect marine habitats and ecosystems. The chapter provides regulations that effectively prohibit non-stormwater discharges into the stormwater drainage system and reduce pollutant loads in stormwater and urban runoff to the maximum extent possible.

- **Amendments to the 2022 California Building Code (Chapter 15.04, Section 15.04.020**). The City of Los Alamitos adopted the 2022 California Building Code for the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion demolition, maintenance, equipment uses, height, and area of buildings and structures. Section 15.04.020 requires incorporation of recommendations from a site-specific geologic or geotechnical report.

4.6.3 Methodology

To determine the geologic and soil conditions and potential for geological hazards to occur on the project site, LGC prepared a preliminary geotechnical investigation to evaluate the pertinent geotechnical conditions at the site and to provide geotechnical design criteria for grading construction, foundation design, and other relevant aspects to project development. Refer to *Technical Appendix F1* for additional information.

Additionally, on May 26, 2022, BFSA conducted a field survey of the property to determine if any paleontological resources were visible. The field methodology employed for the Project included walking evenly spaced survey transects set approximately 10 meters apart while visually inspecting the ground surface, when possible.

4.6.4 Basis for Determining Significance

Section VII of Appendix G to the CEQA Guidelines addresses typical adverse effects due to geological conditions, and includes the following threshold questions to evaluate the Project's impacts resulting from geologic or soil conditions (OPR, 2022):

- *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

    a. *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.*

    b. *Strong seismic ground shaking*

    c. *Seismic-related ground failure, including liquefaction*

    d. *Landslides*

- *Result in substantial soil erosion or the loss of topsoil;*

- *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;*

- *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;*

- *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*;

- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;*

4.6.5 IMPACT ANALYSIS

Threshold a:	***Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides?***

A. Rupture of a Known Earthquake Fault

The Project site is not located within the State of California Earthquake Fault Zone (Alquist-Priolo) and no faults were identified on the site during the site evaluation. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. Therefore, no impacts related to the rupture of a known earthquake fault would occur and no mitigation is required.

B. Strong Seismic Ground Shaking

Southern California is a seismically active area and properties in the City of Los Alamitos, including the Project site, are subject to periodic ground shaking and other effects from earthquake activity along nearby regional faults. As indicated in the Geotechnical Report (*Technical Appendix F1*), the Project site is not at an increased risk relative to the surrounding areas. The Project would incorporate the construction recommendations contained with the geotechnical report as required by the LAMC Section 15.04.020. Project-related structures and buildings would be required to be designed and constructed in compliance with the California Building Code (CBC [California Code of Regulations, Title 24, Part 2]), which contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the probable strength of ground motion. Therefore, as structures would be designed to meet or exceed CBC standards for earthquake resistance, development of the Project would create less than significant impacts related to seismic ground shaking and no mitigation is required.

C. Seismic-Related Ground Failure, Including Liquefaction

The subject site is located within a liquefaction hazard zone per the State of California Seismic Hazard Zone for liquefaction potential. Subsurface field data indicates that the site contains isolated sandy layers susceptible to liquefaction interfingered with fine-grained non-liquefiable soils and dense sands.

The recent explored groundwater elevation of 11 feet below existing grade and historic high groundwater elevation of 10 feet below existing grade were both used in the liquefaction analysis. Liquefaction potential was evaluated using the procedures outlined by Special Publication 117A and the applicable California Building Code seismic criteria.

Section 4.0 of the Geotechnical Report (*Technical Appendix F1*) identifies design recommendations to reduce liquefaction impacts to an acceptable level. The recommendations include seismic design parameters for the site, prevention of the intentional infiltration of storm water into subsurface soils and require foundations to be constructed based on the expansion index and shear strength of on-site soils. The estimated seismic settlement can be mitigated by performing the recommended remedial grading and constructing the buildings with the recommended post-tensioned slab and interconnecting isolated pad footings with grade beams.

The Project would be required to be designed and constructed in accordance with applicable seismic safety guidelines, including the standard requirements of the CBSC. Furthermore, as stated in the LAMC Section 15.04.020, the Project would be required to comply with the grading and construction recommendations contained within the geotechnical report for the Project site to further reduce the risk of seismic-related ground failure due to liquefaction. Implementation of the Project would have the potential to directly or indirectly expose people or structures to substantial hazards associated with seismic-related ground failure and/or liquefaction hazards. Conservatively, this impact would be potentially significant before implementation of mitigation.

D. Landslides

Slope failures in the form of landslides are common during strong seismic shaking in areas of steep hills. The Project site and surrounding area are generally flat with no significant slopes. The Project site is not located within a landslides zone. Accordingly, no impact related to landslide hazards would occur and no mitigation is required.

Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?

A. Construction-Related Activities

Redevelopment of the Project site would result in the demolition of all structures on-site and removal of ornamental landscaping. Grading and construction activities would occur that would expose and disturb soils that are currently covered by impervious surfaces and ground covering. Disturbed soils would be subject to potential erosion during rainfall events or high winds due to the removal of stabilizing vegetation and building materials (e.g., existing concrete foundations) and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant would be required to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least

one (1) acre of total land area. In addition, the Project would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program.

Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for construction-related activities. The SWPPP will specify the Best Management Practices (BMPs) that the Project Applicant will be required to implement during construction activities to ensure that waterborne pollution – including erosion/sedimentation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. In addition, the Project would be required to implement erosion and dust control measures pursuant to South Coast AQMD Rule 403 to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control and dust control measures would reduce, prevent, or minimize soil erosion from Project-related construction activities. Therefore, impacts related to substantial soil erosion or the loss of topsoil would be less than significant and no mitigation is required.

B. Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces (i.e., building foundations and paved parking areas). Minimal areas of exposed soil would occur in the Project site's landscaped areas.

As described in Section 4.9, *Hydrology and Water Quality*, the Project Applicant is required to prepare and submit to the City a Project-specific Water Quality Management Plan (WQMP). The Preliminary WQMP is appended to this EIR (*Technical Appendix I2*) and has been submitted for City approval. The WQMP is required to identify and implement an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate discharge to surface water from stormwater and non-stormwater discharges. Adherence to the requirements noted in the Project's required WQMP (*Technical Appendix I2* of this EIR), and LAMC Chapter 8.44, Stormwater and Urban Runoff Pollution Controls as explained in Section 4.9, would ensure that the Project's potential erosion impacts during operation would be less than significant. No mitigation is required.

Threshold c:	***Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

A. Liquefaction

As discussed above, the Project site is susceptible to liquefaction. Project-related structures would be required to be designed and constructed in compliance with the CBC and the recommendations of the Geotechnical Report. The recommendations require foundations to be constructed based on the

expansion index and shear strength of on-site soils. Conservatively, this impact would be potentially significant before implementation of mitigation.

B. Landslide

As discussed above, the Project site and surrounding area are generally flat with no significant slopes. The Project site is not located within a landslides zone. Accordingly, no impact related to landslide hazards would occur and no mitigation is required.

C. Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures. Due to the lack of a nearby "free face" condition and non-continuous nature of the subsurface layers, the potential for lateral spreading is considered very low. Impacts would be less than significant and no mitigation is required.

D. Settlement

The underlying soils were found to be generally stiff to very stiff silts and clays. Based on laboratory test data consisting of in-situ moisture content, consolidation tests, and blow counts, fine-grained soils are considered generally normally consolidated. Based upon in-situ testing, visual examination, lab data, geotechnical evaluation and the proposed corrective grading and fill placement recommendations, static settlement induced by raising grades 1 to 3 feet is estimated to be on the order of 1-inch. The Geotechnical Investigation (*Technical Appendix F1*) provides standard recommendations for site grading, site preparation, and placement of fill material that would avoid the potential for settlement. The estimated seismic settlement can be mitigated by performing the recommended remedial grading and constructing the buildings with the recommended post-tensioned slab and interconnecting isolated pad footings with grade beams. The recommendations also require isolated pad footings to be interconnected with grade beams. This recommendation would prevent excessive settlement and ensure safety against sliding and overturning. Additionally, the Geotechnical Investigation provides recommendations for soil bearing and lateral resistance which is the amount of load the soil can take without experiencing failure or exceeding the allowable amount of settlement.

Prior to mitigation implementing the geotechnical study recommendations, implementation of the Project would have potential impacts related to settlement. Conservatively, this impact would be potentially significant before implementation of mitigation.

Threshold d: ***Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

Based on the results of the Geotechnical Report (*Technical Appendix F1* of this Draft EIR), site soils are anticipated to have "low" expansion potential. Accordingly, the Project site, would not create substantial direct or indirect risks to life or property associated with the presence of expansive soils. Although the Project site has a low expansion potential, the Geotechnical Investigation provides recommendations for foundations and site improvements, such as flatwork and? Pre-soaking of the subgrade for building slabs to minimize the impacts of expansive soils. Conservatively, this impact would be potentially significant before implementation of mitigation.

Threshold e: ***Would the Project 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?***

The Project would connect to the existing wastewater system. The Project would not utilize septic tanks or alternative wastewater systems. No impact would occur and no mitigation is required.

Threshold f: ***Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

The Project would result in grading to depths of 5 feet below existing grades with deeper excavations (8 to 10 feet) for underground utilities or localized removals. The depth of grading for the existing building and improvements are unknown.

A limited subsurface geotechnical evaluation of the Project site consisting of the excavation of seven small-diameter borings ranging in depth from approximately 5 to 46.5 feet below existing ground surface was performed. Undocumented artificial fill,[1] soils native to or near the site, was encountered at depths ranging from 0 to 2.5 feet below existing grade. Quaternary Young Alluvium (Holocene age) was encountered below the undocumented fill (*Technical Appendix F1* of this Draft EIR).

According to the Paleontological Report (*Technical Appendix F2* of this Draft EIR), Holocene and late Pleistocene young alluvial deposits were mapped at the Project site in 2016 and the depth of the geologic age transition from Holocene to Pleistocene within the alluvial deposits is unknown. Within Orange County, Holocene-aged alluvial sedimentary deposits are usually geologically too young to produce fossils. Due to the lack of nearby significant fossil localities and young sedimentary deposits, there is a low potential to uncover paleontological resources. However, Pleistocene alluvial deposits underlie the Holocene alluvial deposits at the Project site and are considered to have a moderate/undetermined paleontological potential.

[1] Undocumented fill typically includes compacted engineered fills where no construction records exist or a heterogeneous mix of soil types.

Although the Geotechnical Report did not identify Pleistocene alluvial deposit within any borings on site, the depth to Pleistocene alluvial deposits is unknown. As a result, the Project has a remote potential to encounter paleontological resources during grading activities in native soils. Accordingly, the Project would have the potential to directly or indirectly impact a unique paleontological resource. Conservatively, this impact would be potentially significant before implementation of mitigation.

4.6.6 Cumulative Impact Analysis

As noted in the foregoing analysis, all potential Project-related direct and indirect impacts related to geology and soils would be addressed through mandatory compliance with the CBSC, LAMC, other standard regulatory requirements, and the site-specific recommendations identified in the Geotechnical Report contained within *Technical Appendix F1* of this EIR.

With the exception of erosion hazards, potential hazardous effects related to geologic and soil conditions addressed under Thresholds a, c, d, and e are unique to the Project site and inherently restricted to the specific property proposed for development. That is, issues including fault rupture, seismic ground shaking, liquefaction, landslides, and expansive soils would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soil hazards that may occur on other, off-site properties. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties.

As discussed under Threshold b, regulatory requirements mandate that the Project incorporate design measures during construction and long-term operation to ensure that significant erosion impacts do not occur. Other development projects in the vicinity of the Project site would be required to comply with the same regulatory requirements as the Project to preclude substantial adverse water and wind erosion impacts. Because the Project and other projects within the cumulative study area would be subject to similar mandatory regulatory requirements to control erosion hazards during construction and long-term operation, cumulative impacts associated with wind and water erosion hazards would be less than significant.

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the vicinity of the Project site that have a potential for uncovering paleontological resources. Generally, impacts relating to paleontological resources are site-specific and addressed on a site-by-site basis. Therefore, as discussed under Threshold f, while there is potential for an impact on a specific site, the impact would not ordinarily extend beyond the site or the immediate surrounding area. Additionally, Mitigation Measures MM 4.6-1 through MM 4.6-2 would ensure Project-specific paleontological impacts are reduced to less than significant. There could be circumstances in which a paleontological resource extends over more than one property. Therefore, a cumulative impact could occur to paleontological resources if grading on the Project site in combination with grading activities at an adjacent cumulative project would impact a paleontological resource. However, there are no adjacent cumulative related projects that could

potentially combine with the Project to result in impacts to unknown paleontological resources that may lie in the subsurface. Therefore, there would be no cumulative impacts related to paleontological resources.

4.6.7 Significance of Impacts Before Mitigation

Threshold a: Potentially Significant Impact. The Project is not located on a known earthquake fault but would potentially be subject to strong seismic ground shaking. As structures would be designed to meet or exceed CBC standards for earthquake resistance, development of the Project would create less than significant impacts related to seismic ground shaking. The Project site is susceptible to liquefaction. A significant impact could occur, and mitigation would be required. Compliance with the recommendations from the Geotechnical Report would reduce the risk of seismic-related ground failure due to liquefaction to less than significant.

Threshold b: Less-than-Significant Impact. Future development within the Project site would be required to comply with the NPDES permit by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during Project construction. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from Project-related grading and construction activities. Therefore, impacts related to substantial erosion or the loss of topsoil would be less than significant.

Threshold c: Potentially Significant Impact. There is no potential for the Project's construction or operation to cause, or be impacted by, on- or off-site landslides or lateral spreading. Potential hazards associated with unstable soils would be precluded through mandatory adherence to the recommendations contained in the site-specific Geotechnical Report during Project construction. Project-related structures and buildings would be required to be designed and built in compliance with the CBC, which requires the Project to implement the recommendations of the site-specific Geotechnical Report. Conservatively, impacts would be potentially significant and therefore require mitigation.

Threshold d: Potentially Significant Impact. The Project site contains soils with low susceptibility to expansion; however, the Geotechnical Report identified recommendations to minimize the impacts of expansive soils. Conservatively, this impact would be potentially significant before implementation of mitigation.

Threshold e: No Impact. No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.

Threshold f: Potentially Significant Impact. The Pleistocene alluvial deposits that underlie the Holocene alluvial deposits have a remote potential to exist at the Project site and have a moderate/undetermined potential to yield paleontological resources. Conservatively, the Project would have the potential to directly or indirectly impact a unique paleontological resource before mitigation.

4.6.8 MITIGATION

The following mitigation measures outlined below, are based on the findings stated above. The following mitigation measures, when implemented, would reduce potential impacts to a level below significance:

MM 4.6-1 Prior to the issuance of grading permits, the City of Los Alamitos Public Works & Engineering Department shall verify that all of the recommendations provided in Section 4.0 of the Project's December 21, 2021 "Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California," prepared by LGC Geotechnical, Inc. and included as *Technical Appendix F1* to the Project's EIR, are incorporated into the Project's grading and building plans. These recommendations include but are not limited to a) Site Earthwork Considerations; b) Preliminary Foundation Recommendations; c) Site Grading Recommendations; d) Soil Bearing and Lateral Resistance Considerations; e) Lateral Earth Pressures for Retaining Walls Considerations; f) Nonstructural Concrete Flatwork Recommendations; and g) Preliminary Asphalt Concrete Pavement Design Parameters. Alternatively, the Project shall comply with the findings and recommendations of any geotechnical studies that may be required in association with future grading and/or building permits.

MM 4.6-2 If paleontological resources are discovered during earth disturbance activities, the discovery shall be cordoned off with a 50-foot radius buffer so as to protect the discovery from further potential damage, and an Orange County Certified Professional Paleontologist shall be consulted to assess the discovery.

If the discovery is determined to be significant by the paleontologist based on the Society of Vertebrate Paleontology guidelines, a monitoring and recovery plan shall be initiated, which will include notification of appropriate personnel involved and monitoring of earth disturbance activities. The monitoring and recovery plan shall include the following requirements.

a. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist. Monitoring will be conducted full-time in areas of grading or excavation in undisturbed sediments of alluvial deposits.

b. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of fossils in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil

resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.

c. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated and the fossils are removed to a safe place. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.

d. Recovered specimens will be prepared to a point of identification and permanent preservation, including screen-washing sediments to recover small invertebrates and vertebrates.

e. Recovered specimens shall be identified and curated into a professional, accredited public museum / repository with a commitment to archival conservation and permanent retrievable storage (e.g., Orange County [OC] Parks). The paleontological curation program should include a written repository agreement prior to the initiation of monitoring activities. Prior to curation, the lead agency (e.g., the City of Los Alamitos Planning Division) will be consulted on the repository/museum to receive the fossil material.

f. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, will signify satisfactory completion of the project program to reduce impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

4.6.9 Significance of Impacts After Mitigation

Thresholds a, c, and d: Less than Significant Impact with Mitigation Incorporated. Mitigation Measure MM 4.6-1 would ensure that that the Project's design professionals and construction contractors implement the recommendations of the Project's Geotechnical Investigation (*Technical Appendix F1*), which in turn would ensure measures are implemented to address potential impacts due to the exposure of people or structures to adverse effects, including loss, injury, or death as a result of strong seismic ground shaking liquefaction hazards, soil settlement and expansion. Implementation of the required mitigation would ensure that impacts are reduced to less-than-significant levels.

Threshold f: Less than Significant Impact with Mitigation Incorporated. Mitigation Measure MM 4.6-2 would ensure the proper identification and subsequent treatment of any significant paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. With implementation of the required mitigation, the Project's potential impacts to important paleontological resources would be reduced to less than significant. The Project's contribution to cumulative impacts would likewise be reduced to less than significant.

4.7 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based on a technical report prepared by Urban Crossroads titled, *Greenhouse Gas Analysis*, dated May 12, 2023, and included as *Technical Appendix G* to this EIR (Urban Crossroads, 2023d). The technical report and analysis in this Subsection assess the proposed Project's potential to generate greenhouse gas (GHG) emissions that could contribute to global climate change (GCC) and its associated environmental effects.

4.7.1 EXISTING CONDITIONS

A. Introduction to Global Climate Change

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs created by human activity and industrialization over the past 200 years.

An individual project cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. This section will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to GCC.

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 °F cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

B. *Greenhouse Gases*

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GCC from development projects[1].

GHGs have varying Global Warming Potential (GWP) values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The atmospheric lifetime and GWP of selected GHGs are summarized at Table 4.7-1, *GWP and Atmospheric Lifetime of Select GHGs.* As shown in the table below, GWP for the 2nd Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO_2 to 23,900 for SF_6 and GWP for the IPCC's 6th Assessment Report range from 1 for CO_2 to 1,526 for HFC-134a.

Table 4.7-1 GWP and Atmospheric Lifetime of Select GHGs

Gas	Common Name	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
			2nd Assessment Report	6th Assessment Report
CO_2	Carbon dioxide	Multiple	1	1
CH_4	Methane	11.8	21	28
N_2O	Nitrous oxide	109	310	273
HFC-23	Fluoroform	228	11,700	14,600
HFC-134a	1,1,1,2-Tetrafluoroethane	14	1,300	1,526
HFC-152a	1,1-Difluoroethane	1.6	140	164
SF_6	Sulfur hexafluoride	3,200	23,900	25,200

Source: (Urban Crossroads, 2023d, Table 2-2)

Provided below is a description of the common gases that contribute to GCC. For more information about these gases and their associated human health effects, refer to Section 2.3 of *Technical Appendix G* to this EIR and the reference sources cited therein.

- CO_2 is an odorless and colorless GHG that is emitted from natural and artificial sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic

[1] Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

sources include: the burning of coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Exposure to CO_2 in high concentrations can cause human health effects, but outdoor levels are not high enough to adversely affect human health.

- CH_4 is an extremely effective absorber of radiation, though its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. CH_4 in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.

- N_2O concentrations began to rise in the atmosphere at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is used as an aerosol spray propellant, (e.g., in whipped cream bottles), in potato chip bags to keep chips fresh, and in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause brain damage.

- Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source. They are found in aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants.

- Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23, HFC-134a, and HFC-152a. Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant. No human health effects are known to result from exposure to HFCs, which are used for applications such as automobile air conditioners and refrigerants.

- Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. No human health effects are known to result from exposure to PFCs.

- SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The EPA indicates that concentrations in the 1990s were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

- Nitrogen Trifluoride (NF_3) is a colorless gas with a distinctly moldy odor. The World Resources Institute indicates that NF_3 has a 100-year GWP of 17,200. NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display panels, types of solar panels, and chemical lasers. Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis.

C. Greenhouse Gas Emissions Inventories

1. Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2020. Based on the latest available data, the sum of these emissions totaled approximately 28,026,643 gigagram (Gg) CO_2e as shown in Table 4.7-2, *Top GHG-Producing Countries and the European Union*. As noted, the United States, as a single country, was the number two producer of GHG emissions in 2020.

Table 4.7-2 Top GHG-Producing Countries and the European Union

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	5,981,354
European Union (27-member countries)	3,706,110
India	2,839,420
Russian Federation	2,051,437
Japan	1,148,122
Total	**28,026,643**

Source: (Urban Crossroads, 2023d, Table 2-3)

2. State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the U.S. emissions inventory total. The CARB compiles GHG inventories for the State of California. Based upon the 2022 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2020 GHG emissions period, California emitted an average 369.2 million metric tons of CO_2e per year ($MMTCO_2e$ /yr) or 369,200 Gg CO_2e (6.17% of the total United States GHG emissions).

D. Effects of Climate Change in California

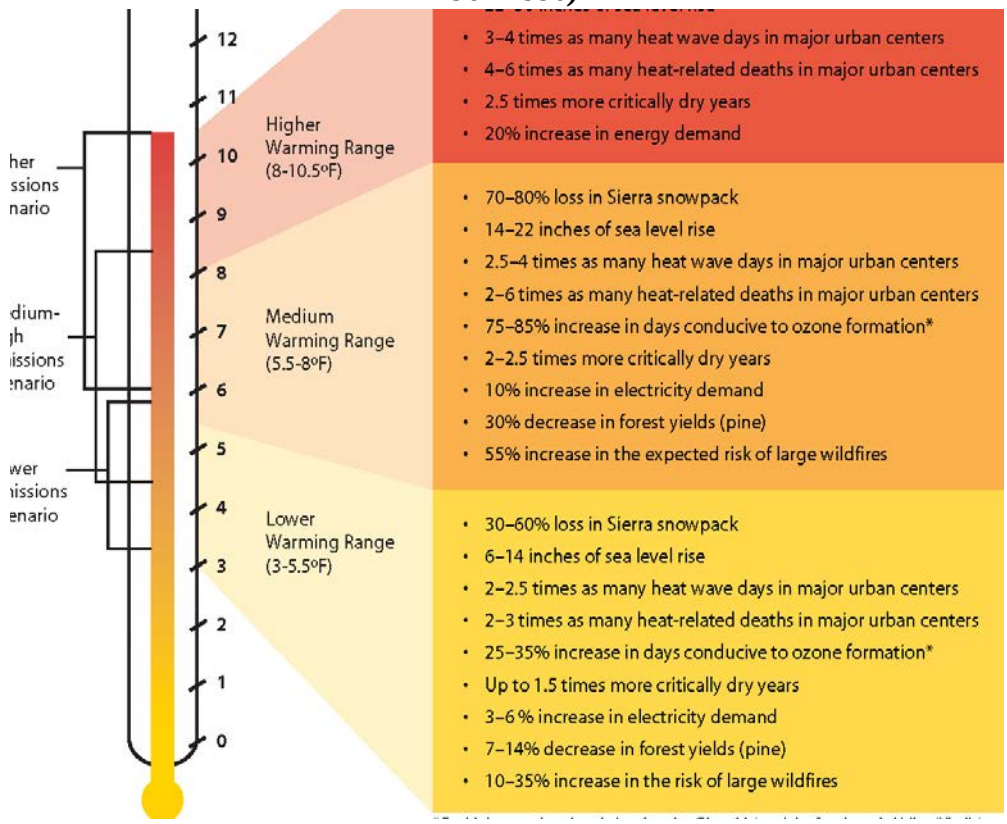
Climate change will likely cause shifts in weather patterns, potentially resulting in changes in rainfall levels and volumes, resulting in flooding or droughts, increased wildfire risk, impaired habitats for threatened and endangered species, and food shortages in some areas, among other climate change results. The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects such as the Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Higher ambient temperatures could affect disease survival rates and result in more widespread disease. Exhibit 4.7-1, *Summary of Projected Global Warming Impact, 2070-2099 (As Compared With 1961-1990),* presents the potential impacts of global warming.

1. Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center,* large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Exhbit 4.7-1: Summary of Projected Global Warming Impact, 2070-2099 (As Compared With 1961-1990)



2. Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

3. Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

4. Forests and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

5. Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

4.7.2 REGULATORY FRAMEWORK

The following is a brief description of the federal, state, and local environmental laws and related regulations related to GHG emissions.

A. International

1. Intergovernmental Panel on Climate Change

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

2. United Nation's Framework Convention on Climate Change (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

3. International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average

temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make “nationally determined contributions” (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would “represent a progression” beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly would not “involve or provide a basis for any liability or compensation;”
- Require parties engaging in international emissions trading to avoid “double counting;” and

- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC.

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

B. Federal

1. Federal Regulation and the Clean Air Act

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the CAA. The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 —in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the Section 2.7.2 "Clean Vehicles" in *Technical Appendix G* of this EIR.

2. Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil

fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

3. *Executive Order 13990*

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

C. *State*

1. *Executive Order S-3-05*

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable.

2. *Executive Order S-01-07*

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. CARB adopted the Low Carbon Fuel Standard (LCFS) on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for

2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

3. Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy* was adopted, which is the "…first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

4. Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable. The state achieved its 2020 GHG emissions reductions target of returning to 1990 levels 4 years earlier than mandated by AB 32. The state is currently implementing strategies in the 2017 Scoping Plan Update to further reduce its GHG emissions by 40% below 1990 levels by 2030.

5. Executive Order B-55-18 and SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing Renewable Portfolio Standards (RPS), 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA

(CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

6. Assembly Bill 32 (AB 32)

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met). GHGs as defined under AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

7. Senate Bill 375 (SB 375)

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

8. Assembly Bill 1493 – Pavley Fuel Efficiency Standards

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs

from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

9. Clean Energy and Pollution Reduction Act of 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the CPUC, the CEC, and local publicly owned utilities.
- Reorganize the ISO to develop more regional electric transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

10. Senate Bill 32 (SB 32)

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050.

11. 2022 CARB Scoping Plan

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan strategy is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with

statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> "The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."
>
> "[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.

- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states that Appendix D (page 4): "…focuses primarily on CAPs and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types

in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

12. Title 20 CCR Section 1601 et seq. – Appliance Efficiency Regulations

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment.

13. Title 24 CCR Part 11 – California Green Building Standards Code

CCR Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that will be effective on January 1, 2023. The CEC anticipates that the 2022 energy code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items:

Residential Mandatory Measures

- Electric vehicle (EV) charging stations. New construction shall comply with Section 4.106.4.1, 4.106.4.2, 4.106.4.3, to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code*, Article 625. (4.106.4).
    - New one- and two-family dwellings and town-houses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

  - New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1.

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with Sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.1.4.
- Outdoor potable water use in landscape areas. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resource Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
- Operation and maintenance manual. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
  - Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
  - Operations and maintenance instructions for the following:
    - Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, EV chargers, water-heating systems and other major appliances and equipment.
    - Roof and yard drainage, including gutter and downspouts.
    - Space conditioning systems, including condensers and air filters.
    - Landscape irrigation systems.
    - Water reuse systems.
  - Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
  - Public transportation and/or carpool options available in the area.
  - Educational material on the positive impacts of an interior relative humidity between 30-60% and what methods an occupants may use to maintain the relative humidity level in that range.
  - Information about water-conserving landscape and irrigation design and controllers which conserve water.
  - Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
  - Information about state solar energy and incentive programs available.
  - A copy of all special inspection verifications required by the enforcing agency of this code.

- Information from CALFIRE on maintenance of defensible space around residential structures.

- Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the CARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat-high Gloss coating, based on its glass, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 CARB, Suggested Control Measure, and the corresponding Flat, Nonflat, Nonflat-high Gloss VOC limit in Table 4.504.3 shall apply.

14. CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

15. SB 97 and the CEQA Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the OPR shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."*

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The CEQA Amendments provide guidance to public

agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.4 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

D. Regional

1. South Coast Air Quality Management District

South Coast AQMD is the agency responsible for air quality planning and regulation in the SCAB. The South Coast AQMD addresses the impacts to climate change of projects subject to South Coast AQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The South Coast AQMD acts as an expert commenting agency for impacts to air quality.

In 2008, South Coast AQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the South Coast AQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which could be applied by lead agencies. The Working Group has not provided additional guidance since release of the interim guidance in 2008. The South Coast AQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.

- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
    - Residential and commercial land use: 3,000 $MTCO_2e/yr$
    - Industrial land use: 10,000 $MTCO_2e/yr$
    - Based on land use type: residential: 3,500 $MTCO_2e/yr$; commercial: 1,400 $MTCO_2e/yr$; or mixed use: 3,000 $MTCO_2e/yr$
- Tier 4 has the following options:
    - Option 1: Reduce Business-as-Usual (BAU) emissions by a certain percentage; this percentage is currently undefined.
    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
    - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
    - Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans
- Tier 5 involves mitigation offsets to achieve target significance thresholds.

The South Coast AQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level (AQMD, 2008). Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

South Coast AQMD only has authority over GHG emissions from development projects that include air quality permits. If the Project requires a stationary permit, it would be subject to the applicable South Coast AQMD regulations.

South Coast AQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the *South Coast* AQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the South Coast AQMD. The South Coast AQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

E. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to greenhouse gas emissions in its Open Space, Recreation, and Conservation Element. The Project-applicable goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*.

4.7.3 METHODOLOGY

In May 2022, the CAPCOA in conjunction with other California air districts, including South Coast AQMD, released the latest version of CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's potential GHG emissions. Output from the model runs for construction and operational activity are provided in Appendices 3.1 through 3.2 of the GHG Analysis (*Technical Appendix G* of this EIR). CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water.

A. Construction Emissions

Construction is expected to occur over an approximate 39.5-month period. The construction schedule utilized in the analysis, shown in Table 3-4, *Construction Schedule*, in Section 3.0, *Project Description*, of this EIR, represents a "worst-case" analysis scenario should construction continue past the respective dates since emission factors for construction decrease as time passes and the analysis year advances due to emission regulations becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines.

A detailed summary of construction equipment assumptions by phase is provided at Table 3-5, *Construction Equipment Fleet*, in Section 3.0, *Project Description*, of this EIR. Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-5 will operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code.

B. Operation Emissions

Operational activities associated with the Project will result in emissions of CO_2, CH_4, and N_2O from the following primary sources: Area Source Emissions; Energy Source Emissions; Mobile Source Emissions; On-site Cargo Handling Equipment Emissions; Water Supply, Treatment, and Distribution; and Solid Waste.

1. Area Source Emissions

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that as of October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

2. Energy Source Emissions

GHGs are emitted from buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting. No natural gas would be used as a result of the Project (PDF GHG-2), and as such use of natural gas is not considered in the analysis. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity usage associated with the Project was calculated by CalEEMod using default parameters.

Based on information provided by the Project applicant, the Project will include the installation of solar, which is expected to generate approximately 1,229,520 kWh per year.

3. Mobile Source Emissions

The Project related GHG emissions derive primarily from vehicle trips generated by the Project. Trip lengths were obtained from the Orange County Transportation Model (OCTAM) which is a local travel demand model, for the Project's transportation analysis zone (TAZ) 634. Based on the travel demand modeling results, the trip length is estimated to be 12.15 miles per trip which was entered in CalEEMod.

4. Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

5. Solid Waste

The Project would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG

emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

4.7.4 Basis for Determining Significance

Section VIII of Appendix G to the CEQA Guidelines indicate that a project would result in a significant impact on climate change if a project were to (OPR, 2022):

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The City utilizes a GHG emissions threshold consistent with South Coast AQMD's recommended threshold. South Coast AQMD determined that a brightline numeric threshold based on a 90% emission capture rate is an appropriate threshold because it allows for meaningful GHG emission reductions from the majority (90%) of projects. The South Coast AQMD's recommended GHG threshold was established to achieve an emission capture rate of 90% of all new or modified stationary source projects. A GHG significance threshold based on a 90% emission capture rate is appropriate to address the long-term adverse potential impacts associated with GHG emissions. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This is based on the fact that South Coast AQMD estimates that these GHG emissions would account for <1% of future 2050 statewide GHG emissions target (85 $MMTCO_2eq/yr$). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Because GHG emissions are directly correlated with the size of the proposed project, number of trips and trip length; there are some projects that are too small to produce a significant amount of GHG emissions or provide meaningful GHG emission reductions. These small projects represent 10% of the emissions on average from all projects, which was the level of emissions used to establish the brightline numeric threshold. Conversely, South Coast AQMD determined the GHG emissions allowed by a project such that 90% of the emissions on average from all projects would exceed that level and be "captured," meaning that exceedance of the level (brightline numeric threshold) would result in a GHG emissions impact and require further mitigation.

A 90% emission capture rate means that 90% of total emissions from all projects would be subject to a CEQA analysis, such as a negative declaration, a mitigated negative declaration, or an environmental impact report, which includes analyzing feasible alternatives and imposing feasible mitigation measures.

A GHG significance threshold based on a 90% emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures since they would exceed the numeric threshold and mitigation would be required. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

In determining this level of emissions, data available from South Coast AQMD was utilized. In compiling these data, South Coast AQMD used a database of projects kept by the Governor's OPR. That database contained 798 projects, 60 of which were extremely large General Plan Updates, Master Plans, or Specific Plan Projects. The 60 very large projects were removed from the database in order not to skew the emissions value, leaving a net of 738 projects. In addition, 27 projects were found to be outliers that would skew the emission value too high, leaving 711 as the sample population to use in determining the 90th percentile capture rate.

The South Coast AQMD analysis of the 711 projects within the sample population combined commercial, residential, and mixed-use projects. It should be noted that the sample of projects included warehouses and other light industrial land uses but did not include industrial processes (i.e., oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these projects were calculated by South Coast AQMD to provide a consistent method of emissions calculations across the sample population and from projects within the sample population, construction period GHG emissions were amortized over 30 years (the average economic life of a development project) to further reduce potential errors in the statistical analysis.

The South Coast AQMD analysis determined that the 90th percentile ranged from 2,983 to 3,143 MT CO_2e per year. Therefore, a 3,000 MT CO_2e per year value is the low-end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need to provide further analysis. The 3,000 MT CO_2e per year threshold uses the Executive Order S-3-05 goal, which provides for a reduction in GHG emissions to 80% below 1990 levels by 2050, as the basis, so it is not tied to only the 2020 target year (AQMD, 2008). This threshold is also based on the 90% capture rate methodology described above.

4.7.5 Project Design Features

The Project includes the following PDFs that serve to reduce the Project's impacts.

PDF GHG-1 The Project will include solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually.

PDF GHG-2 The Project will be 100% electric and would not include natural gas.

PDF GHG-3 A community electric vehicle for the affordable housing component shall be provided for residents to drive short distance trips to the local grocery store.

PDF GHG-4 The Project's parking areas will be designed to provide electric vehicle (EV) charging stations. At minimum, the number of EV charging stations will equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1.

4.7.6 IMPACT ANALYSIS

Threshold a: ***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

A. Construction

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the South Coast AQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.7-3, *Amortized Annual Construction Emissions*.

Table 4.7-3 Amortized Annual Construction Emissions

Year	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
2024	1,204.00	0.05	0.03	0.49	1,216.00
2025	871.27	0.03	0.03	0.70	881.29
2026	856.00	0.03	0.03	0.63	867.00
2027	247.00	0.01	0.01	0.16	249.00
Total GHG Emissions	3,178.27	0.12	0.10	1.98	3,213.29
Amortized Construction Emissions	**105.94**	**0.004**	**0.00333**	**0.07**	**107.11**

Source: (Urban Crossroads, 2023d, Table 3-3)
Note: In order to calculate the emissions amortized over a 30-year period the total construction GHG emissions was divided by 30 years, as follows: 3,213.29 CO_2e/30 = 107.11.

B. Operation

The annual GHG emissions associated with the operations of the Project would result in direct and indirect emissions of CO_2, CH_4, and N_2O, and would not generate other GHGs of sufficient quantity to affect the analysis. Therefore, this analysis focuses on CO_2, CH_4, and N_2O.

Direct Project-related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from energy source, water usage, and solid waste generation. GHG emissions are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity usage associated with the Project was calculated by CalEEMod using default parameters. Pursuant to project design feature PDF-GHG-1, Project will include the installation of solar, which is expected to generate approximately 1,229,520 kWh per year.

Project-related GHG emissions were quantified with CalEEMod, which relies upon vehicle trip rates and Project-specific land use data to calculate emissions. As shown on Table 4.7-4, *Project GHG Emissions*, construction and operation of the Project would generate a 2,757.11 $MTCO_2e$/yr; the Project would not exceed the screening threshold of 3,000 $MTCO_2e$/yr. Thus, impacts would be less than significant and no mitigation is required.

Table 4.7-4 Project GHG Emissions

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Annual construction-related emissions amortized over 30 years	105.94	0.004	0.00333	0.07	107.11
Mobile Source	2,471	0.10	0.10	3.46	2,505
Area Source	58.7	<0.005	<0.005	--	58.8
Energy Source	5.09	<0.005	<0.005	--	5.12
Water Usage	13.3	0.30	0.01	--	23
Waste	16.5	1.65	--	==	57.7
Refrigerants	--	--	--	0.47	0.47
Total CO_2e (All Sources)	**2,757.11**				

Source: (Urban Crossroads, 2023d, Table 3-4)

Threshold b: ***Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

A. 2022 CARB Scoping Plan Consistency

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan, Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects. Appendix D, page 4 states that

it, "…focuses primarily on CAPs and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

The 2022 Scoping Plan lays out a framework to determine Project-level consistency when there is not a CEQA-qualified CAP available to tier from. CARB recommends that the first approach for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing. The 2022 Scoping Plan goes on to note that Projects that can demonstrate consistency with the priority areas identified on Table 3 Key Residential and Mixed-Use Project Attributes that Reduce GHGs from the 2022 Scoping Plan would be aligned with the State's priority GHG reduction strategies and would be deemed consistent with the Scoping Plan. As such, these Projects are considered to be consistent with the Scoping Plan or other plans, policies, or regulations adopted for the purposes of reducing GHGs. Therefore, the GHG emissions associated with such projects would result in a less-than-significant GHG impact under CEQA.

The Project's consistency with the Key Residential and Mixed-Use Project Attributes that Reduce GHGs from the 2022 Scoping Plan is summarized in Table 4.7-5, *Project Consistency With 2022 Scoping Plan Key Residential And Mixed-Use Project Attributes That Reduce GHGs*. As shown, the Project would be consistent with the 2022 Scoping Plan's key residential and mixed-use project attributes to reduce GHGs. As such, the Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan, such as CCR Title 24 and Energy Code. The Project would not have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Accordingly, impacts are less than significant and no mitigation is required.

Table 4.7-5 Project Consistency With 2022 Scoping Plan Key Residential And Mixed-Use Project Attributes That Reduce GHGs

Priority Areas	Key Project Attribute	Consistency Analysis
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval	**Consistent.** The Project would include the most ambitious voluntary standard in the California Green Building Standard Code. Specifically, EV charging infrastructure that, at minimum, would equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1 (PDF GHG-4). Therefore, the Project is consistent with this attribute.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses	**Consistent.** The Project site is currently developed with an

Priority Areas	Key Project Attribute	Consistency Analysis
	and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)	unoccupied two-story, 88,000 sf commercial office building and parking lot that was served by utilities and essential public services. The Project would redevelop the underutilized land with a 246 residential unit development consisting of a variety of different product types, including single family homes, townhomes, and apartments; and would tie into existing infrastructure. Additionally, a community electric vehicle for the affordable housing component shall be provided for residents to drive short distance trips to the local grocery store (PDF GHG-3). Therefore, the Project is consistent with this attribute.
	Does not result in the loss or conversion of natural and working land	**Consistent.** The Project site is currently developed with an unoccupied two-story, 88,000 sf commercial office building and parking lot. The Project would not result in the loss or conversion of natural and working lands. Therefore, the Project is consistent with this attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS	**Consistent.** The overall density for the Project would be 20 dwelling units per acre. Therefore, the Project is consistent with this attribute.
	Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or	**Consistent.** LAMC Section 17.22.030 – Required Parking Spaces, provides parking requirements by each land use. Based on the unit count, 588.5 parking spaces are required for the proposed residential development. The Project would provide a total of 577 parking spaces consisting of 475 parking spaces for the single family homes and 102 parking spaces for

Priority Areas	Key Project Attribute	Consistency Analysis
	For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	the affordable multifamily apartment homes. The Project Applicant has requested that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces for the Project through a parking reduction request pursuant to the State's Density Bonus Law. Therefore, the Project eliminates the City's parking requirement of 588.5 spaces and is consistent with this attribute.
	At least 20 percent of units included are affordable to lower-income residents	**Consistent.** The Project would include 246 total dwelling units, 77 of which would be affordable multifamily apartment homes. Approximately 31.3 percent of the Project would include affordable units to lower-income residents. Therefore, the Project is consistent with this attribute.
	Results in no net loss of existing affordable units	**Consistent.** There are no existing affordable units on the Project site. The Project site is currently developed with an unoccupied two-story, 88,000 sf commercial office building and parking lot. The Project would not result in a net loss of existing affordable units. The Project would meet RHNA requirements per the City's 2021-2029 Housing Element. Therefore, the Project is consistent with this attribute.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	**Consistent.** No natural gas would be used as part of Project operation (PDG GHG-2). The Project would use all-electric appliances without any natural gas connections and would not include the use of propane or other fossil fuels for space heating, water heating, or indoor cooking. Therefore, the Project is consistent with this attribute.

Source: (Urban Crossroads, 2023d, Table 3-5)

4.7.7 Cumulative Impact Analysis

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 consistent with the requirements outlined in CEQA Guidelines 15064(h)(3). As discussed, implementation of the Project would comply with the 2022 Scoping Plan and would not result in net annual emissions that exceed the GHG emissions significance threshold of 3,000 MT CO_2e/yr. Therefore, Project-related GHG emissions and their contribution to global climate change would not be cumulatively considerable, and GHG emissions impacts would be less than significant.

4.7.8 Significance of Impacts Before Mitigation

Threshold a: Less-than-significant Impact. The Project would not exceed the screening threshold of 3,000 $MTCO_2e$/yr. Therefore, impacts are less than significant.

Threshold b: Less-than-significant Impact. The Project would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHG emissions. Therefore, impacts are less than significant.

4.7.9 Mitigation

No mitigation is required.

4.7.10 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following analysis presented in this Subsection is based on the *Phase I Environmental Site Assessment* (Phase I ESA) (*Technical Appendix H1*) that was prepared for the Project site by EFI Global, Inc. (EFI), dated January 18, 2023, (EFI, 2023). The goal of the Phase I ESA was to identify any (1) recognized environmental conditions (RECs), (2) historical recognized environmental conditions (HRECs), (3) controlled recognized environmental conditions (CRECs), and/or (4) *de minimis conditions* associated with the Project site. A Phase II Environmental Site Assessment (*Technical Appendix H2*) was also prepared for the Project site by EFI dated September 22, 2022, (EFI, 2022). This Subsection is also based on information contained in the City of Los Alamitos General Plan. All references used in this Subsection are listed in EIR Section 8.0, *References*.

For the purposes of this EIR, the term "REC" is defined as (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. The term "HREC" is defined as a previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations). A HREC is not a REC. The HREC designation requires the comparison of residual contamination concentrations, if any, to current regulatory standards. The term "CREC" is defined as an REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations). The term "*de minimis conditions*" is defined as a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a *de minimis condition* is not a REC nor a controlled recognized environmental condition.

For the purposes of this EIR, the term "toxic substance" is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances.

For purposes of this EIR, the term "hazardous material" is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness.

Hazardous waste is defined in the California Code of Regulations, Title 22, Section 66261.3. The defining characteristics of hazardous waste are ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the U.S. Environmental Protection Agency [EPA] as capable of inducing systemic damage to humans or animals). Certain wastes are called "Listed Wastes" and are found in the California Code of Regulations, Title 22, Sections 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

4.8.1 Existing Conditions

Under existing conditions, the Project site is developed with a vacant two-story, 88,000 sf commercial office building and surface parking lot while the remainder of the site consists of open space.

A. Historical Review

The Project site was undeveloped land sometime prior to 1896 through at least 1902. There is no information on past uses from 1902 to 1928. From at least 1928 to at least 1963, the site was developed for agricultural purposes. A small barn-like structure was located on the southwest portion of the subject property from 1928 to 1938. By 1938, the site was developed with an unpaved road on the west portion, running north to south, and the unpaved road was no longer present by 1947. In 1971, the Project site was redeveloped with the existing commercial structure on the central portion, a parking lot on the west portion, and landscaped areas in the remainder. The site has remained in this configuration through the present.

Because the site was historically used for agricultural purposes, there is a potential that during this period agricultural chemicals, such as pesticides, herbicides, and fertilizers were applied to the site consistent with normal application practices. Agricultural chemicals tend to accumulate in the near-surface soils. The north and east portions of the site have not been redeveloped since the agricultural use ceased. A Limited Phase II ESA was conducted at the site in September 2022.

B. Regulatory Review

Various State and federal lists that identify properties with confirmed or possible contamination, facilities that generate hazardous wastes, sites with underground storage tanks (USTs), and properties involved in federal enforcement actions were reviewed to assess the environmental status of the Project site.

The existing building was recently occupied by WestEd (a non-profit educational research, development, and services agency), the California Department of Fish and Wildlife, National Comfort Institute, Inc. (NCI) (a heating, ventilation and air conditioning [HVAC] training center), and James J. Mentas Attorney at Law. The Project site is listed on the Department of Defense Sites (DOD), Facility and Manifest Data (HAZNET), Hazardous Waste Tracking System (HWTS), California Hazardous Materials Information Reporting System (CHMIRS), Resource Conservation and Recovery Act - Non

Generator/No Longer Regulated (RCRA NonGen/NLR), Facility Index System/Facility Registry System (FINDS), and Enforcement and Compliance History Online (ECHO) databases.

The DOD listing indicated that the site is located within the boundaries of the Los Alamitos Armed Forces Reserve Center as outlined in the DOD database. The HWTS listings concluded that based on the nature of wastes, and proper disposal, the documented waste generation is not expected to represent a significant environmental concern. FIND records indicated the past occupant, WestEd, was issued a Permit to Construct/Operate (PTC/ O) a diesel-fueled emergency electrical generator on January 6, 2000. Another PTO for this generator was issued to WestEd on June 29, 2007. A notice of violation was issued to WestEd on January 3, 2017, for the failure to register boilers rated 1-2 million British thermal units per hour (Btu/hr), which was returned to compliance on April 7, 2017.

The RCRA NonGen/ NLR listing reported the property as a handler of hazardous waste on July 29, 2013. No violations or evaluations were found. Based on the nature of the wastes, proper disposal, and operation during a period of stringent regulatory oversight, the documented waste generation is not expected to represent a significant environmental concern.

According to the CHMIRS listing, a potential release of 45 gallons of gasoline onto the asphalt was discovered on September 27, 2019, after an event of vandalism that included the vandalization of several governmental vehicles parked at the subject property parking lot. The spilled gasoline was contained under the regulatory oversight of the Orange County Emergency Management Division. EFI prepared a Phase II ESA to further investigate the identified RECs in the Phase I ESA which included the gasoline release. Based on the investigation activities performed, no evidence of a significant release of potential chemicals of concern was identified in relation to the gasoline release. Concentrations are de minimis in nature and do not warrant further investigation or mitigation. None of the other State or federal sites listed on the regulatory database report pose a significant threat to the subject property.

The Santa Ana Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), South Coast Air Quality Management District (South Coast AQMD), Orange County Environmental Health Department (OCEHD), Orange County Sanitation District (OCSD), and Orange County Fire Authority (OCFA) were contacted regarding air emission permits, site investigation files, hazardous materials, underground storage tank, and industrial waste discharge records for the subject property. According to the responses to requests from the Santa Ana RWQCB, DTSC, and OCSD, and a review of the GeoTracker and EnviroStor online databases, there are no files for the Project site. At the time this report was issued, no response was received from the OCEHD. The South Coast AQMD records were consistent with the FINDS records discussed above. OCFA provided a routine inspection report of the Project site on July 25, 2006. The Project site was identified as an office building permitted to maintain combustible liquids as of 2002 and small arms ammunition. No violations were found. Based on the office nature of the operations, this information is not expected to represent an environmental concern.

C. *Field Reconnaissance*

Reconnaissance was conducted on the Project site on December 22, 2022, by EFI. The site inspection was conducted to attempt to identify current site use(s), current hazardous materials storage, and evidence of past site uses and hazardous material storage and to identify evidence of other RECs. The exterior portions of the subject property consist of an asphalt paved parking lot on the west portion, two driveways on the southern portion, concrete paved access ways, and landscaped areas on all sides. The asphalt pavement was observed to be in fair to good condition, with evidence of cracking and normal wear and tear observed throughout.

A gated enclosure area was located at the northwest corner of the parking lot. The enclosure was observed to contain an empty 55-gallon drum and various miscellaneous items. This enclosure was formerly utilized by the California Department of Fish and Wildlife to store confiscated boats. A pad-mounted transformer was observed on the west portion of the subject property. No labeling indicating polychlorinated biphenyls (PCB) content was observed on the transformer and no evidence of staining or leaks from the transformer was observed. Based on the good condition of the equipment, the presence of the pad-mounted transformer onsite is not expected to represent a significant environmental concern for the subject property. A truck loading dock was observed on the west portion, south of the transformer and contained six trash dumpsters for non-hazardous debris.

North of the transformer was an enclosure with a concrete berm containing inactive cooling equipment. In the vicinity of the cooling equipment was a floor drain on the north portion, and two 55-gallon drums to the east with unknown contents. The drums were in good condition with no evidence of spills or stains in the vicinity. Also in this enclosure was a 500-gallon diesel aboveground storage tank (AST). The diesel AST is utilized to fuel an emergency generator located in a south adjoining enclosure. Evidence of corrosion and spills was observed on the AST, and the concrete berm beneath appeared to be partially cracked. A dry-type transformer, which are known to be free of any fluids, was also observed in the vicinity of the emergency generator.

Building materials observed included drywall partitions and ceilings, drop ceiling panels, ceramic and vinyl floor tiles, carpet, and bare concrete paved floors. The building's cooling systems are located indoors in two mechanical rooms on the second floor consisting of cooling towers, boilers, an air compressor, and pumps. Multiple dry-type transformers, which are known to be free of any fluids, were observed within the mechanical rooms. A plastic 55-gallon drum containing cooling water treatment, a propane cylinder, and a 5-gallon container of genetron 113 refrigerant were observed, in addition to floor drains in this area. No evidence of spills or stains were observed in the vicinity and based on the use for the cooling system, the presence of these chemicals are not expected to represent an environmental concern. Within the mechanical room, EFI Global also observed an inactive emergency generator. the emergency generator was formerly powered by diesel and was installed in 1971 when the building was constructed. The generator was inactivated when a new emergency generator was installed onsite in the exterior. No evidence of spills, stains, or odors were noted in the vicinity of the inactive emergency generator. Based on the empty nature and location on the second floor, this inactive emergency generator is not expected to represent an environmental concern for the

subject property. The subject structure is equipped with a hydraulic elevator along the southwestern portion of the building. The elevator equipment room was observed, with evidence of a large stain on the slightly cracked pavement. No significant hazardous material storage was observed in the interior portions of the subject property.

EFI prepared a Phase II ESA for the Project site dated September 22, 2022 based on a geological survey and soil sampling conducted on August 16, 2022. A total of 11 soil borings (B1 through B11) were conducted at the Project site to a maximum depth of 15 feet bgs. Select soil samples were collected and analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as oil (TPHo), volatile organic compounds (VOCs), PCBs, organochlorine pesticides (OCPs), arsenic, and lead (Pb). TPHg and TPHo were not detected above the laboratory reporting limit in any of the three soil samples analyzed. The concentration of TPHd was compared to the Maximum Soil Screening Levels (MSSLs) established by the Los Angeles Regional Water Quality Control Board (LARWQCB) in their Interim Site Assessment and Cleanup Guidebook. The detected TPHd concentration did not exceed this screening level. Therefore, the TPHd concentration in soil is considered to be *de minimis* in nature and is not considered to be a threat to groundwater quality at the Project site.

Analytical results for VOCs and PCBs indicated concentrations were not detected above the laboratory reporting limits in any of the soil samples analyzed. All detected concentrations of OCPs in soil were significantly less than their respective residential Department of Toxic Substances Control screening level (DTSC-SL). Therefore, the OCPs detected in soil are considered to be de minimis in nature and are not considered to be a significant environmental concern for the proposed future residential use of the Project site.

Arsenic was detected in all four soil samples analyzed at a maximum concentration of 4.64 milligram per kilogram (mg/kg). The residential screening level for arsenic is 0.11 mg/kg and this screening level was exceeded in all of the four samples analyzed; however; they are below the background concentrations of 12.7 mg/kg for naturally existing arsenic found in most California soils, including those soils found elsewhere in Orange County. It is well documented that natural background concentrations of arsenic in California soils commonly exceed the screening criterion. A statistical analysis of data from 14 Air Force installations in California was completed in 2005 (*Inorganic Chemicals in Ground Water and Soil: Background Concentrations at California Air Force Bases,* Hunter et al., March 2005). The results of this statistical analysis indicated that for soil in the upper 3 feet, 12.7 mg/kg is considered to be a good estimation of background arsenic concentrations. Lead was also detected in all four soil samples analyzed at a maximum concentration of 17 mg/kg. The residential DTSC-SL for lead is 80 mg/kg. Therefore, the concentrations of arsenic and lead are considered to be *de minimis* in nature and do not warrant further investigation or mitigation as a result of the proposed residential development. (EFI, 2023)

Based on the analytical results detailed in the Limited Phase II ESA, the potential chemicals of concern detected in soil in the areas assessed do not indicate that a significant subsurface chemical release occurred. The detected concentrations found during the investigation are considered to be *de minimis*

for the proposed residential redevelopment, and EFI concluded that no further assessment is warranted at the time with respect to the RECs identified in the Phase I ESA. (EFI, 2023)

D. Airport Hazards

The Project site is located within the ALUC-designated Airport Planning Area of the Los Alamitos JFTB, which is immediately west of the Project site (ALUC, 2017, pp. 4, 10). Geographic areas around an airport that are determined to be a hazard to people are defined as "safety zones," "clear zones," or "accident potential zones." The shape and size of the zones reflect the geographic pattern of aircraft accident risks and applicable land use policies. The Project site is not located within the Clear Zones or accident potential zone (APZ) (refer to Figure 4.8-1, *JFTB Impact Zones*) for the JFTB. JFTB does not identify an APZs beyond the clear zones for the Base. The northwestern vertex of the Project site intersects the JFTB 60-65 A-weighted decibel (dBA) community noise equivalence level (CNEL) noise contour boundary. Land uses within the Airport Planning-Area boundaries are required to conform to safety, height, and noise restrictions established in the AELUP for the JFTB.

E. Wildland Fire Hazards

The City's General Plan identifies very little risk of wildland fire hazards due to the urban nature of Los Alamitos, Rossmoor, and the surrounding communities. In addition, according to the California Department of Forestry and Fire Protection (CalFire), the Project site is not located within a very fire hazard severity zone (CalFire, 2022).

4.8.2 Regulatory Framework

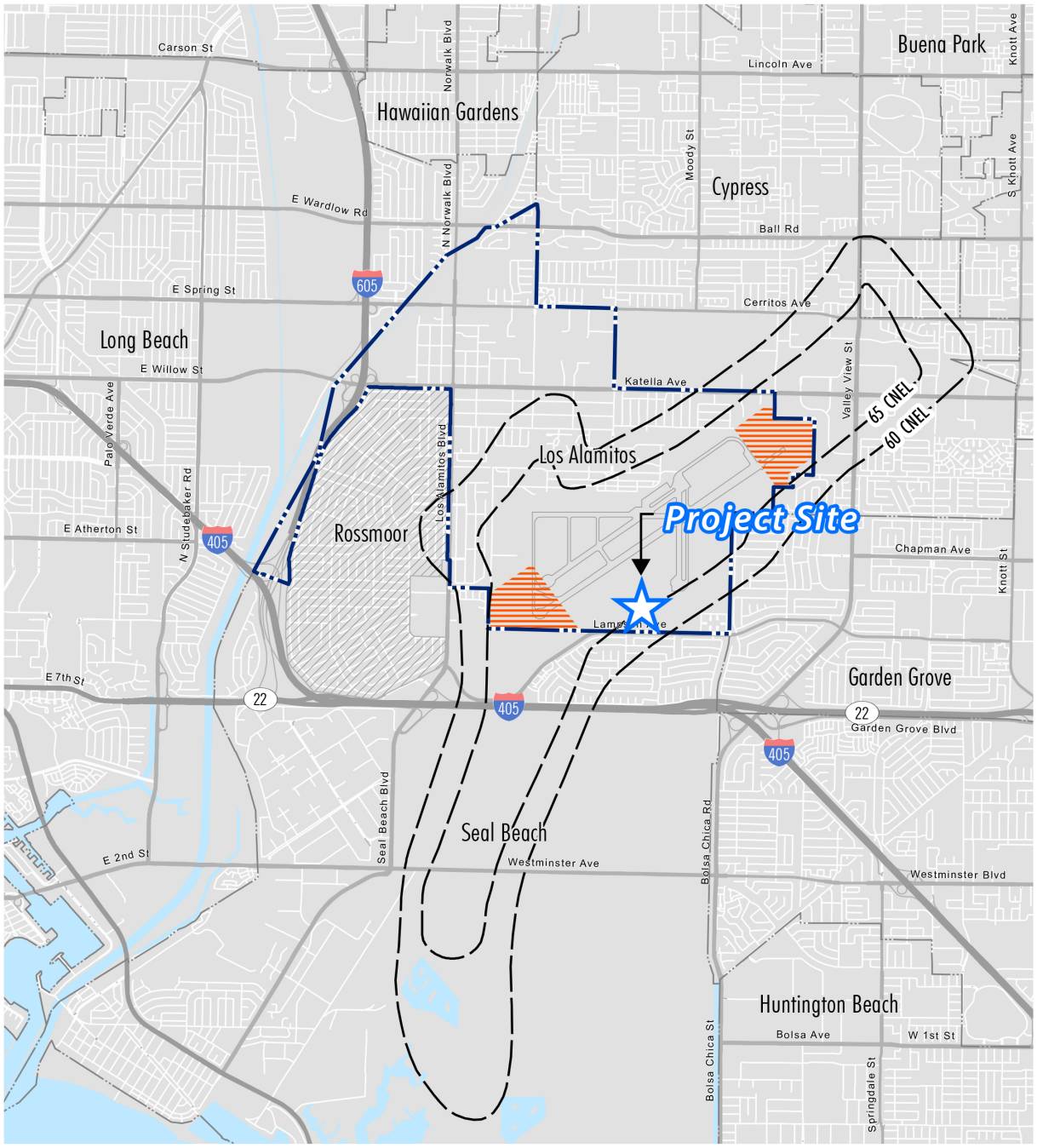
The following is a brief description of the federal, State, and local environmental laws and related regulations related to hazards and hazardous materials.

A. Federal

1. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. EPA also recovers costs from financially viable individuals and companies once a response action has been completed. (EPA, 2022a)

EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. (EPA, 2022a)



Source(s): City of Los Alamitos (03-23-2015)

Figure 4.8-1

Not to Scale

JFTB Impact Zones

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). (EPA, 2022a)

2. Resource Conservation and Recovery Act (RCRA)

The RCRA gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. (EPA, 2022f)

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. (EPA, 2022f)

3. Hazardous Materials Transportation Act (HMTA)

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property." (USDOL, n.d.)

Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 CFR Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177 (USDOL, n.d.)

The HMTA is enforced by use of compliance orders [49 U.S.C. 1808(a)], civil penalties [49 U.S.C. 1809(b)], and injunctive relief (49 U.S.C. 1810). The HMTA (Section 112, 40 U.S.C. 1811) preempts state and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. (USDOL, n.d.)

4. Hazardous Materials Transportation Uniform Safety Act of 1990

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous

material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. (USDOL, n.d.)

The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials. (USDOL, n.d.)

5. Occupational Safety and Health Act (OSHA)

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. (EPA, 2022c)
To establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. (EPA, 2022c)

6. Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint. (EPA, 2022b)

Various sections of TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture.
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found.
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.

- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.

- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform EPA, except where EPA has been adequately informed of such information. EPA screens all TSCA §8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law but are submitted by industry and public interest groups for a variety of reasons. (EPA, 2022b)

7. Federal Aviation Regulations Part 77

Federal Aviation Regulation (FAR) Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects.

Notification allows the Federal Aviation Administration (FAA) to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA: (FAA, 2022a)

- Any construction or alteration exceeding 200 feet above ground level.

- Any construction or alteration:

    - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.

    - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.

    - within 5,000 feet of a public use heliport which exceeds a 25:1 surface.

- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards.

- When requested by the FAA.

- Any construction or alteration located on a public use airport or heliport regardless of height or location. (FAA, 2022a)

Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2022a)

B. State

1. Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace. (USDOL, n.d.)

Pursuant to 29 CFR 1952.172, the California State Plan applies to all public and private sector places of employment in the state, with the exception of federal employees, the United States Postal Service, private sector employers on Native American lands, maritime activities on the navigable waterways of the United States, private contractors working on land designated as exclusively under federal jurisdiction and employers that require federal security clearances. Cal/OSHA is the only agency in the state authorized to adopt, amend, or repeal occupational safety and health standards or orders. In addition, the Standards Board maintains standards for certain things not covered by federal standards or enforcement, including elevators, aerial passenger tramways, amusement rides, pressure vessels and mine safety training. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries or illnesses. (USDOL, n.d.)

2. California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the state. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It

also regulates a number of waste types and waste management activities not covered by federal law (RCRA). (CA Legislative Info, n.d.)

3. California Code of Regulations (CCR), Titles 22 and 26

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the DTSC regulates hazardous waste more stringently than the EPA, the integration of state and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as "Title 22." (DTSC, n.d.; DTSC, 2019)

4. State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics ("Division") and was later amended by statute to read the State Aeronautics Act (Aeronautics Act) in 1961. As a result of this legislation, the Division's first priorities are those mandated by the Aeronautics Act, then Caltrans guidance, then Division guidance as expressed through its Policy Element. As directed by the Aeronautics Act, the Division is a steward and advocate of aviation in California. To that end, its efforts are focused on activities that "protect the public interest in aeronautics and aeronautical progress." (§ 21002) (CA Legislative Info, n.d.)

The Aeronautics Act itself is divided into six chapters, the first five of which have not received significant cleanup legislation since its enabling in 1947. The first chapter begins with general provisions and definitions and explains the Legislature's intent for a State aviation program. Chapter two explains Caltrans' role in administering the Division and explains the role of the California Transportation Commission (CTC). Chapter three includes many of the safety considerations from FAA regulations that help keep airports and the surrounding communities safe and compatible with flight operations. Chapter four deals with airport and heliport permitting, air navigation facilities, noise guidelines, funding, and importantly, the formation and authority of ALUC. Chapter five covers the investigations and hearings on matters covered in the Aeronautics Act. Finally, Chapter six introduces airport planning and specifically introduces the intent of the CASP and how it can be used to support California aviation. (CA Legislative Info, n.d.)

5. California Environmental Quality Act

The operation of airports and aircraft is the responsibility of the FAA, but the requirement to document potential hazards related to airports and air activities when a new project is proposed is contained in CEQA, specifically Public Resources Code Section 21096, which states: (CA Legislative Info, n.d.)

> *"(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.*
>
> *(b) A lead agency shall not adopt a negative declaration for a project described in subdivision (a) unless the lead agency considers whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area."*

C. Local

1. Airport Environs Land Use Plan for the Los Alamitos Joint Forces Training Base

The AELUP is a land-use compatibility plan that is intended to protect the public from adverse effects of aircraft noise, ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and ensure that no structures or activities adversely affect navigable space. The AELUP identifies standards for development in the airport's planning area based on noise contours, accident-potential zones, and building heights. ALUCs are 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. (ALUC, 2017)

The City and the Project site falls within the airport planning area of the Los Alamitos JFTB; land uses within the airport planning-area boundaries are required to conform to safety, height, and noise restrictions established in the AELUP for the JFTB. The Project site is not located within any airport safety zones, including the JFTB Clear Zone, or Runway Protection Zone. The Project site is located within the Federal Aviation Regulation Part 77 Notification Area and under the Horizontal Imaginary Surface for the Los Alamitos JFTB. In addition, the Project site is within the 60 dB noise contour for Los Alamitos JFTB. Residential uses are considered "conditionally consistent" with AELUP Noise limitations and must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. Residential use sound attenuation is required to ensure that the interior CNEL does not exceed 45 dB. (ALUC, 2017)

2. City of Los Alamitos General Plan

The General Plan identifies goals related to hazards and hazardous materials in the Public Facilities and Safety Element. These goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Section 4.10, *Land Use and Planning*, of this EIR.

3. City of Los Alamitos Municipal Code

Chapter 8.20, Hazardous Material Disclosure, of the Los Alamitos Municipal Code establishes a system of disclosure that provides information essential to firefighters, health officials, planners, elected officials, and other emergency service personnel in meeting their responsibilities for the health and welfare of the community. Chapter 8.20 also implements the community's right and need for basic information about the use and disposal of hazardous materials in Los Alamitos and provides for an orderly system for the provision of such information.

4. City of Los Alamitos Emergency Operations Plan

The City adopted an Emergency Operations Plan (EOP) in 2015. The EOP identifies the City's emergency planning, organizational structure, and response policies/procedures to natural disasters and incidents of terrorism. The plan reinforces the City's priorities and directs the allocation of resources to save life, property and the environment. The purpose of the EOP is to mitigate the effects of hazards, identify measures to be taken which will preserve life and minimize damage, enhance response capabilities, provide necessary assistance during emergencies, and establish a recovery system in order to return the City to its normal state of affairs.

4.8.3 METHODOLOGY

The analysis of potential hazards and hazardous materials-related impacts is based upon hazardous materials investigations prepared specifically for the Project site. The investigations included a site reconnaissance, review of published reports, maps, and aerial photographs, and soil testing pursuant to American Society of Testing and Materials (ASTM) International E1527-13 and E1527-21. The analysis also included a review of the City's General Plan, information sources from State and federal agencies, a review of applicable airport land use plans, hazardous materials mapping, fire hazard mapping, and other resource databases.

The analysis of potential airport-related safety and excessive noise hazards is evaluated by determining whether the Project places residents or workers within an APZ or incompatible noise contour. This analysis included a review of the City's General Plan, JFTB Los Alamitos AELUP, the State of California, Division of Aeronautics' California Airport Land Use Planning Handbook, and Federal Regulation Title 14 Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace (Part 77).

4.8.4 Basis for Determining Significance

Section IX of Appendix G to the CEQA Guidelines addresses typical adverse effects due to hazards and hazardous materials, and includes the following threshold questions to evaluate the Project's impacts from hazards and hazardous materials (OPR, 2022):

- *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
- *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;*
- *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*
- *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;*
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;*
- *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;*
- *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.*

4.8.5 Impact Analysis

Threshold a:	***Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***
Threshold b:	***Would the Project 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?***

Implementation of the Project would result in the demolition of the existing building and surface parking lot and the construction and long-term operation of 246 residential units. In the event that any hazards or hazardous materials were to be present on the Project site or any hazardous materials were to be used or stored on the Project site during construction or long-term operation, the Project's activities would have the potential to expose workers or residents on the site, the public, and/or the environment to a hazardous environmental condition. An evaluation of this potential is provided below.

A. Potential Hazards in Demolition Materials

The use of asbestos-containing materials (ACM, a known carcinogen) and lead-based paint (LBP) (a known toxic), both of which are considered hazardous materials, was a common building construction method prior to 1978 and may be present in the existing building. All proposed demolition activities would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of PCBs, ACMs and LBP.

Additionally, the Project is required to comply with South Coast AQMD Rule 1403 (Asbestos Emissions) and Title 17 of the CCR, Division 1, Chapter 8: *Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards* applies. South Coast AQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Assuming that ACMs are present in the existing structure located on-site, then Rule 1403 requires notification of the South Coast AQMD prior to commencing any demolition activities. Rule 1403 also sets forth specific procedures for the removal of asbestos and requires that an on-site representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing, and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because future development on the Project site would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to ACMs would be less than significant.

Title 17, CCR, Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. During the demolition of the existing structure, there is a potential for exposing construction workers to health hazards associated with lead. The Project would be required to comply with Title 17, CCR, Division 1, Chapter 8, which includes requirements such as employer-provided training, air monitoring, protective clothing, respirators, and handwashing facilities. Mandatory compliance with these requirements would ensure that construction workers and the public are not exposed to significant LBP health hazards or upset during demolition and/or during transport of demolition waste to an appropriate disposal facility and would ensure that impacts related to LBP remain less than significant. Compliance with the above regulatory requirements would ensure that removal of ACMs or LBPs would result in a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant. No mitigation is required.

B. On-Site Conditions and Impacted Soils

Based on a review of regulatory databases and a site reconnaissance, the Project site does not contain any hazards, nor is the Project site affected by any off-site hazards. The Phase I ESA and Limited Phase II ESA identified no RECs, HRECs, or CRECs during the course of the assessment. The potential chemicals of concern detected in the soil in the areas assessed do not indicate that a significant subsurface chemical release occurred. The detected concentrations found during the investigation are

considered to be *de minimis* for the proposed residential redevelopment. Therefore, past and present uses do not represent a significant environmental concern for the Project site. As a result, implementation of the Project would result in less than significant impacts. No mitigation is required.

C. Potential Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the Project site during demolition and construction activities. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment.

This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, DTSC, and the Santa Ana RWQCB. With mandatory compliance with applicable hazardous materials regulations, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. A less than significant impact would occur and no mitigation is required.

D. Impact Analysis for Long-Term Operation

The long-term operation of the proposed Project would not include any components associated with the transport, use, or disposal of hazardous materials beyond those typical of a residential development, which would be conducted in accordance with all applicable local, State, and federal regulations. Operation of the proposed residential uses would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. With mandatory regulatory compliance, the Project would not pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. Based on the foregoing, potential hazardous materials impacts associated with long-term operation of the Project are regarded as less than significant and no mitigation is required.

Threshold c:	***Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

The Project site is not located within a one-quarter mile of an existing or proposed school. As discussed under Thresholds a and b, construction of the Project would be required to comply with all applicable federal, State, and local laws and regulations and would not create significant hazard to the public or

the environment through routine transport, use, or disposal of hazardous materials. Past and present uses do not represent a significant environmental concern for the Project site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the South Coast AQMD, EPA, DTSC, and the Santa Ana RWQCB. Operation of the proposed residential uses would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. The nearest existing school to the Project site is the Montessori Greenhouse School, located approximately one mile northeast of the Project site (Google Earth, n.d.). Accordingly, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a one-quarter mile of an existing or proposed school. Thus, no impact would occur and no mitigation is required.

Threshold d:	***Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

Government Code Section 65962.5 requires DTSC, the State Department of Health Services, State Water Resources Control Board, and the State Department of Resources Recycling and Recovery to maintain a list of hazardous materials sites that fall within specific, defined categories. The Project site is not located on any list of hazardous materials compiled pursuant to Government Code Section 65962.5 (DTSC, n.d.). As such, no impact would occur and no mitigation is required.

Threshold e:	***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?***

As discussed previously in Subsection 4.8.2, the Project site falls within the airport planning area of the Los Alamitos JFTB. In 1975 the Orange County ALUC amended the AELUP for the JFTB to protect the public around the JFTB while ensuring operation of the JFTB. The AELUP was most recently amended in 2017, which reflected updates based on changes made to the *California Airport Land Use Planning Handbook*. The Project site is not located within a Clear Zone or APZ (refer to Figure 4.8-1, *JFTB Impact Zones*). The northwestern vertex of the Project site intersects the JFTB 60-65 dBA CNEL noise contour. Land uses within the airport planning-area boundaries such as the Project site are required to conform to safety, height, and noise restrictions established in the AELUP for the JFTB.

As discussed in EIR Section 3.0, *Project Description*, the maximum building height of the Project is approximately 41 feet. Project site elevations range from 21 feet to 39 feet. The proposed Project would not exceed the established Part 77 Horizontal Surface for the primary JFTB runway of 150 feet above airport elevation (ALUC, 2017, p. 26). Also, on January 26, 2022, the FAA issued Determinations of No Hazard to Air Navigation (*Technical Appendix J2*) after its aeronautical study of the Project revealed that the structures would not exceed obstruction standards and would not be a hazard to air

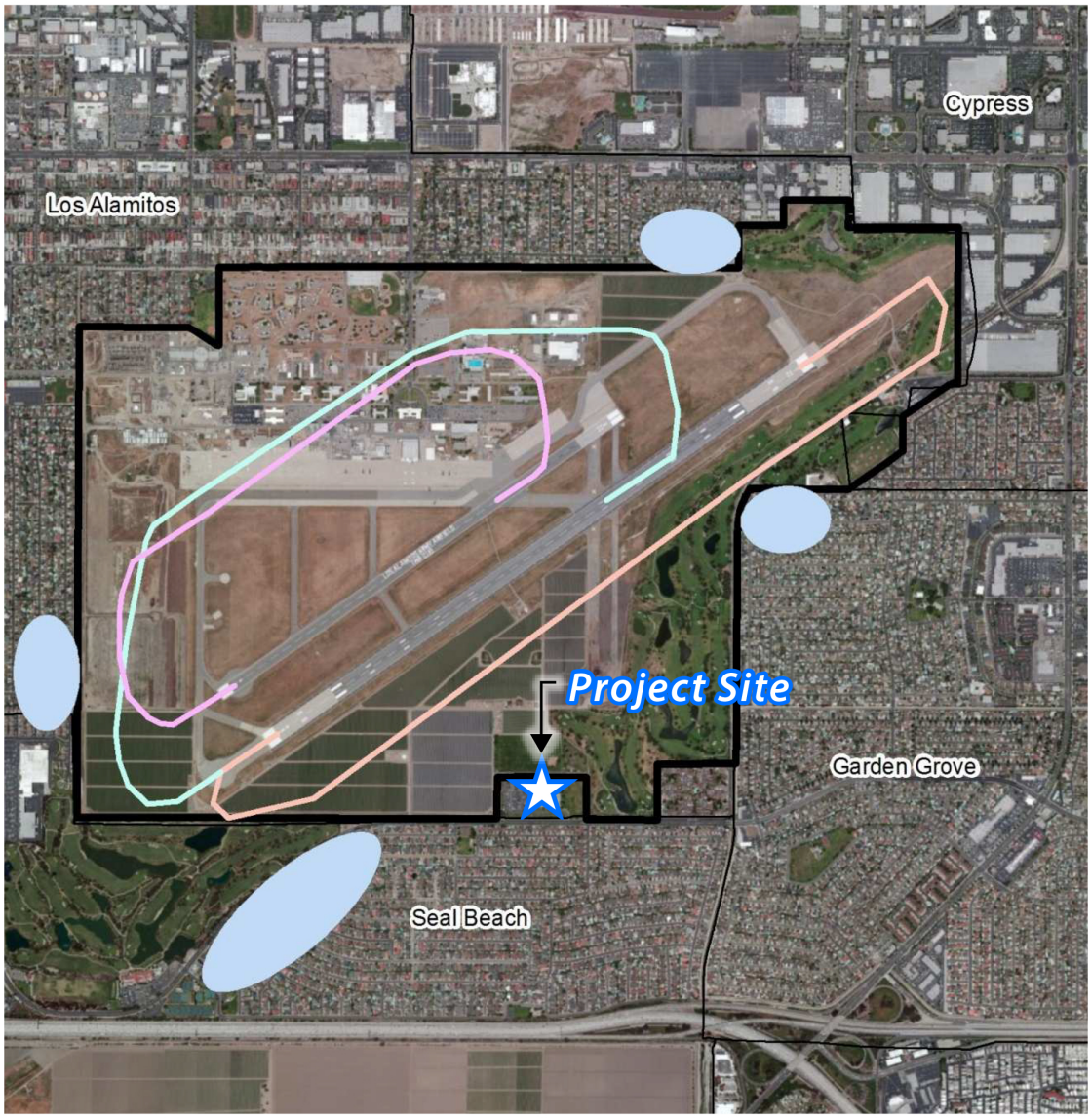
navigation[1]. Additionally, as shown in Figure 4.8-2, *Los Alamitos JFTB Flight Patterns*, the Project site is not located within any of the flight pattern in the JFTB. Buyer awareness is required as part of the City's approval process for the Project. The buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location. Therefore, the City meets the overflight notification requirements as suggested by the Handbook, State law, the AICUZ and AELUP, and the Project would not result in a safety hazard for people residing or working in the Project area.

As discussed in Section 4.11, *Noise*, based on a review of noise level contours for the JFTB a small portion of the proposed residential uses would be located within the conditionally consistent 60-65 dBA noise contour under projected conditions. Exposure of exterior use areas to noise levels in excess of 70 dBA CNEL would be considered significant, and exposure of residential land uses to noise levels in excess of 65 dBA CNEL would be significant unless noise levels in interior habitable rooms are reduced to 45 dBA CNEL . Typical modern residential construction can achieve a noise level reduction of 25 dBA with windows closed. Thus, with the implementation of PDF N-2 (Refer to Section 3.0, *Project Description*, for the discussion of PDF N-2), a windows closed condition was evaluated, which indicates maximum interior noise levels would range from 35 to 40 dBA CNEL from aircraft noise exposure. Therefore, the Project would not result in excessive noise for people residing or working in the Project area.

The currently adopted General Plan contains Policies 1.4, 3.1, 3.5, 3.6, and 3.7 from the Growth Management Element, and Policies 4.1 and 4.6 from the Public Facilities and Safety Element to assure future development will be consistent with the AELUP. Compliance with the policies and land use regulations would further minimize safety hazards for people residing and working near the Los Alamitos JFTB. Refer to Table 4.10-2, *General Plan Consistency Analysis*, for an analysis of the Project's consistency with the policies above. Thus, impacts would be less than significant and mitigation is not required.

Compliance with FAA Regulation Part 77 Notification Area and Horizontal Imaginary Surface for the Los Alamitos JFTB is provided in Section 4.10, *Land Use and Planning*, of this EIR. Based on the FAA's Determination of No Hazard to Air Navigation (*Technical Appendix J2*), the proposed structures do not exceed obstruction standards and would not be a hazard to air navigation. Therefore, no impact would occur.

[1] A timely request for extension was filed with the FAA on June 26, 2023 and was issued on August 18, 2023 and is valid until February 18, 2025.



Legend

- Los Alamitos JFTB
- Noise Sensitive Areas
- 22L/04R North Pattern
- 22R/04L North Pattern
- RW South Traffic Pattern



Source(s): ALUC (08-17-2017)

Figure 4.8-2

Not to Scale

Los Alamitos JFTB Flight Patterns

Threshold f: ***Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

During construction, the Project would result in roadway improvements along Lampson, including replacement of the existing median curb and construction of the two proposed driveways. Construction on Lampson will require an encroachment permit and approval from the City Engineer Lane closures that may be required for median improvements would be temporary and require a permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. Compliance with LAMC 12.08.200 would ensure safe crossing and access for all vehicle and pedestrians at all times.

The City adopted an Emergency Operations Plan (EOP) in 2015. The EOP identifies the City's emergency planning, organizational structure, and response policies/procedures to natural disasters and incidents of terrorism. The purpose of the EOP is to mitigate the effects of hazards, identify measures to be taken which will preserve life and minimize damage, enhance response capabilities, provide necessary assistance during emergencies, and establish a recovery system in order to return the City to its normal state of affairs. The City currently does not have any designated evacuation routes, however, the EOP recognizes that during a major evacuation event, all major roadways would be available for evacuation purposes. (City of Los Alamitos, 2015a) Implementation of the Project would not result in changes to the existing roadways that would impair or physically interfere with the EOP or evacuation routes.

The Project site does not contain any emergency facilities. During construction and long-term operation, the proposed Project would be required to maintain adequate access for emergency vehicles. The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. In accordance with OCFA Guideline B-09, Fire Master Plans for Commercial & Residential Development, Firesafe Planning Solutions prepared a Fire Master Plan for the Project (see Figure 4.8-3, *Fire Master Plan*). The Fire Master Plan demonstrates the Project's compliance with the California Fire and Building Codes and other regulations governing water availability for firefighting and emergency access to the Project site, including but not limited to fire access and roadway design, fire lane identification, and access to structures. Accordingly, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan. Thus, impacts would be less than significant and mitigation is not required.

Threshold g: ***Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?***

The City's General Plan identifies very little risk of wildland fire hazards due to the urban nature of Los Alamitos, Rossmoor, and the surrounding communities. The primary fire hazard is urban fires - those that burn in developed areas and include commercial, industrial, and residential structures. The Project would result in the development of the Project site with residential buildings that would remove the vegetation which would reduce the presence of fuel in the event of a wildfire. The proposed residential structures would be designed to comply with State and local fire safety requirements. Figure

4.8-3, *Fire Master Plan*, demonstrates compliance with all codes and other regulations governing water availability for firefighting and emergency access to the Project site and structures. In addition, the Project site is not located within a very fire hazard severity zone (CalFire, 2022). Therefore, the Project would not expose people or structures, directly, or indirectly, to a risk of loss, injury or death involving wildland fire, and no impact would occur.

4.8.6 Cumulative Impact Analysis

As discussed above under the responses to Thresholds a and b, the Project's construction and operation would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, and disposal of hazardous substances. Such uses also would be subject to additional review and permitting requirements by the Orange County Health Care Agency, Environmental Health Division. Similarly, any other developments in the area proposing the construction of uses with the potential for use, storage, or transport of hazardous materials also would be required to comply with applicable federal, State, and local regulations, and such uses would be subject to additional review and permits from their local oversight agency. Therefore, the potential for release of toxic substances or hazardous materials into the environment, either through accidents or due to routine transport, use, or disposal of such materials, would be less than cumulatively considerable.

As discussed above under Threshold c, no existing or planned schools are located within a one-quarter mile of the Project site, and therefore, the Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a one-quarter mile of an existing or proposed school, and no impact would occur. Therefore, the Project has no potential to combine with other development projects to result in substantial hazardous materials-related impacts within one-quarter mile of the Project site.

As indicated under Threshold d, the Project site is not listed on any hazardous materials sites lists compiled pursuant to Government Code Section 65962.5; no impact would occur. Because the Project site is not classified as a hazardous materials site, there is no potential for the Project to contribute to, or exacerbate, adverse environmental effects resulting from other hazardous materials sites in the Project vicinity.

As discussed above under Threshold e, the Project would not violate the standards outlined in the AELUP for the Los Alamitos JFTB. Because the Project and cumulative development within the airport planning area are subject to compliance with the policies and land use regulations in the AELUP, the potential for a cumulative impact to occur related to potential safety hazards for people residing and working near the Los Alamitos JFTB would be minimized.

CONSTRUCTION NOTES

1. INSTALL FIRE LANE ENTRANCE SIGN PER OCFA GUIDELINE B-01 AND DETAIL SHT. F-1.
2. INSTALL "VEHICULAR ACCESS ONLY" SIGN AT EVA. SEE DETAIL SHT. F-1.
3. INSTALL SUB- KEYED KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS PER OCFA GUIDELINE B-01.
4. INSTALL FIRE HYDRANT MARKER THAT SHALL BE PLACED 6" FROM CENTERLINE ON HYDRANT SIDE OF STREET.
5. INSTALL HAMMERHEAD TURNAROUND PER OCFA GUIDELINE B-01.
6. INSTALL RED CURB PER OCFA GUIDELINE B-01 AND DETAILS SHT. F-1.
7. INSTALL WAYFINDER SIGN.
8. INSTALL EVA ENTRY ALL WEATHER DECORATIVE PAVING OR PAVERS THAT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
9. PROPOSED ALTERNATIVE DRIVABLE PAVERS OR PAVED SURFACE NOT A PART OF FIRE ACCESS.
10. INSTALL 4" DROP CURB THAT SHALL BE PAINTED RED.

LEGEND

- PROPOSED FIRE HYDRANT WITH BLUE REFLECTIVE FIRE HYDRANT MARKER. MARKER SHALL BE PLACED 6" FROM CENTERLINE OF HYDRANT SIDE OF STREET.
- PAINT CURB RED WITH "NO PARKING FIRE LANE" STENCIL AT 30' O.C. PER DETAILS SHT. F-1 AND OCFA GUIDELINE B-01
- 150' MAXIMUM HOSE PULL DISTANCE
- 300' MAXIMUM HOSE PULL DISTANCE
- PROPOSED FIRE LANE ENTRY SIGN
- PROPOSED EMERGENCY VEHICULAR ACCESS (EVA) ENTRY SIGN
- 6" MIN. BUILDING ADDRESSING (SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS)
- 4" MIN. UNIT ADDRESSING (SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS)
- LOCATION OF WAYFINDING SIGN PER CITY STANDARDS. SEE ARCHITECTURAL PLAN FOR FINAL DESIGN AND LOCATIONS
- INDICATES APPROXIMATE LOCATION OF KNOX BOX WITH 3-SETS OF ENTRY DOOR/GATE KEYS.

- INDICATES PROPOSED 3-STORY APARTMENT BUILDING (RESIDENTIAL AND INTERIOR COMMON USE)
- INDICATES PROPOSED 3-STORY TOWNHOME BUILDING
- INDICATES PROPOSED 3-STORY SINGLE FAMILY DWELLING UNIT
- INDICATES NOT A PART OF FIRE ACCESS
- PROPOSED PAVED ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
- PROPOSED EVA ENTRY ALL WEATHER DECORATIVE PAVING OR PAVERS THAT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. PER OCFA REQUIREMENTS.
- PROPOSED ALTERNATIVE DRIVABLE PAVERS OR PAVED SURFACE NOT A PART OF FIRE ACCESS

R=20' R=40' L 29' — INDICATES FIRE APPARATUS TURNING RADII. 20' WIDE PATH WITH 20' INSIDE AND 40' OUTSIDE

3' PAD SETBACK — INDICATES GROUND LADDERING ACCESS POINT TO RESCUE LOCATIONS AT 2ND AND 3RD LEVELS. SEE DETAIL SHT. F-1 FOR SETBACKS AND NOTES. FINAL LOCATIONS SHALL PER BE PART OF THE PRECISE FIRE MASTER PLAN.

NOTE: ALL FIRE DEPARTMENT ACCESS ROADS, INCLUDING STREETS NOT A PART OF FIRE ACCESS SHALL BE INSTALLED TO MEET OCFA REQUIREMENTS TO SUPPORT VEHICULAR LOADS OF 94,000 LBS.

40' 25' 32' 37'



Source(s): C&V Consulting, Inc. (04-04-2023)

Figure 4.8-3

Not to Scale

Fire Master Plan

As discussed above under Threshold f, the Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route; therefore, it has no potential to impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan and would result in no impact. Thus, the Project would have no effect on emergency access and there is no potential for the proposed Project to contribute to any cumulative impacts associated with emergency facilities or emergency evacuation routes.

As discussed above under Threshold g, the Project site is not located in an area that is susceptible to wildland fire hazards, and therefore would result in no impact related to significant risk of loss, injury, or death involving wildland fires. As such, the Project would not contribute to any cumulative impact related to wildland fires.

4.8.7 Significance of Impacts Before Mitigation

Threshold a and b: Less-than-Significant Impact. During Project construction and operation, mandatory compliance with federal, State, and local regulations would ensure that the proposed Project would not create a significant hazard to the environment due to routine transport, use, disposal, or upset of hazardous materials. Impacts would be less than significant.

Threshold c: No Impact. The Project site is not located within one-quarter mile of any existing or proposed schools. Accordingly, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts would occur to schools located one-quarter mile or more of the Project site.

Threshold d: No Impact. The Project site is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impacts would occur.

Threshold e: Less-than- Significant Impact. The Project would not exceed the established approach criteria for the primary JFTB runway of 150 feet above ground level. The FAA has issued a Determination of No Hazard based on their aeronautical study of the Project. Compliance with the policies and land use regulations in the AELUP would minimize potential safety hazards for people residing and working near the Los Alamitos JFTB. The Project site is not located within the Clear Zones for the JFTB and would not expose people residing or working in the Project area to excessive noise levels. Impacts would be less than significant.

Threshold f: Less-than-Significant Impact. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, adequate emergency vehicle access is required to be provided. Accordingly, implementation of the Project would not impair implementation of or physical interfere with an adopted emergency response plan or an emergency evacuation plan. Impacts would be less than significant.

Threshold g: No Impact. The Project site is not located in close proximity to wildlands or areas with high fire hazards. Additionally, the Project site is not located within an area recognized by CalFire as

a fire hazard severity zone. Therefore, the Project would not expose people or structures, directly, or indirectly, to a risk of loss, injury or death involving wildland fire. No impacts would occur.

4.8.8 Mitigation

No mitigation is required.

4.8.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.9 HYDROLOGY AND WATER QUALITY

The information presented in this Subsection relies on technical reports prepared by C&V Consulting, Inc. (hereinafter, "C&V"): 1) "Preliminary Hydrology Study," (Hydrology Report) dated March 2024 (C&V, 2024a); and 2) "Preliminary Water Quality Management Plan (WQMP)," dated March 13, 2024 (C&V, 2024b). In addition, C&V prepared "Alternate Preliminary Hydrology Study" for an alternate storm drain system (Alternate Hydrology Report) dated September 2023 (C&V, 2023). These reports are provided as *Technical Appendices I1, I2, and I3*, respectively, to this EIR. All other information sources referenced in this Subsection are listed in EIR Section 8.0, *References*.

4.9.1 EXISTING CONDITIONS

A. Regional Hydrology

Most of the City is within the Coyote Creek Watershed, which drains via several tributaries, including Coyote Creek, Brea Creek, Fullerton Creek, Carbon Creek, and the Los Alamitos Channel. The City is at Coyote Creek's confluence with the San Gabriel River. The concrete-lined, southerly flowing San Gabriel River flows year round in the lower end and is west of the City. The flood control facilities drain surface water from the cities of Los Alamitos, Cypress, Stanton, Garden Grove, and others throughout Southern California. (City of Los Alamitos, 2015b)

B. Site Hydrology

The existing site generally flows in a north to south direction into an existing westerly flowing concrete channel along the site's southerly property line. The westerly flowing channel is collected via an offsite 18-inch corrugated metal pipe (CMP) that flows under the offsite driveway to Arbor Park and discharges into an offsite earthen channel on the west side of the driveway. Runoff flows within this earthen channel are then collected by an existing 24-inch CMP that flows westerly, discharges into a westerly flowing earthen channel within the JFTB, and then drains to the Old Ranch Country Club to the south. Runoff is ultimately conveyed downstream into the San Gabriel River.

The combined, total 100-year peak flow rate for the Project site is approximately 40.28 cubic feet per second (cfs) under existing conditions. The Project site's existing stormwater drainage pattern is illustrated on Figure 4.9-1, *Existing Conditions Hydrology Map*.

Figure 4.9-2, *Existing Offsite Conditions Hydrology Map*, presents the offsite existing conditions on Lampson Avenue. Per field observation, the existing concrete channel along the site's southerly property line currently ponds back to the existing driveway and may overflow onto Lampson Avenue. Per Orange County Flood Protection Goals, flooding is permitted over the curb for the 100-year storm event as long as the 1-foot freeboard from the building finished floor to the water surface is provided. Additionally, street flow calculations located within Appendix C.3 of the Hydrology Report (*Technical Appendix I1*), contributing 25-year storm event street flows are contained below the top of curb with a 12 foot wide travel lane provided for emergency vehicles in accordance with Orange County Flood Protection Requirements. Based on conversations with City of Seal Beach staff, historical stormwater flows in Lampson Avenue exceed the top of curb elevation during larger storm events. C&V conducted

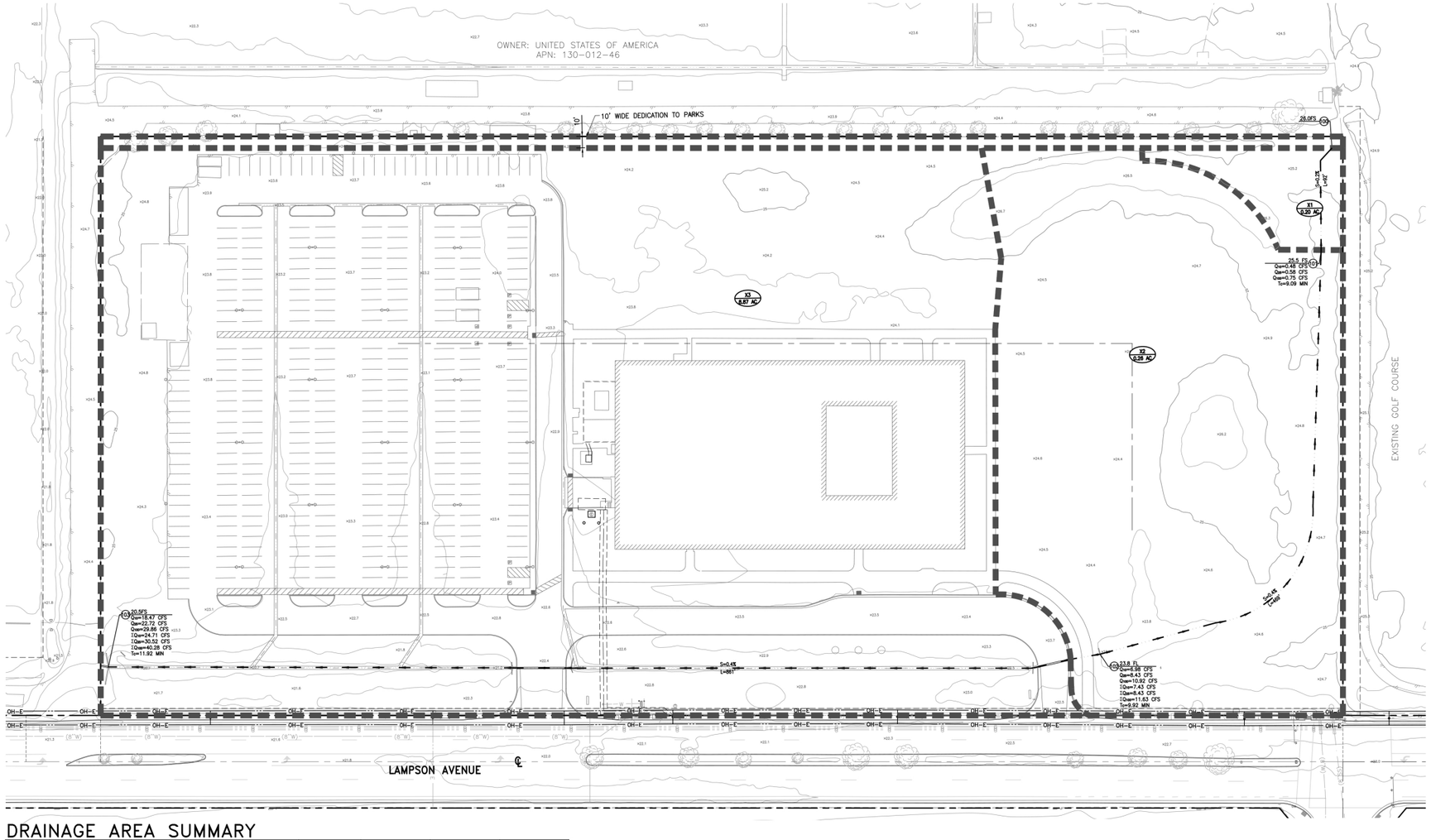
field observations and found that the existing concrete channel along the site's southerly property line currently ponds back to the existing driveway and may overflow onto Lampson Avenue. Based on the existing topography of the site, in the event the outlet pipe was to become clogged, the existing overflows from the property would flow onto Lampson Avenue at the low point at the southwest corner of the site.

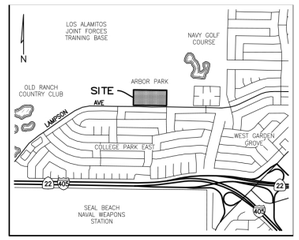
C. Flooding and Dam Inundation

As shown in Figure 4.9-3, *Existing Flood Hazard Zone*, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06059C0116J (effective 12/03/2009), the Project site is located within FEMA Flood Zone D. Flood Zone D is correlated with a possible risk of flooding, but the probability has not been determined. It may be noted that the area south of the Project site, including adjacent Lampson Avenue, is located within FEMA Flood Zone X (areas determined to be outside the 0.2% annual chance floodplain) according to the FEMA FIRM No. 06059C0118J (effective 12/03/2009).

D. Water Quality

The Project site is located within the San Gabriel-Coyote Creek Watershed. The Project site discharges into the Federal Storm Channel, converges with the San Gabriel River and outlets to the Pacific Ocean. The San Gabriel River Estuary is listed under Section 303(d) of the Clean Water Act (CWA) and is impaired with copper, dioxin, indicator bacteria, nickel and oxygen. The San Pedro Bay Near/Off Shore Zones is also listed and impaired for Chlordane, Polychlorinated Biphenyls (PCBs), Total Dichloro-Diphenyl-Trichloroethane (DDT) Toxicity. States are required to submit their 303(d) list for EPA approval every two years. For each water on the list, the state identifies the pollutant causing the impairment, when known. The state assigns a priority for development of Total Maximum Daily Loads (TMDLs) based on the severity of the pollution and the sensitivity of the uses to be made of the waters, among other factors. In general, once a water body has been added to a State's list of impaired waters, it stays there until the State develops a TMDL and EPA approves it. TMDLs are listed for the water bodies Coyote Creek Channel for copper, lead, and zinc. San Gabriel TMDLs are for indicator bacteria. These TMDLs have been adopted for Coyote Creek/ San Gabriel River by the Los Angeles Regional Water Quality Control Board (Region 4); however, it applies to the areas of Orange County that drain to the Coyote Creek and San Gabriel River. (C&V, 2024b)





VICINITY MAP
NTS

LEGEND

- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

DRAINAGE AREA SUMMARY

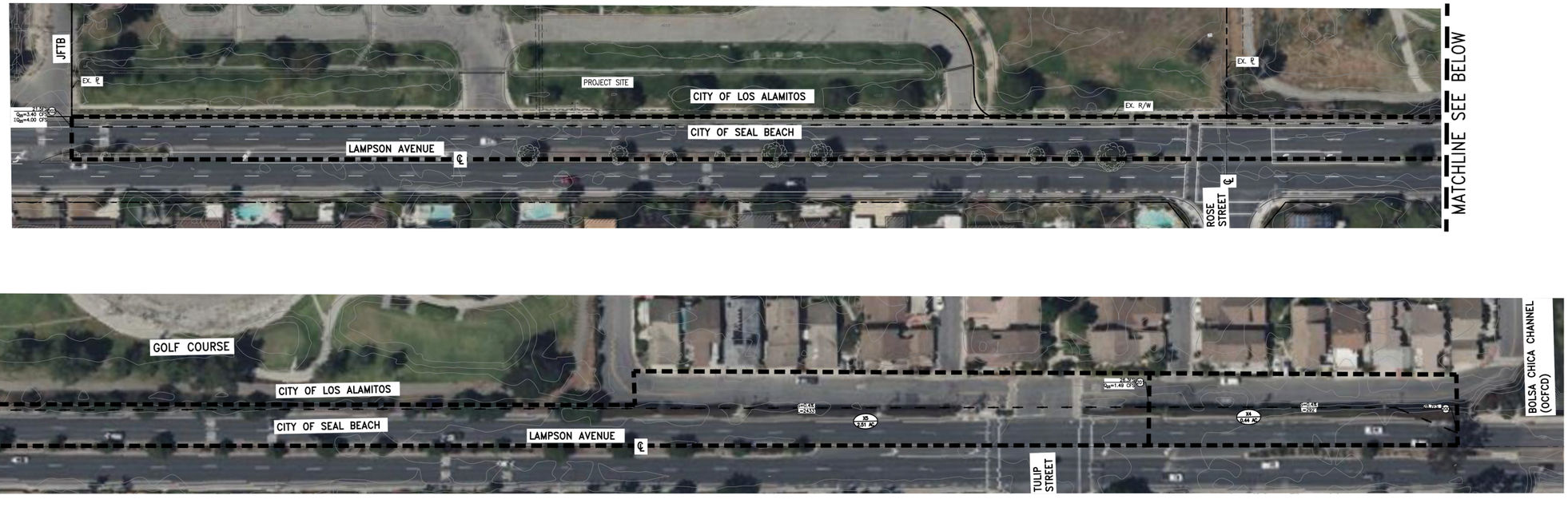
DA	AREA (SF)	AREA (AC)	PERVIOUS AREA (SF)	IMPERVIOUS AREA (SF)	PERCENT IMPERVIOUS	Q10	Q25	Q100	100-yr Tc
X1	8627.39	0.20	0.20	0	0	0.48	0.58	0.75	9.09
X2	133050.72	3.05	3.05	0	0	6.98	8.43	10.92	9.92
X3	386267.51	8.87	0.89	7.98	0.9	18.47	22.72	29.86	11.92
TOTAL	527945.61	12.12	4.14	7.98	0.66	24.71	30.52	40.28	

Source(s): C&V Consulting, Inc. (02-20-2023)

Figure 4.9-1

Not to Scale

Existing Conditions Hydrology Map

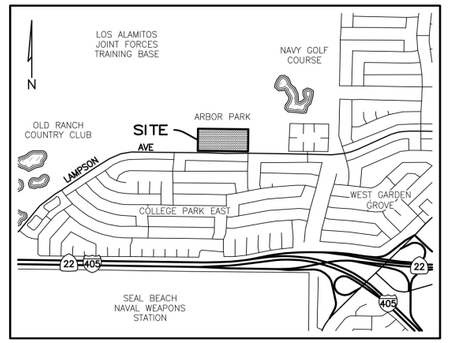


LEGEND

- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

DRAINAGE AREA SUMMARY (OFFSITE)

DA	AREA (SF)	AREA (AC)	Q25	25-yr Tc
X4	19129.9	.44	0.44	7.69
X5	109209.9	2.51	3.40	38.23
TOTAL	128339.8	2.95	4.00	38.23

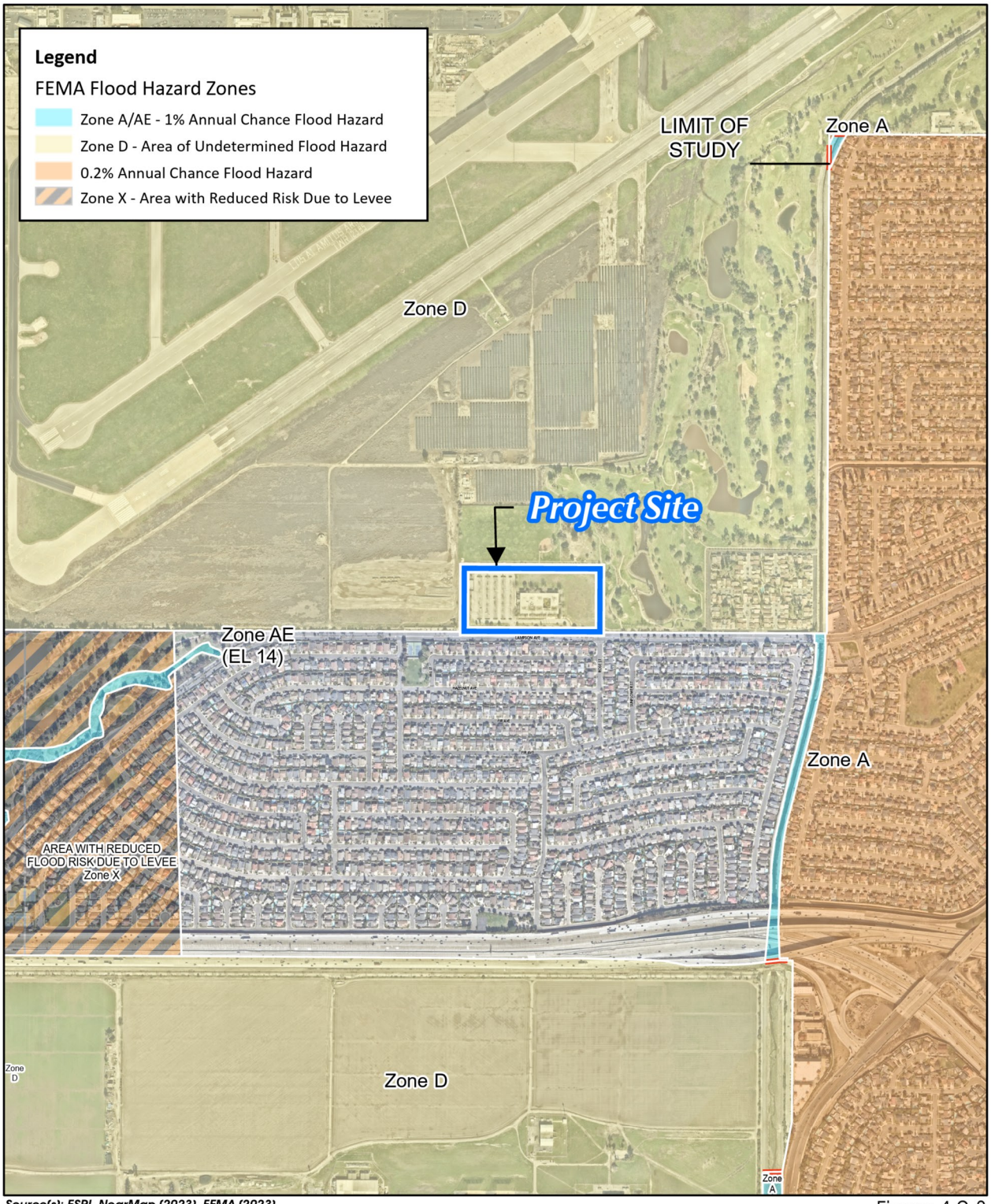


Source(s): C&V Consulting, Inc. (03-28-2023)

Figure 4.9-2

Not to Scale

Existing Offsite Conditions Hydrology Map



Source(s): ESRI, NearMap (2023), FEMA (2023)

Figure 4.9-3

Existing Flood Hazard Zone

E. Groundwater

Water for the City of Los Alamitos is provided by Golden State Water Company (GSWC), which owns and operates the water lines serving the majority of the City. GSWC's water supply comes from the Orange County Groundwater Basin (OCGB) and imported water from the Municipal Water District of Orange County (MWDOC). The Orange County Water District (OCWD) manages and replenishes the basin, ensures water reliability and quality, prevents seawater intrusion, and protects Orange County's rights to Santa Ana River water. OCWD maintains a thorough groundwater protection policy that includes water quality monitoring, cleanup of contaminants, regulatory agency support, toxic residuals removal, and hazardous waste management. Additionally, OCWD provides water quality information to regulators, other water agencies, and the general public. (City of Los Alamitos, 2015a)

4.9.2 Regulatory Framework

The following is a brief description of the federal, State, and local environmental laws and related regulations related to hydrology and water quality.

A. Federal

1. Clean Water Act

The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the EPA has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's NPDES permit program controls discharges. Point sources are discrete conveyances such as pipes or man- made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2022d)

2. Federal Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration

(FIMA) within the FEMA is responsible for administering the NFIP and administering programs that provide assistance for mitigating future damages from natural hazards. (FEMA, 2023)

3. *Executive Order 11988 – Floodplain Management*

Executive Order 11988 requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions: (FEMA, 2021)

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements; and
- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

B. State

1. *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Act establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code § 13000 et seq.), the policy of the State is as follows: (SWRCB, 2018)

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-

point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management. (SWRCB, 2018)

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2018)

Surface water quality is the responsibility of the RWQCB, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water. (CA Legislative Info, n.d.)

The Porter-Cologne Act also implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. (SWRCB, 2018) The Project site is located in the San Gabriel-Coyote Creek Watershed, which is under the jurisdiction of Santa Ana RWQCB. The Santa Ana RWQCB and its water quality plan is the governing water quality plan for the region.

2. Other California Code Requirements

Water quality provisions are contained in numerous other California Code sections, including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. (CA Legislative Info, n.d.)

3. California Toxics Rule (CTR)

The California Toxics Rule (CTR) fills the gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR criteria are similar to those published

in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016, pp. 14-15)

4. CDFG Code Section 1600 et seq. (Lake- or Streambed Alteration Agreement Program)

Fish and Game Code § 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (CDFW, n.d.)

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream, or lake.

It should be noted that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. (CDFW, n.d.)

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, n.d.)

5. Watershed Management Initiative (WMI)

The State and Regional Water Boards are currently focused on looking at entire watersheds when addressing water pollution. The Water Boards adopted the Watershed Management Initiative (WMI) to further their goals. The WMI establishes a broad framework overlying the numerous federal and State mandated priorities. As such, the WMI helps the Water Boards achieve water resource protection, enhancement and restoration while balancing economic and environmental impacts. (SWRCB, 2017) The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds. Involve stakeholders to develop solutions.

- Better coordinate point source and nonpoint source regulatory efforts. Establish working relationships between staff from different programs.

- Better coordinate local, state, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups. (SWRCB, 2017)

6. Sustainable Groundwater Management Act (SGMA)

The 2014 Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. The California Department of Water Resources (DWR) categorizes the priority of groundwater basins. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The SGMA also requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. (DWR, n.d.) (DWR, 2020)

7. National Pollutant Discharge Elimination System Construction General Permit

Pursuant to Section 402(p) of the CWA, which requires regulations for permitting of certain storm water discharges, the SWRCB has issued a statewide general NPDES Permit for storm water discharges from construction sites ([NPDES No. CAS000002] Water Quality Order 2009-0009-Division of Water Quality (DWQ).[1] Under this Construction General Permit, storm water discharges from construction sites with a disturbed area of one acre or more are required to either obtain individual NPDES permits for storm water discharges or to be covered by the Construction General Permit. Coverage under the Construction General Permit is accomplished by determining the risk level of the construction site and by preparing a SWPPP that includes a site evaluation and assessment, BMPs to be implemented at the construction site, and an inspection program. The SWPPP should also outline the monitoring and sampling program to verify compliance with discharge Numeric Action Levels (NALs) according to the Risk Level for the site, as set by the Construction General Permit. The primary objective of the SWPPP is to ensure that the responsible party properly constructs, implements, and maintains BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site. Permit Registration Documents (SWPPP, Notice of Intent,

[1] NPDES No. CAS000002, Water Quality Order 2009-0009 DWQ, SWRCB NPDES General Permit for Storm Water Discharges Associated with Construction Activity (adopted by the SWRCB on September 2, 2009, and effective on July 1, 2010). This order was amended by 2010-0014-DWQ, which became effective on February 14, 2011, and 2012-0006-DWQ, which became effective on July 17, 2012. In accordance with the language set forth in Order No. 2009-0009-DWQ, this permit was administratively extended.

and other documents), as well as annual reports, Notice of Terminations, and NAL exceedance reports, must be electronically submitted to the SWRCB and the permit fee mailed to the SWRCB for Construction General Permit coverage. The SWRCB adopted revisions to the Construction General Permit on September 8, 2022. The new permit will go into effect on September 1, 2023. However, for those projects that secure coverage under the current permit (2012 permit) prior to September 1, 2023, that coverage will last for two years after the effective date (September 1, 2025).

C. Regional

1. Water Quality Control Plan for the Santa Ana River Basin

The Santa Ana Regional Board Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was originally adopted in 1995 and has been subsequently amended through June 2019 (SWRCB, 2022). The Basin Plan is designed to preserve and enhance water quality and to protect the beneficial uses of all regional waters. Specifically, the Basin Plan: 1) designates beneficial uses for surface and subsurface waters (groundwater); 2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and to conform to the State's anti-degradation policy; 3) describes the implementation plan to achieve water quality objectives and to protect the beneficial uses of all waters in the region; 4) describes the comprehensive monitoring and assessment program used to evaluate the effectiveness of the Basin Plan; and 5) provides an overview of water resource management studies and projects which are in progress in the region. Additionally, the Basin Plan incorporates by reference all applicable State and Regional Board plans and policies.

The Basin Plan establishes or designates beneficial uses and water quality objectives for all the ground and surface waters in the region. Beneficial uses are the uses of water necessary for the survival and well-being of humans, plants, and wildlife. These uses serve to promote tangible and intangible economic, social, and environmental goals. Water quality objectives are the levels of water quality constituents or characteristics that must be met to protect beneficial uses. The Basin Plan for the Santa Ana River Basin also establishes an implementation program that describes the actions that the Santa Ana Regional Water Quality Control Board (SARWQCB) and others must achieve and maintain for the designated beneficial uses and water quality objectives of the region's waters.

Water bodies that do not meet water quality standards are deemed "impaired" and, under Section 303(d) of the CWA, are placed on a list of impaired waters for which a TMDL must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (with a "factor of safety" included). Once established, the TMDL is allocated among current and future pollutant sources to the water body. TMDLs must consider and include allocations to both point sources and non-point sources of listed pollutants.

2. Orange County Hydrology Manual

The Orange County Hydrology Manual provides the computational techniques and criteria for the estimation of runoff, discharges, and volumes for use in submittals to the Orange County Environmental Management Agency (Agency).

It is the goal of the Agency to provide 100-year return frequency flood protection for all habitable structures and other non-floodproof structures. Thus, all drainage plans must demonstrate this 100-year flood protection criteria.

Additionally, it is the design objective of the Agency to afford specific design criteria for the more frequent flood events. That is flood protection levels for 10- and 25-year floods may be required for major street travelways, catch basin sump design, and other conditions. The design criteria may be obtained from the Agency.

3. Orange County Flood Control District

Orange County Flood Control District (OCFCD) was established May 23rd, 1927 under authorization of the Orange County Flood Control Act. The state statute was created to provide control of flood and storm waters of the district and streams flowing into the district (such as: the Santa Ana River, San Juan Creek, East Garden Grove-Wintersburg Channel and Santa Ana Delhi Channel); to mitigate the effects of tides and waves; and to protect the harbors, waterways, public highways and property in the district from such waterways. (OCPW), n.d.)

D. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to water quality and supply through its elements. These goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*.

2. City of Los Alamitos Municipal Code

The City of Los Alamitos Municipal Code (LAMC) identifies policies related to stormwater runoff management. The specific LAMC that is relevant to the Project is as follows:

> **Chapter 8.44 – Stormwater and Urban Runoff Pollution Controls.** The purpose of this chapter is to protect the health and safety of the waters of the State and the United States, those who recreate in and consume food from those waters, and to protect marine habitats and ecosystems existing therein by: (A) Effectively prohibiting non-stormwater discharges into the stormwater drainage system; and (B) Reducing pollutant loads in stormwater and urban runoff to the maximum extent practicable.

4.9.3 METHODOLOGY

The analysis of potential hydrology and water quality-related impacts is based upon the preliminary hydrology studies and preliminary WQMP prepared specifically for the Project site. The hydrology calculations were prepared using the Rational Method per the County of Orange Hydrology Manual. The existing/proposed subarea was analyzed for acreage, land-use, soil type, peak flow rate, and time of concentration according to the Rational Method. Recommended perviousness values are based on the existing and proposed land use. Proposed conditions were analyzed with Advanced Engineering Software (AES) Rational Method to determine the required detention volume. AES Rational Method Analysis identifies offsite 25-year storm event flow allowed to prevent flooding of one travel lane of the half-street per Orange County Public Works Flood Local Drainage Manual. The preliminary WQMP in compliance with and meets the requirements of the Santa Ana RWQCB. The City's General Plan and information sources from State and Federal agencies were researched to establish the Project Site's existing conditions and likelihood of environmental effects.

4.9.4 BASIS FOR DETERMINING SIGNIFICANCE

Section X of Appendix G to the CEQA Guidelines addresses typical adverse effects to hydrology and water quality, and includes the following threshold questions to evaluate the Project's impacts on hydrology and water quality (OPR, 2022):

- *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;*

- *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;*

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

    a) Result in substantial erosion or siltation on- or off-site;

    b) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

    c) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

    d) Impede or redirect flood flows.

- *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.*

- *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

4.9.5 Project Design Features

The Project includes the following PDFs that will result in a reduction of the Project's impacts.

PDF HYD-1 The Project will be built such that the finished floor elevation for the onsite buildings is set 1 foot minimum above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements.

4.9.6 Impact Analysis

Threshold a: ***Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?***

The Project Applicant would be required to comply with Section 402 of the Clean Water Act, which authorizes the NPDES permit program that regulates point sources of pollution discharging to a water body. The NPDES program would require the Project Applicant and/or construction contractor to prepare a SWPPP and obtain authorization to discharge stormwater under an NPDES construction stormwater permit because the Project would result in construction on a site that is larger than one acre. The Project Applicant also would be required to comply with the California Porter-Cologne Water Quality Control Act (Section 13000 et seq., of the California Water Code), which requires that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is located within the jurisdiction of the Santa Ana RWQCB.

A. Construction-Related Water Quality Impacts

Construction of the Project would involve demolition, clearing, grading, paving, utility installation, building construction, and landscaping activities, which have the potential to generate silt, debris, organic waste, chemicals, paints, and other solvents; should these materials come into contact with water that reaches the groundwater table or flows off-site, the potential exists for the Project's construction activities to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during Project construction in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Santa Ana RWQCB and LAMC Chapter 8.44, the Project Applicant would be required to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit). The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. In addition, the Project Applicant would be required to comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Program*. Compliance with the NPDES permit and the *Santa Ana River Basin Water Quality Control Program* involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will

specify the BMPs that the Project's construction contractors would be required to implement during construction activities to ensure that potential pollutants of concern are prevented, minimized, and/or treated appropriately prior to being discharged from the subject property. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding.

Mandatory compliance with the SWPPP would ensure that Project construction does not violate any water quality standards or waste discharge requirements. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation is required.

B. Operational Water Quality Impacts

Pursuant to the LAMC Chapter 8.44, the Project Applicant would be required to implement a WQMP to demonstrate compliance with the City's NPDES municipal stormwater permit, and to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters. The WQMP is a site-specific post-construction water quality management program designed to address the pollutants of concern of a development project via BMPs, implementation of which ensures the on-going protection of the watershed basin. The Project's preliminary WQMP is included as *Technical Appendix I2* appended to this EIR and includes both storm drain scenarios. As identified in the Project's preliminary WQMP, the proposed Project is designed to include evapotranspiration, rainwater harvesting BMPs, biotreatment BMPs, non-structural source control BMPs, and structural source control BMPs. The Project site would be divided into seven (7) Drainage Management Areas (DMA). Each drainage area would have an area drain system to convey runoff from landscape and roof drainage along curb inlet Modular Wetlands Systems to intercept surface runoff from surrounding walkways and drive aisles. The area drain system design would be determined during final engineering and would connect directly to the proposed water quality treatment devices. Non-structural source control BMPs include education for property owners, tenants and occupants, activity restrictions, common area landscape management, BMP maintenance, title 22 CCR compliance, uniform fire code implementation, common area litter control, employee training, common area catch basin inspection, and street sweeping private streets and parking lots. Structural source control BMPs include storm drain system stenciling and signage, trash and waste storage areas, efficient irrigation systems & landscape design, water conservation, smart controllers, and source control.

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during long-term operation. Impacts would be less than significant and no mitigation is required.

C. Groundwater Quality

As previously described above, during soil sampling conducted for the Project, groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. Excavation associated with the Project's grading activities have the potential to encounter groundwater. However, the Project would comply with regulatory requirements, including the Construction General Permit which would address

potential groundwater quality impacts. Project Construction would not adversely affect groundwater on or off site.

D. Conclusion

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction or long-term operation. Impacts would be less than significant and no mitigation is required.

Threshold b:	***Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

According to the Project's Geotechnical Evaluation, groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. (LGC, 2021) The Project Applicant does not propose the use of any wells or other groundwater extraction activities. Therefore, the Project would not directly draw water from the groundwater table.

Sources of OCWD groundwater recharge supplies include Santa Ana River – Base Flow and Storm Flow, Santiago Creek – Storm Flow/Santa Ana River, Natural Recharge – Precipitation and subsurface inflow, Recycled water – Groundwater Replenishment System and Water Replenishment District of Southern California, and Imported Water – Untreated and Treated.

Development of the Project would increase impervious surface coverage by 48% on the Project site, which would, in turn, reduce the amount of water percolating down into the underground aquifer that underlies the Project site and a majority of the City and surrounding areas (i.e., Orange County Groundwater Basin). The Project site, however, is located in the western portion of the Orange County Groundwater Basin and would not physically impact any of the major groundwater recharge supplies discussed above in the Basin (OCWD, 2015, p. 5-3). Additionally, the Project site is not within or a part of a recharge facility for the Orange County Groundwater Basin (OCWD, 2018). Therefore, the Project's reduction in percolation at the site would not impact groundwater recharge supplies. The Project would not result in substantial, adverse effects to local groundwater levels.

Based on the infiltration testing conducted within the Geotechnical Investigation (*Technical Appendix F1*), the infiltration rates were approximately 0.03 inches per hour and 0.04 inches per hour. Therefore,, due to the extremely low measured infiltration rate, low permeability fine-grained soils at depth, shallow groundwater, and site liquefaction potential, infiltration is not feasible at the Project site. Accordingly, buildout of the Project would not interfere substantially with groundwater recharge or impede sustainable groundwater management of the Orange County Groundwater Basin. Based on the foregoing information, the Project would not interfere substantially with groundwater recharge.

For the reasons stated above, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the basin. Impacts would be less than significant and no mitigation is required.

Threshold c: ***Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?***

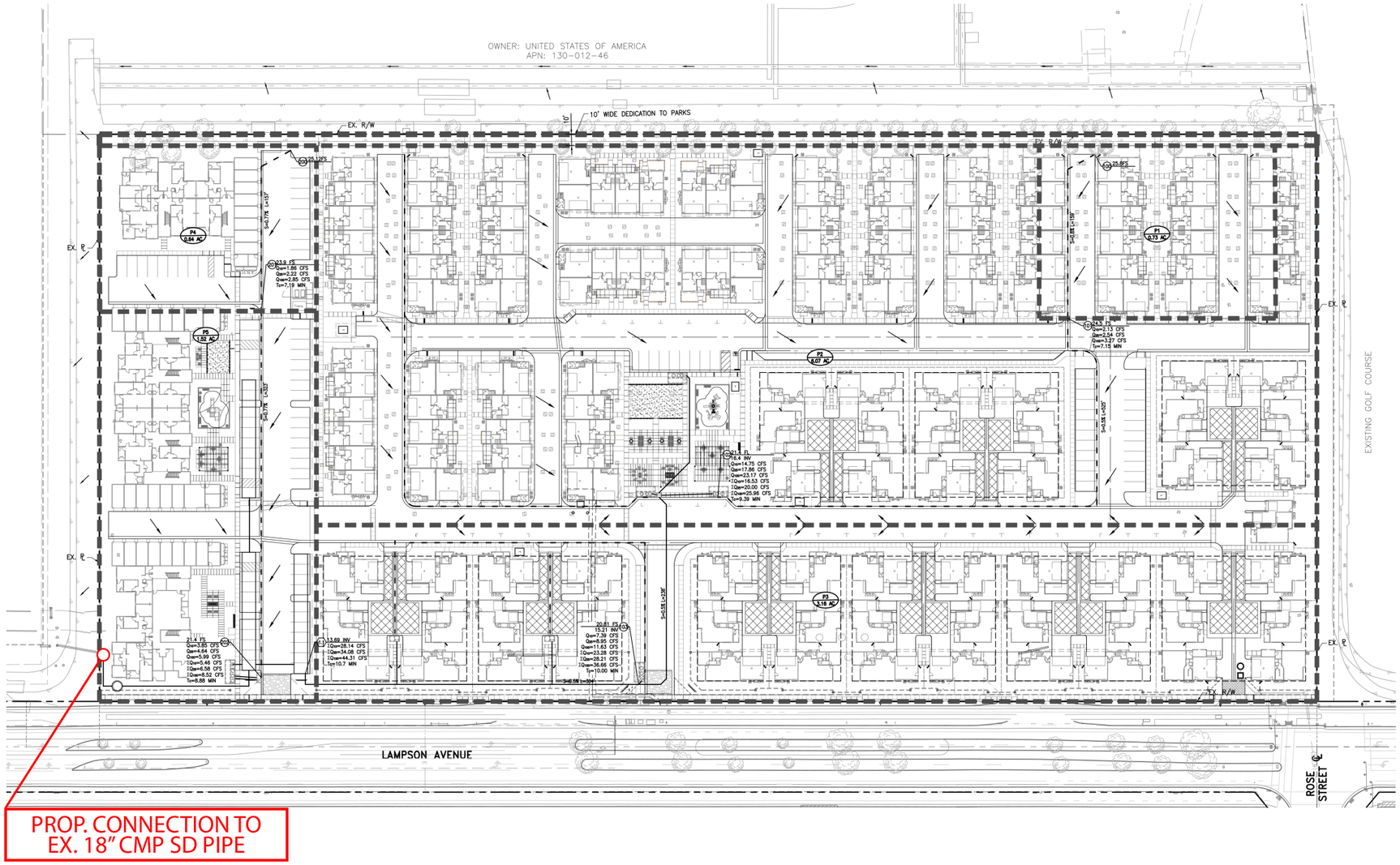
A. Proposed Storm Drain Facilities

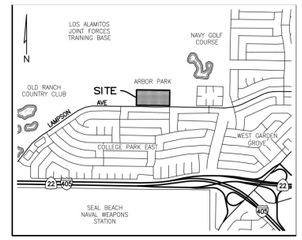
Two stormwater drainage facility plans have been proposed to accommodate stormwater runoff associated with the increase in this amount of impervious surface: on-site storm drain facilities and an alternate off-site storm drain facilities. The analysis below demonstrates that the Project has been designed to capture and treat stormwater runoff such that it would not impact downstream facilities.

1. Storm Drain Facilities – Preferred Route

The preferred treatment of stormwater runoff for the Project would be conveyance by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via onsite underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows into the existing 18" storm drain pipe at the southwest corner of the site to outlet to the JFTB. The detention system and pump will be sized so that the outlet flows from the developed site will be equal to, or less than, existing flows. In the event the stormwater pump fails or the outlet pipe becomes clogged, the emergency overflow for the site will flow onto Lampson Avenue matching historical drainage patterns.

The combined, total 100-year peak flow rate for the Project site is 40.28 cfs under existing conditions. The combined, total 100-year peak flow rate for the Project Site is approximately 44.31 cfs under the proposed conditions. Figure 4.9-4, *Proposed Conditions Hydrology Map* illustrates the post-development drainage conditions of the Project site. The proposed drainage design would follow the existing drainage pattern with surface flows to on-site drainage facilities that would ultimately outlet into the existing storm drain pipe at the southwest corner of the Project site. The results from the hydrology study demonstrate that the proposed conditions of the Project site of 44.31 cfs would generate a higher peak runoff flowrate than the existing condition of the site of 40.28 cfs.





VICINITY MAP
NTS

DRAINAGE AREA SUMMARY

DA	AREA (SF)	AREA (AC)	Q10	Q25	Q100	100-yr Tc
1	31825.47	0.73	2.13	2.54	3.27	7.15
2	264358.13	6.07	14.75	17.86	23.17	9.39
3	137683.35	3.16	7.39	8.95	11.63	10
4	28039.35	0.64	1.86	2.22	2.85	7.19
5	66043.15	1.52	3.85	4.64	5.99	8.88
TOTAL	527949.45	12.12	28.14	34.08	44.31	10.7

LEGEND

- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

Source(s): C&V Consulting, Inc. (September 2023)

Figure 4.9-4

Not to Scale

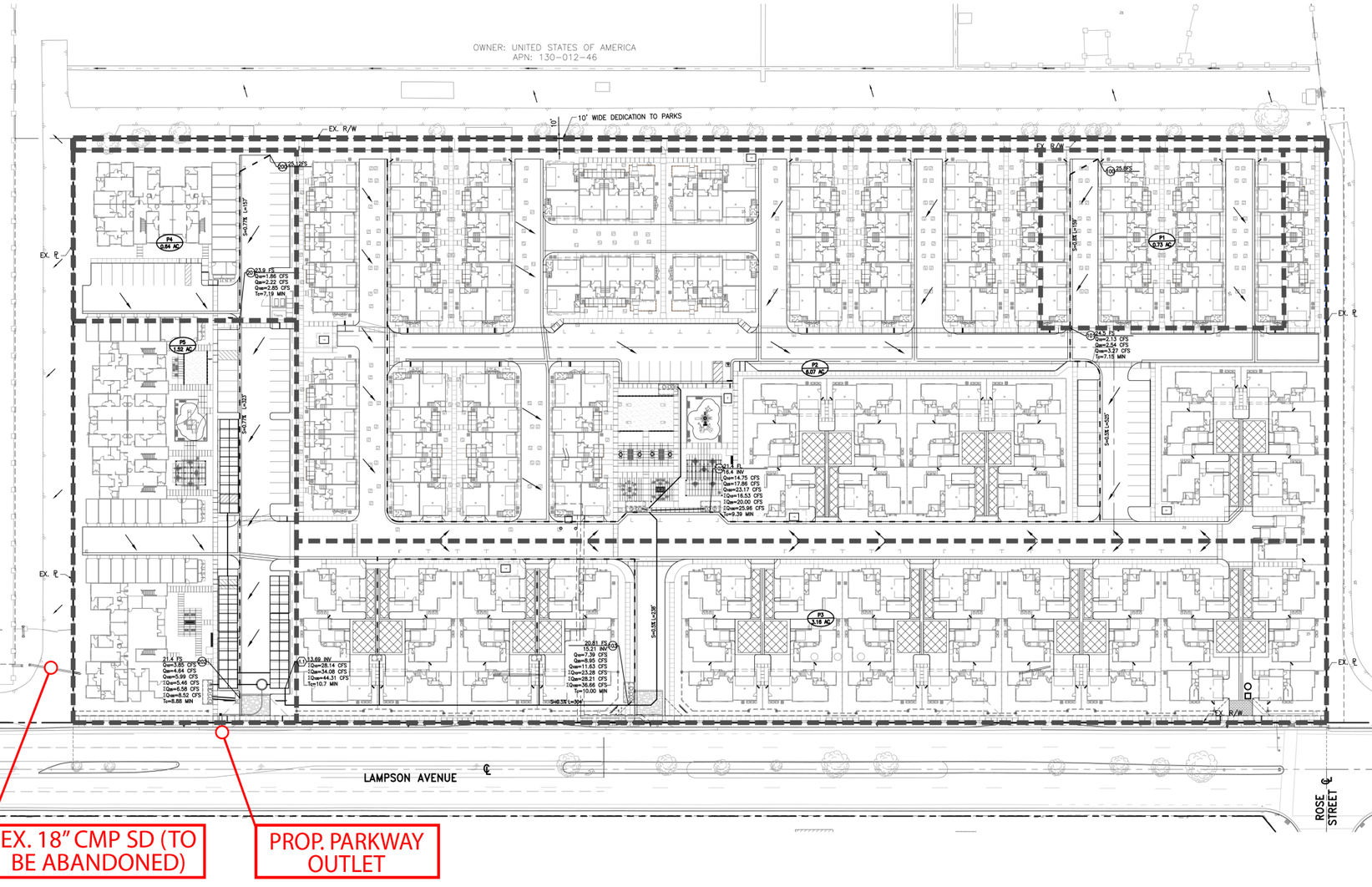
Proposed Conditions Hydrology Map

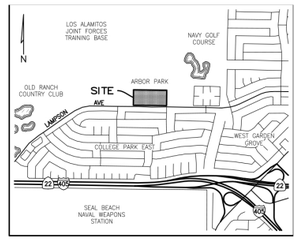
Due to increased peak runoff flows created from the proposed change in land use and increased impervious coverage by 48%, stormwater would need to be detained and mitigated on-site to match existing conditions. By matching the maximum flows conveyed by the outlet pipe and providing a 20 percent factor for safety for preliminary sizing, approximately 10,000 cubic feet (cf) would be required to be detained on-site based on a conservative 100-year storm event. As such, the proposed on-site detention facilities will be designed to detain a minimum volume of 10,000 cf and detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. As such, downstream facilities would not be hydrologically impacted by the proposed Project. Impacts would be less than significant and no mitigation is required.

2. Alternate Storm Drain Facilities

In the event the preferred route (historical flow across the JFTB) is not available, an alternate treatment of stormwater runoff for the Project would be conveyance to offsite storm drain facilities. Figure 4.9-5, *Proposed Alternate Conditions Hydrology Map* illustrates the post-development drainage conditions for this drainage and detention alternate. The proposed site's stormwater runoff would be conveyed by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets for water quality treatment. The bio-filtration devices include internal overflow bypass that direct flows via on-site underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site will outlet flows onto Lampson Avenue via a parkway culvert. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows would continue pumping to Lampson Avenue normally.

Under the Alternate Storm Drain plan, stormwater will need to be detained and mitigated onsite such that Lampson Avenue meets OC Hydrology flooding standards. Onsite and offsite small unit hydrographs were analyzed using AES Rational Method Analysis to identify the time that the flows exceed the allowed offsite 25-year storm event flows to prevent flooding of one travel lane of the half-street per the OC Local Drainage Manual. Approximately 32,300 cf of water would need to be detained onsite to ensure that offsite 25-year flows are not exceeded. By matching the maximum flows and providing an additional 20 percent factor of safety for preliminary sizing, approximately 38,800 cf of water would be detained onsite. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, the proposed finished floor elevations for the onsite buildings would be set 1-foot minimum above the 100-year storm event water surface elevation in accordance with Orange County Flood Protection Requirements.





VICINITY MAP
NTS

DRAINAGE AREA SUMMARY

DA	AREA (SF)	AREA (AC)	Q10	Q25	Q100	100-yr Tc
1	31825.47	0.73	2.13	2.54	3.27	7.15
2	264358.13	6.07	14.75	17.86	23.17	9.39
3	137683.35	3.16	7.39	8.95	11.63	10
4	28039.35	0.64	1.86	2.22	2.85	7.19
5	66043.15	1.52	3.85	4.64	5.99	8.88
TOTAL	527949.45	12.12	28.14	34.08	44.31	10.7

LEGEND
- EXISTING RIGHT-OF-WAY/ BOUNDARY
- DRAINAGE MANAGEMENT AREA (DMA)
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- DRAINAGE FLOW ARROWS
- PROPOSED MWS BIOFILTRATION VAULT
- PROPOSED CATCH BASIN
- DMA X / X.XX AC — DRAINAGE MANAGEMENT AREA (DMA) / ACREAGE

Source(s): C&V Consulting, Inc. (September 2023)

Figure 4.9-5

Not to Scale

Proposed Alternate Conditions Hydrology Map

3. Storm Drain Facilities Considered but Determined Infeasible

As part of the Project's hydrology analysis, the following drainage designs with different outlet locations were reviewed but found to be infeasible:

1. Construct storm drain pipe under Lampson Avenue to west: The proposed installation of approximately 2,400 feet of 30-inch underground gravity storm drain pipe in Lampson Avenue to directly connect to the closest downstream existing 36-inch storm drain pipe (north of Guava Avenue extended) was found to be infeasible due to conflicts with existing utilities; including existing 16-inch water, 8-inch sewer, and 34-inch gas main. Installing 2,400 feet of force main, as opposed to gravity main, may also create long-term maintenance concerns. In addition, the installation of 2,400 feet of force main is not desirable due to head losses (pressure loss causing a reduction in flow) created by such a long length of pipe.

2. Construct storm drain pipe under Heather Street, Hazelnut Avenue, and Guava Avenue to south and west: Since there is no existing underground storm drain to connect to within Heather Street or Hazelnut Avenue, a new storm drain pipe would need to be extended 3,000 feet through these streets to connect to the existing 36-inch storm drain pipe in Guava Avenue. The existing storm drain system is undersized according to the City of Seal Beach Master Plan of Drainage Update dated August 2008. Future City of Seal Beach capital improvements to the downstream storm drain system are recommended in the Master Plan of Drainage Update at this location, but there is no current timeline to install any capital improvements. Without the capital improvements in place, redirecting stormwater runoff flows from the site to the currently undersized storm drain system in Guava Avenue is infeasible since it would exacerbate the existing flooding condition at this location adjacent to single family homes.

3. Outlet Runoff to Arbor Park to North: Arbor Park is within the JFTB and drains south to the same earthen channel outlet as the project site. If the proposed flows from the Project are not allowed to outlet to the JFTB at the southwest corner of the site, proposed flows from the Project would not be allowed to outlet to the JFTB to the north of the site either since they are essentially the same outlet location.

4. Outlet Runoff to Golf Course to East: The golf course to the east is within the JFTB and drains east ultimately outletting to the Bolsa Chica Channel. Outletting to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the Project site.

5. Construct storm drain pipe under Lampson Avenue to east: Outletting to the east does not match the historical drainage pattern and the Bolsa Chica Channel was not designed to accommodate flows from the site. Additionally, installation of underground storm drain pipe within Lampson Avenue is infeasible due to conflicts with existing utilities, maintenance concerns, and head losses as described above (see #1).

The following analysis evaluates the potential for Project-related development activities to adversely affect water quality or cause or exacerbate local flooding.

B. Erosion or Siltation On- or Off-site

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site. As discussed in Threshold a, compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a SWPPP for construction-related activities. The SWPPP will specify the BMPs that would be required to be implemented during construction activities to ensure that waterborne pollution – including erosion/siltation – is prevented, minimized, and/or otherwise appropriately treated prior to surface runoff being discharged from the subject property.

Mandatory compliance with the SWPPP would ensure that the Project's construction does not violate any water quality standards or waste discharge requirements. Based on the foregoing information, erosion and sedimentation impacts associated with Project construction activities would be less than significant. No mitigation is required.

As discussed under Threshold a, during operation of the Project, the Project Applicant would be required to prepare and implement a WQMP, which is a site-specific post-construction water quality management program that will be implemented to minimize erosion and siltation, pursuant to LAMC Chapter 8.44, Stormwater and Urban Runoff Pollution Controls. The WQMP is required to identify an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges. The WQMP also is required to establish a post-construction implementation and maintenance plan to ensure on-going, long-term erosion protection. Compliance with the WQMP is required as a condition of approval for the Project, as will the long-term maintenance of erosion and sediment control features. The preliminary WQMP for the Project is provided as *Technical Appendix I2* to this EIR. Because the Project Applicant would be required to utilize erosion and sediment control measures to preclude substantial, long-term soil erosion and loss of topsoil, Project operation would result in less than significant impacts related to soil erosion and sedimentation. No mitigation is required.

C. Runoff and Flooding On- or Off-site

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff resulting in flooding on- or offsite.

1. On-Site Storm Drain Facilities

The results from the hydrology report demonstrate that the proposed drainage conditions would generate a higher peak runoff flowrate than the existing conditions on the Project site due to an increase in impervious area and change in land use. The preferred detention facilities would be designed to detain the increased peak flow between the existing outlet pipe flows and proposed conditions. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements (C&V, 2024a).

2. Alternate Storm Drain Facilities

A second hydrology report was prepared for the alternate stormwater conveyance plan. The results from the report demonstrated that the proposed condition of the alternate would generate a 10 percent (44.31 cfs proposed/40.28 cfs existing) higher 100-year storm event peak runoff flowrate than the existing condition of the site due to an increase in impervious area and change in land use. The proposed underground detention facilities would be designed to detain the increased flows under the proposed conditions, which would be discharged from the site via a pump station at flow rates that would not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed Project site improvements. (C&V, 2023)

Based on the foregoing information, the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. Impacts would be less than significant and no mitigation is required.

D. Stormwater Drainage System Capacity & Polluted Runoff

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Project's preferred storm drain system and alternate storm drain system would be sized and designed in accordance with the City's drainage requirements and Orange County Hydrology Manual to ensure that off-site flows are conveyed through the Project site and flows originating off-site are discharged from the site at a volume and rate that can be accommodated by existing and planned downstream storm drain facilities.

As discussed under Threshold a, the Project Applicant would be required to comply with a SWPPP and the Project's WQMP (*Technical Appendix I2*) which identify required BMPs to be incorporated into the Project's design and operation to ensure that near-term construction activities and long-term post-development activities of the proposed Project would not result in substantial amounts of polluted runoff. Therefore, with mandatory compliance with the Project's SWPPP and WQMP, the proposed Project would not create or contribute substantial additional sources of polluted runoff, and impacts would be less than significant. No mitigation is required.

E. Flood Flows

The Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows. FEMA Flood Insurance Rate Maps identify flood zones and areas that are susceptible to 100-year (1% annual chance of occurrence) and 500-year floods (0.2% annual chance of occurrence). These areas are referred to as Special Flood Hazard Areas and Moderate Flood Hazard Areas respectively. According to FEMA FIRM No. 06059C0116J (effective 12/03/2009), the Project site is located within FEMA Flood Zone D. Flood Zone D is correlated with areas with a possible risk of flooding, but the probability has not been determined. (FEMA, 2009) Additionally, the City's General Plan identifies the Project site as an undetermined risk area. (City of Los Alamitos, 2015a, p. 44). It should be noted that the Project site is not in proximity to an area within a flood zone.

1. On-site Storm Drain Facilities

According to the Hydrology Report, during a peak 100-year storm event, stormwater flows would be detained within the on-site underground detention basin. Detained volumes will be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Additionally, the Project's proposed finished floor elevations would be set at least 1 foot above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection requirements.

2. Alternate Storm Drain Facilities

According to the Hydrology Report for the alternate stormwater conveyance plan, during a peak 100-year storm event, stormwater flows would be detained with the proposed detention facilities. Detained volumes would be discharged from the site via a pump system at flow rates that do not exceed the existing condition flow rates. Downstream facilities would not be hydrologically impacted by the proposed improvements. Additionally, proposed floor elevations for the onsite buildings would be set at least 1 foot above the peak 100-year storm event water surface elevation in accordance with Orange County Flood Protection requirements.

Moreover, as previously discussed, the Project was designed to maintain the approximate existing drainage pattern to the extent feasible. Accordingly, the Project is not expected to impede flood flows. Impacts would be less than significant and no mitigation is required.

Threshold d:	***Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

A tsunami is a very large ocean wave caused by an underwater earthquake or volcanic eruption. Tsunamis typically only reach up to a few miles inland. The Project site is located approximately 4.22 miles northeast of the Pacific Ocean; therefore, there is minimal potential for the Project site to be impacted by a tsunami. A seiche occurs when a wave oscillates in lakes, bays, or gulfs as a result of seismic disturbances. The Project site is also not subject to flooding hazards associated with a seiche

because there are no large bodies of water within the vicinity of the Project site. Furthermore, as stated above under Threshold c, the Project's storm drainage infrastructure would adequately detain 100-year flows, discharge detained flows at rate that do not exceed existing flows, and the Project's finish floor elevations would be at least 1 foot above the water surface elevation. Accordingly, the Project is not anticipated to risk the release of pollutants due to project inundation. Impacts would be less than significant and no mitigation is required.

Threshold e: ***Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

As discussed under Threshold a above, the Project site is located within the jurisdiction of the Santa Ana RWQCB. Project-related construction and operational activities would be required to comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Plan* by preparing and adhering to a SWPPP and WQMP. As also discussed in Threshold a above, implementation of the Project would not conflict with or obstruct the *Santa Ana River Basin Water Quality Control Plan* and impacts would be less than significant.

The Project site is within the Coastal Plain or Orange County Groundwater Basin (Basin 8-1). The DWR classifies this basin as a medium-priority basin. Under the SGMA, local agencies are required to form GSAs for the high and medium priority basins. GSAs develop and implement GSPs to avoid undesirable results and mitigate overdraft within 20 years. The GSA for Basin 8-1 is comprised of OCWD, city of La Habra, and Irvine Ranch Water District. These agencies collaborated and submitted an Alternative to a GSP titled Basin 8-1 Alternative 2022 Update on January 1, 2022 to the DWR (Alternative). This Alternative documents the basin conditions; basin management is based on measurable objectives and minimum thresholds defined to prevent significant and unreasonable impacts on the sustainability indicators defined in the Alternative. (OCWD, 2022)

According to the Project's Geotechnical Evaluation, groundwater was encountered at depths of approximately 11 to 13 feet below existing grade. Additionally, historic high groundwater is estimated to be about 10 feet below existing grade. (LGC, 2021) The Project Applicant does not propose the use of any wells or other groundwater extraction activities. The Project's potable water would by supplied by GSWC, which relies on the Orange County Groundwater Basin and imported water from the Municipal Water District of Orange County.

The 2021-2029 Housing Element includes the Project site in its housing opportunity sites. The Housing Element concluded that based on the 2020 MWDOC UWMP analysis and discussion with the City's water service provider, sufficient water capacity is available to provide water service for additional units constructed to meet the City's RHNA allocation for the planning period. Therefore, the Project would not have the potential to conflict with or obstruct implementation of the Basin 8-1 Alternative. Refer also to 4.17, *Utilities and Service Systems*, for a detailed discussion related to water supply. Impacts would be less than significant and no mitigation is required.

4.9.7 CUMULATIVE IMPACT ANALYSIS

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project site and projects located in San Gabriel-Coyote Creek Watershed and the Orange County Groundwater Basin.

A. Water Quality

Project construction and the construction of other projects in the cumulative study area would have the potential to contribute waterborne pollution, including erosion and siltation, to the San Gabriel-Coyote Creek Watershed. Pursuant to the requirements of the State Water Resources Control Board and the Santa Ana RWQCB, all construction projects that disturb one (1) or more acres of land area are required to obtain coverage for construction activities under the State's General Construction NPDES Permit. In order to obtain coverage, an effective site-specific SWPPP is required to be developed and implemented. The SWPPP must identify potential on-site pollutants and identify an effective combination of erosion control and sediment control measures to reduce or eliminate discharge of pollutants to surface waters. In addition, the Project Applicant and all cumulative developments in the Santa Ana River Basin would be required to comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Program*, which establishes water quality standards for ground and surface waters of the region. Compliance with these mandatory regulatory requirements, would ensure that development projects within the San Gabriel-Coyote Creek Watershed, including the proposed Project, would not contribute substantially to water quality impairments during construction.

Operational activities on the Project site would be required to comply with the Project's WQMP to minimize the amount of waterborne pollution, including erosion and sediment, discharged from the site. Other development projects within the watershed would similarly be required by law to prepare and implement site-specific WQMPs to ensure that runoff does not substantially contribute to water quality violations. Accordingly, operation of the Project would not contribute to cumulatively-considerable water quality effects.

B. Groundwater Supplies and Management

The Project site does not support infiltration and the Project site is not within and is not a part of a recharge facility for the Orange County Groundwater Basin. Also, as previously noted, implementation of the Project would not result in substantial adverse effects to local groundwater supplies or groundwater recharge. Thus, no component of the Project would obstruct or prevent implementation of the management plan for the Orange County Groundwater Basin and other development projects within the Orange County Groundwater Basin would be prohibited from any activity that would endanger the health and sustainability of the groundwater basin. Based on the lack of impacts to groundwater and compliance with the applicable Orange County Groundwater Basin management plan, cumulative development would not result in a considerable, adverse effect to local groundwater supplies and not conflict with any water quality control plans or sustainable groundwater management plans.

C. *Flooding*

Construction of the Project and other development projects within the San Gabriel-Coyote Creek Watershed would be required to comply with federal, State, and local regulations and applicable regional and local master drainage plans in order to mitigate flood hazards both on- and off-site. Compliance with federal, State, and local regulations and applicable drainage plans would require development sites to be protected from flooding during peak storm events (i.e., 100-year storm) and also would not allow development projects to expose downstream properties to increased flooding risks during peak storm events. In addition, future development proposals within the San Gabriel-Coyote Creek Watershed would be required to prepare hydrologic and hydraulic calculations, subject to review and approval by the responsible City Engineer, to demonstrate that substantial on- and/or off-site flood hazards would not occur. Accordingly, the construction and operation of the Project would not contribute to cumulatively considerable flooding impacts.

4.9.8 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Adherence to a SWPPP and WQMP is required as part of the Project's implementation to address construction- and operational-related water quality. Impacts would be less than significant.

Threshold b: Less-than-Significant Impact. The Project would not physically impact any of the major groundwater recharge facilities in the Orange County Groundwater Basin. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the Basin. Impacts would be less than significant.

Threshold c: Less-than-Significant Impact. The Project would be required to comply with applicable water quality regulatory requirements to minimize erosion and siltation. Additionally, the Project would not result in flooding on- or off-site or impede/redirect flood flows. Lastly, with the implementation of the condition of approval PDF HYD-1 above, neither the preferred nor the alternate stormwater conveyance design for the Project would create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems nor provide substantial additional sources of polluted runoff. Impacts would be less than significant.

Threshold d: Less-than-Significant Impact. The Project site would not be subject to inundation from tsunamis or seiches. The Project site is within FEMA Zone D, which is an area with an undetermined flood risk. However, the Project's preferred and alternate on-site storm drain infrastructure designs would adequately detain 100-year flows and discharge flows at rates that do not exceed existing flow rates. Project site inundation is not anticipated. With implementation of PDF HYD-1 above impacts would be less than significant.

Threshold e: Less-than-Significant Impact. The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

4.9.9 Mitigation

No mitigation is required.

4.9.10 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.10 LAND USE AND PLANNING

The following analysis was based on information obtained from the City of Los Alamitos General Plan; the City of Los Alamitos Municipal Code (LAMC), the Airport Environs Land Use Plan (AELUP) for the Joint Forces Training Base Los Alamitos, and Southern California Association of Governments (SCAG's) 2020-2045 RTP/SCS (Connect SoCal). Additionally, information was obtained from the Airport Land Use Commission Compatibility Assessment–4665 Lampson Avenue Project, Los Alamitos, CA prepared by Johnson Aviation Consulting, dated October 2, 2023. All references in this Subsection are listed in EIR Section 8.0, *References*.

4.10.1 EXISTING CONDITIONS

A. Project Site

The approximately 12.3-acre Project site is located within the City of Los Alamitos, which is located in the northwestern portion of Orange County, California. The site is located north of and adjacent to Lampson Avenue and northwest of the intersection of Lampson Avenue and Rose Street. The legal address for the Project site is 4665 Lampson Avenue, Los Alamitos, CA 90720 and the Project site's APN is 130-012-35.

Under existing conditions, the Project site is currently developed with a vacant two-story, 88,000 sf commercial office building located centrally within the Project site and surface parking lot located within the western portion of the Project site. The remainder of the Project site consists of open space.

B. Surrounding Land Uses

Existing land uses in the immediate vicinity of the Project site are described in detail in Section 2.3, *Surrounding Land Uses*, Section 2.5, *Existing Physical Site Conditions*, and described in Table 2-1, *Surrounding Land Uses* as summarized below.

North: Arbor Park, which is operated by the City of Seal Beach, is located immediately north of the Project site. The Los Alamitos JFTB is north of Arbor Park.

South: A single-family residential community in the City of Seal Beach, College Park East, is located immediately south of the Project site.

West: The Los Alamitos JFTB is located immediately west of the Project site.

East: The Navy Golf Course is located immediately east of the Project site. Single-family and limited multi-family residential development in the City of Garden Grove are located to the east of the golf course.

C. General Plan Land Use Designation

The City's General Plan land use designation for the Project site is "Multiple Family Residential-25." The "Multiple Family Residential-25" land use designation is defined as "single family detached and attached residences, including small lot subdivisions, townhomes, courtyard homes, duplexes, and triplexes. Live/work uses are also permitted, subject to the uses permitted by the Professional Office designation" (City of Los Alamitos, 2015a, p. 17)

D. Zoning Designation

As depicted on Figure 2-2, *Existing Zoning Classifications*, the Project site is zoned as "Multi-Family Residential (R-3)". The R-3 zone applies to lots intended to provide multi-family housing. Housing types permitted include those permitted in the R-1 and R-2 zones, as well as structures containing four or more dwelling units. The maximum permitted density is 25 dwelling units per net acre. The R-3 zone implements the General Plan Multi-Family Residential land use designation (City of Los Alamitos, 2023a).

4.10.2 Regulatory Framework

The following is a brief description of the federal, state, and local environmental laws and related regulations related to land use and planning.

A. Federal

1. Federal Aviation Regulations Part 77

Federal Regulation Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for: (FAA, 2022a)

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects.

Notification allows the FAA to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. Any person/organization who intends to sponsor any of the following construction or alterations must notify the Administrator of the FAA: (FAA, 2022a)

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
    - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet.

- within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet.
- within 5,000 feet of a public use heliport which exceeds a 25:1 surface.

- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location. (FAA, 2022a)

Persons failing to comply with the provisions of FAR Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a). (FAA, 2022a)

B. State

1. California Planning and Zoning Law

California cities and counties exercise local planning and land use functions in accordance with the California Planning and Zoning Law, §§ 65000 - 66499.58. Under State of California planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in constructing a general plan; however, general plans must include seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures. (OPR, n.d.) The City of Los Alamitos General Plan is a policy document designed to provide long-range guidance for planning decisions that affect the growth and resources of the City.

2. Office of Planning and Research (OPR) General Plan Guidelines

To assist local governments in preparing general plans, the Governor's OPR is required to adopt and periodically revise guidelines for the preparation and content of local general plans pursuant to Government Code § 65040.2. The General Plan Guidelines are advisory, not mandatory. Nevertheless, it is the state's only official document explaining California's legal requirements for general plans. Planners, decision-making bodies, and the public depend upon the General Plan Guidelines for help when preparing local general plans. The courts have periodically referred to the General Plan Guidelines for assistance in determining compliance with planning law. For this reason, the General Plan Guidelines closely adhere to statute and case law. They also rely upon commonly accepted principles of contemporary planning practice. (OPR, n.d.)

3. State Housing Law

The State law regulating residential occupancies is entitled the "State Housing Law" and is found in the California HSC, Division 13, Part 1.5, Sections 17910 to 17998.3. Regulations implementing the State Housing Law mandate statewide residential building standards for new construction, which are found in the California Code of Regulations, Title 24, also referred to as CalGreen. (CA Legislative Info, n.d.)

4. State Density Bonus Law

The State Density Bonus Law codified in Government Code Section 65915 to 65918 provides a mechanism that allows housing developers to increase density on a property above the maximum set under a jurisdiction's General Plan and reduce required development standards in exchange for offering to build or donate land for affordable or senior housing units. A developer who meets the requirements of the State law is entitled to receive the density bonus and other benefits as a matter of right, including up to a 50 percent increase in project densities for most projects and up to an 80 percent increase in density for project that are completely affordable. (CA Legislative Info, n.d.)

5. Housing Accountability Act

California Government Code Section 65589.5, also known as the Housing Accountability Act, prohibits a local agency from disapproving, or conditioning approval in a manner that renders infeasible, a housing development project for very low, low-, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record. The act specifies that one way to satisfy that requirement is to make findings that the housing development project or emergency shelter is inconsistent with both the jurisdiction's zoning ordinance and general plan land use designation as specified in any element of the general plan as it existed on the date the application was deemed complete. The act requires a local agency that proposes to disapprove a housing development project that complies with applicable, objective general plan and zoning standards and criteria that were in effect at the time the application was deemed to be complete, or to approve it on the condition that it be developed at a lower density, to base its decision upon written findings supported by substantial evidence on the record that specified conditions exist, and places the burden of proof on the local agency to that effect. The Housing Accountability Act was recently amended by the enactment of Senate Bill 330 in 2019, which also established the Housing Crisis Act of 2019. (CA Legislative Info, n.d.)

6. Subdivision Map Act

The Subdivision Map Act ("Map Act") vests in the cities and counties the power to regulate and control the design and improvement of subdivisions within its boundaries. Each city must adopt an ordinance regulating and controlling subdivisions for which the Map Act requires a tentative and final or parcel map. The authority for a city or county to regulate land use, including subdivisions, flows from the general police power. However, the Map Act sets forth certain mandates that must be followed for subdivision processing. A city can impose conditions on the subdivision process when the Map Act is

silent, but it cannot regulate contrary to specific provisions contained in the Map Act. The Map Act's primary goals are:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of the subdivision, with a proper consideration of its relation to adjoining areas;

- To ensure that the areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community; and

- To protect the public and individual transferees from fraud and exploitation.

The Map Act is applied in conjunction with other state land use laws such as the general plan, specific plans, zoning, CEQA, and the Permit Streamlining Act.

7. State Aeronautics Act

The State Aeronautics Commission Act of 1947 created the Division of Aeronautics ("Division"), and was later amended by statute to become the State Aeronautics Act (Aeronautics Act) in 1961. The Aeronautics Act is intended to "protect the public interest in aeronautics and aeronautical progress." (§ 21002) (CA Legislative Info, n.d.) The Caltrans, Division of Aeronautics, administers much of this statute through its California Airport Land Use Planning Handbook (Handbook), as required by Article 3.5, Airport Land Use Commissions, Public Utility Code (PUC) Sections 21670 – 21679.5. Together, the Aeronautics Act and Handbook address, among other things, airport land use compatibility to "minimize the public's exposure to excessive noise and safety hazards" while providing for the "orderly expression of airports" (PUC § 21670 (a)(2)). The primary considerations in airport land use compatibility include noise, overflight, safety, and airspace protection. The Handbook is a required source for developing and implementing airport land use compatibility plans within the State. Note that guidance specific to joint use military/civilian airfields is provided by the U.S. Department of Defense (DOD) and the U.S. Air Force. Airspace compatibility guidance is provided by the Federal Aviation Administration (FAA).

The Aeronautics Act also addresses the formation of ALUCs to conduct airport land use compatibility planning. The provisions of the Aeronautics Act which govern ALUCs are set forth in PUC Section 21670-21679.5. Under PUC Section 21674, ALUCs assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports, coordinate planning at the State, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare, and prepare and adopt airport land use compatibility plans (ALUCP) pursuant to Section 21675. ALUCs have been granted the statutory authority to prepare an ALUCP and to review local government general and specific plans for consistency against the ALUCP. ALUCs oversee the consistency between local plans and the ALUCP. In some cases, they also review the compatibility of individual land use projects with the ALUCP. ALUC consistency determinations for local agency plans and projects are subject to overrule

by the local agency. The overrule process preserves local government's constitutional land use authority and local government's ability to implement its plans and projects. When a plan or project is found inconsistent by the ALUC, the local agency has a choice to stop or amend the plan or project, and thereby accept the ALUC's inconsistency determination, or to overrule the ALUC with a two-thirds "supermajority" vote of the local agency's governing body. (PUC §§ 21675.1(d),21676, and 21676.5).

8. California Air Resources Board (CARB)

CARB's 2035 Scoping Plan outlines the main State strategies for meeting the emission reduction targets and to reduce greenhouse gases that contribute to global climate change. Pursuant to AB 32, the Scoping Plan must "identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives" in order to achieve the 2020 goal and achieve "the maximum technologically feasible and cost-effective greenhouse gas emission reductions" by 2020 and maintain and continue reductions beyond 2020. The Project's consistency with the Scoping Plan is discussed in Section 4.7, *Greenhouse Gas Emissions*, of this EIR.

C. Regional

1. South Coast Air Quality Management District (South Coast AQMD)

The 2022 Air Quality Management Plan (AQMP) seeks to achieve multiple goals in partnership with other entities promoting reductions in criteria pollutant, greenhouse gases, and toxic air contaminants, as well as efficiencies in energy use, transportation, and goods movement. The 2022 AQMP includes the integrated strategies and measures needed to meet the National Ambient Air Quality Standards (NAAQS). The Project's consistency with the AQMP is discussed in Section 4.2, *Air Quality*, of this EIR.

2. Southern California Association of Governments (SCAG)

On September 3, 2020, SCAG adopted Connect SoCal – The 2020-2045 RTP/SCS which is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern, demonstrates how the region will achieve the GHG emissions reduction targets set by CARB (See Section 4.7, *Greenhouse Gas Emissions*). Connect SoCal presents strategies and tools that are consistent with local jurisdictions' land use policies and incorporates best practices for achieving the state-mandated reductions in GHG emissions at the regional level through reduced per-capita VMT. Connect SoCal is not designed to dictate or supersede local actions and policies, but rather to lay out a path to achieving regional goals set by SCAG's Regional Council. The Project's consistency with the Connect SoCal is discussed in Table 4.10-1, below.

3. *Joint Forces Training Base Los Alamitos Compatibility Plan*

The AELUP intends to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. The AELUP seeks to protect the public from the 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 airspace. The Project site is located within the AIA of the JFTB and is subject to compliance with the AELUP. (ALUC, 2017)

The City's Housing Element received certification from the State HCD. However, the Housing Element received an inconsistent finding from ALUC on January 19, 2023. On February 21, 2023, the City Council adopted Resolution 2023-04, providing notice of the notice of the City's intent to overrule ALUC's determination. The City Council conducted a Study Session and reviewed information related to ALUC's finding of inconsistency on July 17, 2023. A Public Hearing was held on August 21, 2023, where the City Council considered the adoption of a resolution overruling the ALUC's determination but failed to receive the required two-thirds affirmative vote (four affirmative votes were required). On September 21, 2023, the ALUC voted to require the City to submit all discretionary actions related to Housing Element Sites 6 (4665 Lampson Avenue), 7 (Laurel Park), and 10 (5030-5084 Katella) to ALUC for review until such time as the General Plan is revised, or the City overrules ALUC's determination. On December 11, 2023, City received a four/fifths vote from the Los Alamitos City Council to overrule ALUC's finding and adopt the City's Housing Element. Accordingly, approval from ALUC is not required for the Project.

D. *Local*

1. *City of Los Alamitos General Plan*

The City of Los Alamitos's prevailing planning document is its General Plan, adopted March 23, 2015. The 2015 General Plan was a comprehensive update, replacing the previously adopted 1990 General Plan, to better reflect current conditions, refine goals and policies, and position the City for success through the year 2035. The General Plan is comprised of seven topical elements: Land Use: Economic Development; Housing; Open Space, Recreation, and Conservation; Mobility and Circulation; Public Facilities and Safety; and Growth Management. The elements establish the goals and policies relevant to land use, growth, and development of the City for a variety of topics and provide a framework for municipal decision-making. The City intends the goals and policies to guide and help inform decisions of those investing in Los Alamitos—residents, businesses, and organizations.

As depicted on Figure 2-1, *Existing General Plan Land Use Designations*, the City's General Plan designates the Project site for "Multiple Family Residential-25" land use. The "Multiple Family Residential-25" land use designation is defined as "single family detached and attached residences, including small lot subdivisions, townhomes, courtyard homes, duplexes, and triplexes. Live/work uses are also permitted, subject to the uses permitted by the Professional Office designation" (City of Los Alamitos, 2015a, p. 17)

2. City of Los Alamitos General Plan Housing Element

The Housing Element contains the official policies for the construction, rehabilitation and preservation/conservation of housing in the City of Los Alamitos. The Housing Element is built upon identification and analysis of existing and projected housing needs, resources, opportunities and past performance. The Housing Element contains detailed analysis of the City's economic, demographic and housing characteristics and addresses housing opportunities for current and future City residents through 2029 and provides the policy guidance for local decision making related to housing in the City. (City of Los Alamitos, 2023b)

On February 21, 2023, Los Alamitos City Council adopted the comprehensive update of the City's Housing Element for the reporting period of 2021-2029 (Resolution No. 2023-02). The City of Los Alamitos Housing Element demonstrates through policies that the estimated capacity of adequate sites will be able to accommodate the projected housing need for the current Planning Period (2021-2029). To address two policy actions identified in the Housing Element, the City Council also adopted Resolution No. 2023-01 approving GPA 22-02, which updated the multi-family land use designations and amended the General Plan Land Use Map to redesignate certain sites for multi-family housing development. On March 20, 2023, City Council adopted Ordinance 2023-01 which approved a R-4 Zoning District in the City, amended the Town Center Mixed Use Zone, and rezoned certain properties to the R-3 and new R-4 Districts. The Project site is identified in the housing sites inventory of the City's 2021–2029 Housing Element Update, Figure B-1 and Table B-2 as Site 6 and was rezoned from C-F (Community Facilities) to R-3 (Multi-Family Residential).

Pursuant to PUC Section 21676(b), the City referred the Housing Element Update to the Orange County ALUC to review for consistency with the 2017 JFTB Los Alamitos AELUP. On January 19, 2023, the ALUC, acting pursuant to PUC 21670, determined that the Housing Element Update is inconsistent with the AELUP. On February 21, 2023, the City adopted Resolution 2023-04, making draft findings in support of overruling the ALUC's determination and directing staff to send a Notice of Intent to Overrule the Orange County ALUC and to the California Department of Transportation, Division of Aeronautics. On August 21, 2023, the City Council voted on Resolution 2023-20, which made findings that the General Plan 2021-2029 Housing Element Update is consistent with the purposes of the State Aeronautics Act and overruled the Orange County ALUC's determination that the Housing Element is inconsistent with the 2017 JFTB Los Alamitos AELUP; however, the resolution failed to receive the required four-fifths affirmative vote.

On September 21, 2023, the ALUC met to consider submittal requirement options following the City's failed vote to overrule the ALUC's determination. The ALUC voted to require the City to submit discretionary actions related to Housing Element Sites 6 (4665 Lampson Avenue), 7 (Laurel Park), and 10 (5030-5084 Katella) to ALUC for review until such time as the General Plan is revised, or the City overrules the ALUC's determination.

On December 11, 2023, the City reconsidered adoption of Resolution 2023-20. The Resolution passed with a four/fifths vote, finding that the Housing Element Update is consistent with the purposes of the State Aeronautics Act and overruling the Orange County ALUC's determination.

4.10.3 Methodology

The following analysis considers whether the Project would conflict with applicable planning documents, plans, or policies from the City and other agencies that were adopted for the purposes of avoiding or mitigating an environmental effect and whether those conflicts, if any, would cause significant environmental effects. A determination regarding a project's consistency with an applicable plan is made by the Lead Agency. Consistency is achieved where a project furthers the overall objectives and policies of a plan and where it would not obstruct their attainment. Project consistency was analyzed for the following plans: SCAG's Connect SoCal, the AELUP for the JFTB Los Alamitos, and the City of Los Alamitos General Plan.

A project's conflict with a policy is considered significant if such inconsistency would cause significant physical environmental impacts. A policy conflict is not in and of itself considered a significant impact but may be evidence that an underlying physical impact is significant and adverse.

4.10.4 Basis for Determining Significance

Section XI of Appendix G to the CEQA Guidelines addresses typical adverse effects to land use and planning resources, and includes the following threshold questions to evaluate the Project's impacts on land use and planning resources (OPR, 2022):

- *Physically divide an established community;*
- *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

4.10.5 Impact Analysis

Threshold a: ***Would the Project physically divide an established community?***

The Project involves the redevelopment of a 12.3-acre site with a residential development of 246 units. The Project is consistent with the City's General Plan land use designations and zoning. The Project site is surrounded by Arbor Park to the north, the Navy Golf Course to the east, residential development to the south, and the Los Alamitos JFTB to the west. The proposed residential development is consistent with the surrounding land uses in the area and would not introduce a new use that potentially would separate existing communities through incompatible development (e.g., by limiting access to surrounding areas). For example, the Project would facilitate connections between the existing residential neighborhoods to the south and Arbor Park by providing additional parking for the park, improved sidewalks, signalized pedestrian intersections, and other circulation improvements. Additionally, the proposed Project would be developed within the confines of the Project site and would not introduce new major roadways or other infrastructure improvements that would bisect or

transect the surrounding communities. For example, off-site improvements, including the replacement of the existing median curb/landscape and water line extension along Lampson Avenue would all occur within existing right-of-way. Therefore, redevelopment of the Project site would not physically divide an established community. No impact would occur and no mitigation is required.

Threshold b: ***Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

The Project's consistency with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect is discussed below. This section includes an analysis of consistency with SCAG's Connect SoCal, the AELUP for the Los Alamitos JFTB, and the City's General Plan. The Project's consistency with the General Plan Mobility and Circulation Element is also discussed in Section 4.15, *Transportation*, of this EIR.

1. SCAG Connect SoCal

SCAG's Connect SoCal is the SCAG planning document that applies to the Project. Connect SoCal identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. The Connect SoCal goals are meant to provide guidance for considering proposed projects for municipalities throughout the SCAG jurisdictional area. As shown in Table 4.10-1, *SCAG Connect SoCal Goal Consistency Analysis*, the Project would not conflict with the Connect SoCal goals. Accordingly, the Project would have a less than significant impact and no mitigation is required.

Table 4.10-1 SCAG Connect SoCal Goal Consistency Analysis

RTP/SCS Goal	Goal Statement	Project Consistency Discussion
1	Encourage regional economic prosperity and global competitiveness.	**No Conflict.** This is not a project-specific goal but would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts. Nonetheless, the Project would support this goal by redeveloping an underutilized site and providing housing consistent with the City's Housing Element in support of State Housing Law. Therefore, the Project would support economic growth and health in the City.
2	Improve mobility, accessibility, reliability, and travel safety for people and goods.	**No Conflict.** The Project would improve mobility, accessibility, and travel safety for people and goods. As described in Section 3.3.2 of this EIR, non-motorized circulation would include pedestrian connectivity with existing sidewalks along Lampson Avenue, including a signalized pedestrian connection to the south at Rose Street and Lampson Avenue and pedestrian "paseo" connections with Arbor Park and the Arbor Dog Park to the north. A 4-foot-wide community natural colored concrete sidewalk and 6-foot-wide public natural colored concrete sidewalk would be

RTP/SCS Goal	Goal Statement	Project Consistency Discussion
		constructed throughout the Project site to link residential neighborhoods to open spaces and amenities. The Project would also construct roadway improvements to ensure safe travel. Vehicle access to the Project site would be provided via two driveways on Lampson Avenue, one for the apartment entry on the western side and one for the primary neighborhood entry central to the site. Additionally, a restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The Project would implement stop controls for the southbound approach at all driveways on Lampson Avenue. The driveway for the apartment entry would be restricted to right-in/right-out access only. Vehicular circulation would be unrestricted throughout the Project site. If and when the primary neighborhood entry meets the appropriate warrants, a traffic signal shall be installed at this location and shall be coordinated along with the other traffic signals along Lampson Avenue. Additionally, the Project would construct frontage improvements along Lampson Avenue, including median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements as required by City standards. Roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Los Alamitos General Plan Circulation Element. The Project's mobility improvements and compliance with City policies and design standards would support this goal to improve mobility, accessibility, reliability, and travel safety for people and goods.
3	Enhance the preservation, security, and resilience of the regional transportation system.	**No Conflict.** This is not a project-specific goal, but would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. Additionally, this goal provides guidance to City staff to monitor the regional transportation network and to continue to coordinate with other agencies as appropriate. Implementation of the Project would have no adverse effect on such planning or maintenance efforts. The Project would be confined to the Project site with the exception of off-site infrastructure improvements as shown in Figure 3-27, *Physical Disturbance Area*. The Project would not result in the alteration of the segment of Lampson Avenue that abuts the Project site except for the replacement of the existing median curb and construction of the two proposed driveways. Lane closures that may be required for median improvements would be temporary and require a

RTP/SCS Goal	Goal Statement	Project Consistency Discussion
		permit and compliance with LAMC 12.08.200, Safety precautions–Obstruction of traffic. LAMC 12.08.200 provides specific requirements to maintain safe crossings for vehicles and pedestrian traffic at all street intersections, including but not limited to requirements on intervals and widths of crossings, placement of materials, maintained barriers, and the requirement that one travel lane in each direction shall remain open at all times. This would ensure safe crossing and access for all vehicle and pedestrians at all times. Therefore, the Project would not result in an adverse effect to the preservation, security, and resilience of the regional transportation system.
4	Increase person and goods movement and travel choices within the transportation system.	**No Conflict.** The Project would provide housing in an urbanized area and construct roadway and pedestrian improvements. Additionally, the Project would provide a community electric vehicle for residents of the Project's affordable housing to drive short distance trips (see Project Design Feature PDF-GHG-3). The Project consists of infill development in proximity to local and regional travel routes, providing access to recreational, retail, and office uses in the vicinity. The Project would bring residential uses in close proximity to the regional transportation network (I-405, SR-22, and I-605) and nearby existing employment centers and retail areas. Therefore, the Project would increase person, goods movement, and travel choices within the transportation system.
5	Reduce greenhouse gas emissions and improve air quality.	**No Conflict.** An analysis of the Project's environmental impacts is provided throughout this EIR and mitigation measures are specified where warranted. The Project's potential air quality and greenhouse gas emissions are addressed in detail in Section 4.2, *Air Quality* and Section 4.7, *Greenhouse Gas Emissions*, of this EIR, respectively. As discussed in Section 4.2, *Air Quality*, Project-related activities would not exceed the applicable South Coast AQMD regional thresholds of significance during construction or operation. Similarly, as discussed in Section 4.7, *Greenhouse Gas Emissions*, the Project would not exceed the South Coast AQMD threshold of 3,000 $MTCO_2e$/yr, and impacts would be less than significant. Furthermore, as discussed in Section 3.3.7 of this EIR, the Project includes several Project Design Features to reduce greenhouse gas emissions and improve air quality; including installation of solar roofs, energy use will be 100% electric, provision of a community electric vehicle, preferential parking for fuel efficient vehicles, and EV charging stations (see Project Design Features PDF GHG-1 through PDF GHG-5).
6	Support healthy and equitable communities.	**No Conflict.** The Project would support healthy and equitable communities by developing a residential community with a variety of housing product types with over 31% units of affordable

RTP/SCS Goal	Goal Statement	Project Consistency Discussion
		housing. Therefore, the Project would offer needed housing for a variety of income levels. Refer also to Connect SoCal Goal 5.
7	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	**No Conflict.** This is not a project-specific goal but would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. Nonetheless, the Project would provide affordable housing consistent with the City's Housing Element and State Housing Law, providing needed housing for a variety of income levels. Providing both affordable and market rate housing would support an integrated regional development pattern and transportation network. Developing housing near an established transportation network (I-405, SR-22, and I-605) would reduce commute distances. The Project consists of infill development in proximity to local and regional travel routes, including Lampson Avenue, Seal Beach Blvd., and Valley View Street, providing access to recreational, retail, and office uses in the vicinity. Therefore, the Project would bring residential uses in close proximity to the regional transportation network. Additionally, as discussed in Section 4.12, *Population and Housing*, of this EIR, the Project would place housing within a job-rich area. Although there would be a significant and unavoidable impact related to vehicle miles traveled (VMT), this is due to the fact that the Project is not currently served by transit or alternative transportation opportunities (e.g. bus service) and has a higher VMT per capita compared to the County's regional average. Nevertheless, co-locating housing near jobs reduces greenhouse gas emissions caused by long commutes and contributes to integrated development patterns.
8	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	**No Conflict.** This is not a project-specific goal but would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. Nonetheless, the Project would support new transportation technologies by providing a community electric vehicle for residents of the Project's affordable housing to drive short distance trips (see Project Design Feature PDF-GHG-3). Implementation of the Project would have no adverse effect on leveraging new transportation technologies and data-driven solutions that result in more efficient travel.
9	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	**No Conflict.** The Project would result in the development of 246 residential units, consisting of a variety of different product types, including single family detached homes, townhomes, and apartments. An off-site pedestrian circulation system would be available in proximity to the Project site with an interconnected paved sidewalk system with the roadway right-of-way separated from vehicular travel lanes by a landscaped parkway. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east.

RTP/SCS Goal	Goal Statement	Project Consistency Discussion
		Additionally, there is a Class I bike/pedestrian path along Seal Beach Boulevard, north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage. Although there are no bus routes immediately adjacent to the Project site (along the Project's frontage Lampson Avenue), the Project area is currently served by OCTA with bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). OCTA route 42 runs along Seal Beach Boulevard and serves Seal Beach to Orange with an existing stop provided at Katella Avenue and Los Alamitos Boulevard (approximately 3.5 miles walking distance). OCTA Route 123 serves the City of Anaheim to City of Huntington Beach via Malvern Avenue, Valley View Street, and Bolsa Chica. The nearest bus stop to the Project site for Route 123 is at Valley View Street and Chapman Avenue (approximately 1.6 miles walking distance). Therefore, the Project would support the development of diverse housing types in areas with multiple transportation options.
10	Promote conservation of natural and agricultural lands and restoration of habitats.	**No Conflict.** The Project site is in a developed area of the City of Los Alamitos. The Project site is currently occupied by a vacant two-story, 88,000 sf commercial office building, ornamental landscaping, and parking lot. As discussed in Section 4.3, *Biological Resources*, of this EIR, the Project site does not contain any special-status habitats. As discussed in Section 5.0, of this EIR, the Project site is designated as Urban and Built-Up land by the California Department of Conservation Farmland Mapping and Monitoring Program and does not support agricultural uses. Therefore, the proposed Project would not interfere with the City's ability to promote the conservation of natural and agricultural lands and the restoration of habitats.

(SCAG, 2020a)

2. Airport Environs Land Use Plan (AELUP) for Joint Forces Training Base (JFTB) Los Alamitos

The City and the Project site are within the airport planning area of the Los Alamitos JFTB (ALUC, 2017, p. 4). Land uses within the airport planning-area boundaries are required to conform to four key areas of military airport compatibility including: 1) aviation safety; 2) aircraft noise; 3) aircraft overflight; and 4) airspace protection/height zoning. Section 2.1 of the AELUP describes the standards and criteria adopted by the Airport Land Use Commission for Orange County for establishing planning boundaries.

Safety

As discussed above, the AELUP intends to safeguard the general welfare of the inhabitants within the vicinity of the airport, "to protect the public from the 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 airspace" (ALUC, 2017, p. 5). Safety restrictions established in the AELUP for the JFTB include the establishment of safety compatibility zones. For safety considerations, the AELUP relies on the 1994 Air Installations Compatible Use Zones (AICUZ) Study, which uses Department of Defense criteria for determining APZs and clear zones (CZs) at JFTB (ALUC, 2017, pp. 16-17, 23-25). A CZ is defined as "a trapezoidal area off each end of a runway used to enhance the protection of people and property on the ground." APZs are defined as "designated areas for military airports that require density and intensity use restrictions due to the potential for loss of life and property resulting from aircraft accident" (ALUC, 2017, pp. 16-17).

As discussed in Section 4.8, *Hazards and Hazardous Materials*, of this EIR, the Project site is not located within the CZs or APZ (refer to Figure 4.8-1, *JFTB Impact Zones*) for the JFTB. Therefore, the Project does not concentrate people in areas susceptible to aircraft accidents. Therefore, the Project would not result in a safety hazard for people residing at the Project site.

As such, the Project is consistent with the safety restrictions established in the AELUP for the JFTB.

Height

In adopting criteria for building height restrictions and airspace protection in the vicinities of airports, the ALUC considered only one height standard, FAR Part 77 entitled, "Objects Affecting Navigable Airspace." In order to ensure that buildings would not affect the continued operations of airports, the AELUP incorporates the standards for determining obstructions and FAR Part 77 definitions, of the "imaginary and notification surfaces" for airports, as the guidelines for height limits. (ALUC, 2017, p. 17)

FAR Part 77 establishes standards for determining whether objects constructed near airports would be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace. Development proposals within the City that include the construction or alteration of structures more than 200 feet above mean sea level require filing with the FAA and notification of ALUC, including filing of a Notice of Proposed Construction or Alteration (FAA Form 7460-1). Any development project that would penetrate the FAR Part 77 Notification Surface for Los Alamitos JFTB (notification area) is also required to file FAA Form 7460-1.

The Project site is located within the FAR Part 77 Notification Area and Horizontal Imaginary Surface for the Los Alamitos JFTB. Based on the FAA's Determination of No Hazard to Air Navigation (*Technical Appendix J2* of this EIR), the Project would not penetrate FAR Part 77 Imaginary Obstruction Surfaces for JFTB. Determination of No Hazard further determined that the location and

height of the Project's proposed buildings would not interfere with the established, or planned, airport flight procedures, patterns, or navigational systems. The FAA further found that the Project would not raise the ceiling or visibility minimums for any existing or planned instrument procedure at the Base. The FAA found that the Project would not result in a loss of airport utility, operational efficiency and capacity and would not reduce the usable length of either Base runway. Further, the Project would not conflict with the visual flight rules (VFR) airspace used for traffic patterns or arrival/departure airspace areas. The FAA Determination of No Hazard stated that marking and lighting of Project structures is not necessary for aviation safety. As such, the Project is consistent with the height restrictions established in the AELUP for the JFTB.

Noise Standards

On January 9, 1975, the ALUC for Orange County adopted the Community Noise Equivalent Level Methodology. Specifically, Resolution No. 75-1 states that: ". . . aircraft noise emanating from airports may be incompatible with the general welfare of the inhabitants within the vicinity of an airport and in order to measure the impact of aircraft noise on inhabitants within the vicinity of an airport, ALUC adopts the Community Noise Equivalent Level Methodology as specified in the Noise Standards for California Airports (Title 21, California Code of Regulations)." (ALUC, 2017, pp. 15-16)

The AELUP relies on the 1994 California Army National Guard Installation Compatible Use Zone Study (AICUZ) for noise contours surrounding JFTB. The 1994 AICUZ depicts the Project site outside of the 65 dB CNEL noise contour and between the 60 and 65 CNEL noise contours. The AELUP considers residential land uses "conditionally consistent" with the 60 decibels (dB) Community Noise Equivalent Level (CNEL) noise contour and recommends sound attenuation to ensure interior CNEL does not exceed 45 dB CNEL and outdoor signage "informing the public of the presence of operating aircraft." The City enforces California Building Code standards for residential construction practices and building materials to ensure that interior noise levels do not exceed 45 dBA.

Although the AELUP considers the Project conditionally consistent with the 60 dB CNEL contour, the CNEL noise contours depicted in the 1994 AICUZ and used by the AELUP are outdated and do not reflect updated noise contour information set forth in the most recent 2020 Noise Assessment completed for the Base. Further, the ALUC estimated the 60 dB CNEL contour in the AELUP using the 1994 AICUZ by extrapolating from the outdated 65 dB CNEL contour "using a logarithmic scaling method and professional acoustical-engineering judgment". This method of extrapolation is both outdated and contrary to the US DOD aircraft noise analysis requirements. The US DOD requires the use of the aircraft noise model NOISEMAP to predict community noise exposure. As required by US DOD, the 2020 Noise Assessment for the Base used NOISEMAP to predict community noise exposure.

The 2020 Noise Assessment included a noise analysis of the then-current aircraft operations as the "Baseline" and provided a forecast of additional operations by the California Air National Guard projected over a 10-year period ("Projected" operations). As shown in Figure 4.11-4, a small portion of the northwest corner of the Project site is within the 60 dB CNEL Projected Noise Contour (based on the 10-year operations forecast) but the remainder of the site remains outside of the 60 dB CNEL

noise contour. Figure 4.11-4 depicts the Project site in relation to the Baseline and Projected noise contours under the 2020 Noise Assessment for the base.

Relative to the 2020 Baseline and Projected noise contours, the entire Project site is located outside of the 65 dB CNEL noise contour, and only a small portion of the Project site would be located within the 60 to 65 CNEL contour. The remainder of the Project site would be outside the 60 dB CNEL contour. The AELUP considers residential land uses consistent in areas outside the 60 dB CNEL contour and indicates that there are "no special noise reduction requirements." For the small portion of the site within the 60 to 65 CNEL contour, the AELUP indicates that it would be conditionally consistent and recommends sound attenuation to ensure interior CNEL does not exceed 45 dB and outdoor signage. The Project would comply with these recommendations. As stated above, the City enforces California Building Code standards for residential construction practices and building materials to ensure that interior noise levels do not exceed 45 dBA. Indeed, current building codes require construction materials and construction techniques that generally provide a minimum of 20 dB of sound attenuation. Typical building construction would provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed.".

Thus, interior noise for the small portion of the Project site within the 60 to 65 CNEL contour would be less than 45 dB CNEL with 20 dB of noise attenuation from standard construction practices. Interior noise within the rest of the Project site, which is located outside the 60 CNEL contour, would be even lower. Therefore, both the exterior and interior noise levels associated with the Project are consistent with the AELUP, and the Project would not expose people residing or working in the project area to excessive noise levels from airport or aircraft operations. Impacts would be less than significant and no mitigation is required.

Aircraft Overflight

Aircraft overflight refers to aircraft operating in the vicinity of the Base that are arriving, departing or within the local traffic patterns associated with each runway. These lower altitude operations make aircraft more visible to people on the ground near the airport and, while not necessarily rising to the level of the noise standard, may still be considered an annoyance to some people. The Base has developed extensive, non-standard, noise abatement routing procedures over streets, highways and non-residential areas for aircraft, and particularly helicopters, operating in the vicinity of the JFTB to specifically avoid residential overflights.

Arrival and departure corridors used by inbound and outbound aircraft avoid direct overflight of residential areas as much as possible and avoid the Project site (see Figure 11 of *Technical Appendix J1)*. These corridors follow the major highways and streets to blend the majority of overflight noise with the background traffic noise. Navy Golf Course, Old Ranch Country Club and the Base's landside facilities, such as aircraft parking aprons, hangars, offices and roadways, also provide overflight setbacks from residential land uses. The objective is to reduce annoyance and minimize the number of people exposed to excessive noise levels from overflying aircraft.

As noted in the Handbook, "very little guidance exists for limiting people's exposure to overflight." Nonetheless, regular updates to the AICUZ noise and overflight analysis are prepared and provided to members of the community as changes are made over time to the diverse mix of aircraft making use of the Base in its unique role as a "Joint Forces Training" facility. These operations, noise and overflight updates are required by the Department of Defense guidance for Base planning personnel and for dissemination to the public through the AICUZ program.

AELUP Section 2.1.4 provides the ALUC guidance specific to overflight compatibility. The AELUP overflight policies follow State law and the California Airport Land Use Planning Handbook methods of achieving compatibility through buyer awareness and overflight information. The ALUC mandates the State's real estate disclosure provisions[1] requiring buyer and renter notification for new residential land uses within an airport influence area (even if these state laws were to be revised or rescinded). The ALUC also requires that signs providing these disclosures and notices be "prominently posted" in real estate sales offices and within the new development depicting overflight areas and helicopter traffic patterns.

As identified in the Handbook, the primary overflight strategy is to ensure buyer awareness as opposed to any specific land use restrictions. This buyer awareness notification process is built into the real estate disclosure laws of the State to ensure that potential buyers are fully informed before buying a home near an airport if they are sensitive to the types of annoyances or disruptions that may come with the location. Buyer awareness is required as part of the City's approval process for the Project including the statement below:

> **NOTICE OF AIRPORT.** This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

With this notification, the Project is consistent with overflight notification requirements as required by State law provided by the Handbook, State law, the AICUZ and AELUP.

Summary

The Project would not conflict with JFTB AELUP's safety, height, noise, or aircraft overflight criteria, and impacts would be less than significant. No mitigation is required.

[1] California Business and Professional Code Section 11010 and Civil Code Section 1102.6, 1103.4 and 1353.

3. City of Los Alamitos General Plan

Table 4.10-2, *General Plan Consistency Analysis*, provides an analysis of the Project's consistency with all applicable General Plan goals and policies that were adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 4.10-2, the Project would not conflict with any of the applicable General Plan goals and policies. Accordingly, the Project would have a less-than-significant impact with respect to a conflict with the City of Los Alamitos General Plan and mitigation is not required.

Table 4.10-2 General Plan Consistency Analysis

General Plan Policy	Consistency
Land Use Element	
Goal 2: Fiscally sustainable growth and economic development through a balanced mix of land uses and development types.	
Policy 2.1 Fiscal impacts. Require that new development be fiscally neutral or positive and can be adequately served by public facilities without negatively impacting service to existing businesses and neighborhoods.	**No Conflict.** Implementation of the Project would result in the development of 246 residential units. As discussed in EIR Section 4.13, *Public Services*, the Project would be adequately serviced by existing public facilities and would not negatively impact service to existing businesses and neighborhoods. Additionally, the Project would be required to pay Development Impact Fees to assist in providing for fire protection facilities, police protection facilities, school facilities, parks and recreational facilities, and other public facilities. Additionally, to the extent required, the Project will comply with the fair share requirements of this policy and would pay school-related development impact fees. The Project would be developed in an area of the City already served by fire and police services and would not expand that service area. Therefore, the Project would not conflict with Policy 2.1. See also Section 4.13, *Public Services*, of this EIR for further discussion of public facilities.
Goal 4: Neighborhoods and buildings that are well maintained and demonstrate a sense of pride and identity	
Policy 4.4 Scale and Character. Ensure that all new development in residential neighborhoods is compatible with the scale and character of the surrounding neighborhood.	**No Conflict.** Upon implementation of the Project, views of the townhomes and cluster homes from Lampson Avenue would consist of the three-story buildings, street trees, shrubs and groundcover. The Project would be attractive and of quality design, and provide visual interest through varied architectural detailing, including but not limited to building massing, heights, building materials, and decorative features. Additionally, as shown in Table 4.1-1, *Zoning Development Standards Consistency Analysis*, the Project would be compliant with the zoning development standards and City requirements pertaining to scenic quality. The new residential development would complement the scale and character of existing residential land uses and would bring housing to an underutilized area. Therefore, the Project would not conflict with Policy 4.4.See also Section 4.1, *Aesthetics*, of this EIR for further discussion of aesthetic impacts.

General Plan Policy	Consistency
Housing Element	
Housing Strategy Area 4: Adequate Housing Supply	
Policy 4.1: Incentives for Development of Housing Affordable to Low and Moderate Income Households The City recognizes the need for housing affordable to and meet the needs of all segments of the population, especially lower and moderate income households. The City shall encourage the development of housing affordable to lower and moderate income households throughout the City using incentives such as density bonus provisions (Municipal Code Section 17.28.050), expedited processing, and fee waivers/deferrals.	**No Conflict.** The City re-designated and rezoned the site for multi-family housing development. The Project site is identified as housing opportunity site 6 of the Housing Element and is a key site for purposes of ensuring the City meets its RHNA. The City encourages the development of housing affordable to lower and moderate income households throughout the City using incentives such as density bonus provisions (LAMC Section 17.28.050), expedited processing, and fee waivers/deferrals. The Project is consistent with land use designation and zoning district and would provide 77 for rent affordable multifamily apartment homes. Therefore, the Project would not conflict with policy 4.1.
Policy 4.10: Land Subdivisions Under this policy, the City encourages further land divisions resulting in parcel sizes that facilitate multifamily development affordable to lower income households. The City offers incentives for land division encouraging the development of affordable housing including but not limited to: priority to processing subdivision maps that include affordable housing units, expedited review for subdivision of larger sites, and financial assistance. The objective of this policy is to facilitate land subdivisions for affordable housing development.	**No Conflict.** The Project includes Tentative Parcel Map No. 2022-133 and Vesting Tentative Tract Map No. 19263 in support of this policy. As shown in Figure 3-24, *Tentative Parcel Map 2022-133*, Tentative Parcel Map No. 2022-133 (for finance and conveyance purposes) would subdivide the property into two parcels: 1) Parcel 1 (2.204 acres) for the affordable housing component and 2) Parcel 2 (10.163 acres) for the single family detached and townhome component. As shown in Figure 3-25, *Vesting Tentative Tract Map*, a Vesting Tentative Tract Map is being provided for condominium purposes. The 77-unit affordable housing apartment home component will be established on Parcel 1. The Vesting Tentative Tract Map would be proposed on the Parcel 2 and would be used for condominium purposes. Therefore, the Project would not conflict with Policy 4.10.
Policy 4.11: Monitor Multifamily Parking Requirements. The multifamily parking requirements may impact the feasibility of residential development, especially those with affordable units. The City shall annually monitor the impact of parking requirements for multifamily development. In addition, the City shall establish programs or strategies in its Zoning standards to address the constraint such as parking reductions. The objective of this policy is to reduce the impact of parking requirements on multifamily development and establish strategies as appropriate.	**No Conflict.** Implementation of the Project would result in the development of 246 residential units, including 77 affordable multifamily units. The Project would provide 577 parking spaces, which is below the City's required 679 parking spaces pursuant to LAMC Section 17.22.030, Required Parking Spaces. However, the State's Density Bonus Law specifies that for housing developments that qualify for a density bonus the local government shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds the following ratios: (A) zero to one bedroom: one onsite parking space; (B) two to three bedrooms: one and one-half onsite parking spaces; and (C) four and more bedrooms: two and one-half parking spaces. (Gov't Code Section 65915(p)(1).)

General Plan Policy	Consistency
	Pursuant to the state's Density Bonus Law, 439 spaces would be required. The Applicant requests that the City require no more than 2.35 spaces per unit for a total of 577 parking spaces (475 for the single family detached and townhomes and 102 for the apartments) for the Project, which is significantly more than the 439 parking spaces that would be required pursuant to the State's Density Bonus Law. Walker Consultants prepared a parking analysis (EIR *Technical Appendix P*) to determine the appropriate amount of parking needed for the Project. Based on the parking analysis, the Project would provide more than adequate parking based on nationally recognized Urban Land Institute/National Parking Association Standards for market-rate residential development and would meet the minimum parking requirements of the City of Seal Beach, the adjacent jurisdiction (Walker Consultants, 2022). Therefore, the Project would not conflict with this policy.
Housing Strategy Area 5: Coordinated Housing Efforts	
Policy 5.3: Partnerships and Coordination with Developers and Outside Agencies. To maximize the efficiency and effectiveness of existing and estimated future local resources, the City seeks partnerships with developers and applicable outside agencies in the development of affordable housing. The City shall evaluate the effectiveness of its current partnerships with developers and outside agencies. Based on its findings, the City will seek ways to expand and foster partnerships and increase cooperation within these partnerships to provide additional housing opportunities for lower income households. The City will formulate an outreach strategy to provide information to residential developers on a variety of City-initiated incentives, such as development standards and density bonuses, reduced parking requirements and other programs related to residential projects. Much of this process can be integrated into the Town Center Mixed Use Strategic Plan process, which covers all the Town Center sites identified for affordable housing. The City will also seek partnerships with outside agencies such as the County of Orange to obtain financing and other resources as appropriate. The objective of this policy is to increase partnerships and coordination with developers and outside agencies, with an emphasis during the Town Center Mixed Use Strategic Plan process.	**No Conflict.** The Project would be required to go through the City's development review process to ensure compliance with City policies and regulations. In addition, because the implementation of the Project would result in 77 affordable housing units, the Project Applicant has incorporated City-initiated incentives, such as development standards and density bonus law requests. Therefore, the Project supports the City's effort to coordinate with developers and outside agencies and would not conflict with Policy 5.3

General Plan Policy	Consistency
Policy 5.4: Promote Community Participation. The City understands collaborating with residents and stakeholders is critical in formulating effective housing policies and programs. The City shall continue to encourage community participation by informing residents and stakeholders of public workshops and hearings related to housing through notices posted at City Hall, local community centers and the City's website; and mailers to relevant community stakeholders. The objective of this policy is to promote community participation.	**No Conflict.** The City hosted various community meetings regarding the Project prior to preparing this EIR. A Community Open House was conducted for the Project on November 16, 2022. Further, the Project's NOP was filed with the State Clearinghouse and distributed to responsible agencies, trustee agencies, and other interested parties on October 3, 2022, for a 30-day public review period. In addition, a publicly noticed EIR Scoping Meeting was held on October 20, 2022. The EIR Scoping Meeting provided public agencies, interested parties, and members of the general public an additional opportunity to learn about the Project, the CEQA review process, and how to submit comments on the scope and range of environmental concerns to be addressed in this EIR. This Draft EIR will also be published for a 45-day public review period and residents and stakeholders will have the opportunity to comment on the Project's Draft EIR. The City will consider the Project at a public hearing and will provide notice to members of the general public and an opportunity to comment on the Project at the hearing. Therefore, the Project would not conflict with Policy 5.4.
Open Space, Recreation, and Conservation Element	
Goal 3: Natural, historic, and cultural resources that are preserved and promoted as key features for civic pride and identity.	
Policy 3.1 Native plants. Require the use of native and climate-appropriate plant species, and prohibit the use of plant species known to be invasive.	**No Conflict.** As shown in Figure 3-18, *Landscape Plan*, the Project would include a variety of trees and shrubs along the building frontage, access points, and throughout the site. Landscaping will feature drought-tolerant plant materials. A total of 441 trees, including 51 36" box focal trees, 190 15-gallon trees, 5 10x10'specimen canopy trees, and 195 24/36" box trees, would be planted throughout the Project site. No plants listed on the California Invasive Plant Council (Cal-IPC) Inventory species will be planted and a list of approved species to be planted shall be reviewed by a qualified biologist prior to planting (PDF-B-2). Therefore, the Project would not conflict with Policies 3.1, 3.2, and 3.3.
Policy 3.2 Urban forest. Maintain and enhance a diverse and healthy urban forest on public and private lands. Incorporate and preserve mature and specimen trees at key gateways, landmarks, and public facilities.	
Policy 3.3 Landscaping. Establish and maintain attractive landscaping on public and private property visible to the public, including rights-of-way, freeways access points, building frontages, and trails	
Goal 4: Air, water, and energy resources that are protected from pollution and overuse.	
Policy 4.2 Sensitive Land Uses. Discourage the future siting of sensitive land uses within the distances defined by the California Air Resources Board without sufficient mitigation.	**No Conflict.** The California Air Resources Board recommends health protective distances for placing sensitive receptors near sources of high pollutant concentrations, such as freeways. The Project would not place sensitive land uses in proximity to sources of high pollutant concentrations. Further, as discussed in EIR Section 4.2, *Air Quality*, implementation of the Project would not exceed applicable South Coast AQMD localized criteria pollution emissions thresholds during construction and operation and would not cause or measurably contribute to the formation of a CO "hot spot." Therefore, the Project would not conflict with Policy 4.2.

General Plan Policy	Consistency
Policy 4.3 Regional air quality. Support regional efforts to reduce particulate matter and collaborate with other agencies to improve air quality at the emission source.	**No Conflict.** As discussed in EIR Section 4.2, *Air Quality*, Project-related activities would not exceed the applicable South Coast AQMD regional thresholds of significance during construction or operation. Therefore, the Project would not conflict with Policy 4.3.
Policy 4.4 Low and zero emission vehicles. Support development of private and public parking infrastructure facilitating the use of alternative fuel vehicles.	**No Conflict.** As discussed in EIR Section 3.0, *Project Description*, the Project would provide EV charging stations that shall equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2 (see PDF GHG-5). Additionally, parking areas shall be designed to provide parking for low-emitting, fuel-efficient, and carpool/van vehicles equal the Tier 2 Residential Voluntary Measures of the California Green Building Standards Code, Section A4.106.8.2.1 (see PDF GHG-5). Therefore, the Project would not conflict with Policy 4.4.
Policy 4.5 Energy and water conservation. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the City's zoning ordinance and the California Building Code.	**No Conflict.** As discussed in EIR Section 4.5, *Energy*, and Section 4.17, *Utilities and Service Systems*, the Project would result in a less than significant impacts related to energy and water supply. The Project would be required to comply with the City's zoning ordinance and the California Building Code, including energy and water conservation and reduction standards. Additionally, the Project would exceed energy standards through installation of solar photovoltaic rooftops, use of 100% electricity, preferential parking of fuel-efficient vehicles, and EV charging stations (see PDF GHG -1, -2, -4, and -5. Therefore, the Project would not conflict with Policy 4.5.
Policy 4.6 Irrigation. Encourage the use of water-efficient irrigation systems and reclaimed water for irrigation.	**No Conflict.** The Project would install irrigation systems on-site per local California water regulations (AB 1881), which established the Model Water Efficient Landscape Ordinance to improve water efficient irrigation systems and landscaping. Therefore, the Project would implement water-efficient irrigation systems and reclaimed water for irrigation and would not conflict with Policy 4.6.
Policy 4.7 Stormwater pollution. Minimize non-point source pollutants and stormwater runoff.	**No Conflict.** The Project proposes stormwater drainage improvements that would minimize pollutants and stormwater runoff. As discussed in EIR Section 4.9, *Hydrology and Water Quality*, the Project would be required to comply with the SWPPP and Project-specific WQMP to address construction and operational-related water quality impacts. The WQMP is a site-specific post-construction water quality management program that will be implemented to minimize erosion and siltation, pursuant to LAMC Chapter 8.44, Stormwater and Urban Runoff Pollution Controls. As identified in the Project's preliminary WQMP, the proposed Project is designed to include evapotranspiration, rainwater harvesting BMPs, biotreatment BMPs, non-structural source control BMPs, and structural source control BMPs. Structural source control BMPs include storm drain system stenciling and signage, trash and waste storage areas, efficient
Policy 4.8 Stormwater management. Encourage the use of low impact development techniques that retain or mimic natural features for stormwater management.	

General Plan Policy	Consistency
	irrigation systems & landscape design, water conservation, smart controllers, and source control. Therefore, the Project would not conflict with Policies 4.7 and 4.8.
Policy 4.9 Renewable Energy. Promote the use of renewable energy sources to serve public and private sector development.	**No Conflict**. As discussed in EIR Section 4.7, *Greenhouse Gas Emissions*, the Project would include installation of solar photovoltaic with the capability to generate up to 1,229,520 kWh/annually. Therefore, the Project would not conflict with Policy 4.9.
Mobility and Circulation Element	
Goal 1: A context-sensitive network of streets, bikeways, and pedestrian areas that promote the safe and efficient movement of people and goods	
Policy 1.1 **Multimodal network.** The City shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.	**No Conflict.** The Project encourages multimodal mobility. An off-site pedestrian circulation system would be available in proximity to the Project site with an interconnected paved sidewalk system with the roadway right-of-way separated from vehicular travel lanes by a landscaped parkway. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. Additionally, there is a Class I bike/pedestrian path along Seal Beach Boulevard, north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage. As discussed in Section 3.0, *Project Description*, roadway improvements have been included as part of the Project to maintain City standards for safe and efficient traffic operations. Moreover, bike lane improvements are currently ongoing on Lampson Avenue between Basswood Street ant Seal Beach Boulevard, which will connect to the existing bike lane on Lampson Avenue (City of Seal Beach, 2024). The roadway section of Lampson Avenue along the Project's frontage is entirely within the City of Seal Beach. According to the City of Seal Beach General Plan, Lampson Avenue is a divided roadway with a raised median and designed to accommodate a maximum of 37,500 daily vehicle trips (City of Seal Beach, 2003). At General Plan Buildout with Project Lampson Avenue would carry 15,750 trips from Rose Street to Tulip (east of the Project) and 15,350 daily trips from Rose Street to Heather Street (adjacent and west of the Project) (see *Technical Appendix N1* of the EIR). Therefore, the Project's anticipated generation of 1,658 daily trips is well within the capacity of Lampson Avenue. The Project would not conflict with the comfort, convenience, and safety of pedestrian, bicyclists, and motorists of all ages and abilities. Under existing conditions, access to the Project site is provided via two driveways along Lampson Avenue. Lampson Avenue is identified as a Secondary Arterial. One driveway is located centrally along the Project site's frontage and near the southeast corner along the Project site's frontage. Under Project conditions, access to the Project site would be provided via two
Policy 1.2 **Transportation decisions.** Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists of all ages and abilities.	
Policy 1.6 **Access management.** Minimize access points and curb cuts along arterials and within 200 feet of an intersection to improve traffic flow and safety. Eliminate and/or consolidate driveways when new development occurs or when traffic operation or safety warrants.	

General Plan Policy	Consistency
	driveways. One is proposed near the southwest corner of the Project site (Driveway 1) and one is proposed centrally along the Project site's frontage with Lampson Avenue (Driveway 2). A gated emergency vehicle access driveway would be provided near the southeast corner of the Project site. Driveway 1 would be restricted to right-in/right-out access only and a median would be constructed to restrict the access and Driveway 2 would allow full access. Refer to Threshold c for a queuing analysis under General Plan Buildout traffic conditions; the Project driveways would accommodate adequate queues. These two proposed driveways and curb cuts would be located more than 200 feet from existing intersections. Based on the foregoing, the Project would not conflict with these polices.
Policy 1.7 **Fair share of improvements**. Require new development to pay a fair share of needed transportation improvements based on a project's impacts to the multimodal transportation network.	**No Conflict.** As discussed in the Project's Traffic Analysis (*Technical Appendix N1*), transportation improvements associated with the Project are funded through a combination of improvements constructed by the Project or fair share contributions. Fair share contributions are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increase. The Project will comply with the fair share requirements of this policy. Therefore, the Project would not conflict with this policy.
Goal 2: Neighborhoods that are protected from through traffic.	
Policy 2.1 **Traffic calming**. Discourage cut-through traffic in residential neighborhoods through the application of traffic-calming measures	**No Conflict.** The Project would provide direct and convenient access to the site via a convenient and efficient circulation system. With direct access to Lampson Avenue from regional access routes, the Project would not generate any cut-through traffic resulting in the need for traffic-calming measures. Therefore, the Project would not conflict with this policy.
Goal 3: Safe and convenient access to schools and parks that promote healthy and active living.	
Policy 3.1 **Commuting to school.** Maximize the number of students walking, biking, and riding the bus to and from school.	**No Conflict.** The Project would promote future residents of the Project to walk, bike, or ride the bus to and from schools. Project frontage improvements such as sidewalk improvements, the existing bike lanes on Lampson Avenue adjacent to the Project site, and bike storage would promote residents and students to utilize these facilities. Therefore, the Project would not conflict with this policy.
Policy 3.2 **Active trips.** Establish, maintain, and improve bicycle and pedestrian systems to promote active trips to schools and parks.	**No Conflict.** The Project proposes pedestrian systems to promote access to Arbor Park and open space amenities within the Project site. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage. As discussed in Section 3.0, Project Description, roadway improvements have been included as part of the Project to maintain City standards for safe and efficient traffic operations. Moreover, bike lane improvements are currently ongoing on Lampson Avenue between Basswood Street and Seal Beach Boulevard,

General Plan Policy	Consistency
	which will connect to the existing bike lane on Lampson Avenue (City of Seal Beach, 2024). Therefore, the Project would not conflict with this policy.
Goal 4: Bicycle, pedestrian, and transit systems that are desirable alternatives to the car.	
Policy 4.2 **Site design.** Require physical designs for new development that provide convenience and security to pedestrians, bicyclists, and transit users.	**No Conflict.** As part of the City's development review and permitting process, the Project's site plans were reviewed to ensure site access is convenient and safe for pedestrians, bicyclists, and transit users. The Project would promote convenience and safe access for alternative modes of transportation by constructing sidewalk, bike lane improvements along Lampson Avenue adjacent to the Project site, and bike storage. Therefore, the Project would not conflict with this policy.
Policy 4.3 **Intersections.** Improve the safety and comfort of pedestrian and bicycle crossings at intersections.	**No Conflict.** The closest intersection to the Project site is at the eastern boundary of the Project at Lampson Avenue and Rose Street, A Traffic Analysis has been prepared for the Project (*Technical Appendix N1*) to evaluate the proposed development and assess any potential traffic deficiencies that would result from implementation of the Project. Frontage improvements would include sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards, which would improve the safety and comfort of pedestrian and bicycle crossings. Therefore, the Project would not conflict with this policy.
Policy 4.5 **Regional connections**. Connect bicycle and pedestrian trails to local and regional trails in adjacent jurisdictions.	**No Conflict**. The Project proposes to incorporate paseos for pedestrian access to Arbor Park. Therefore, the Project would not conflict with this policy.
Policy 4.6 **Bicycle and pedestrian wayfinding.** Provide bicycle and pedestrian network wayfinding and information through signs, street markings, or other technologies.	**No Conflict.** The Project proposes to incorporate paseos for pedestrian access to Arbor Park. The Project would provide appropriate signage as needed and would not impede the City's efforts with providing bicycle and pedestrian network wayfinding and information.
Policy 4.7 **Transit stops.** Improve and maintain safe, clean, comfortable, well-lit, and rider friendly transit stops that are well marked and visible to motorists.	**Not Applicable.** The nearest OCTA Route 123 bus stop from the Project site is approximately 1.6 miles walking distance at the intersection of Valley View Street and Champman Avenue. The nearest OCTA Route 42 bus stop from the Project site is approximately 3.5 miles walking distance at the intersection of Katella Avenue and Los Alamitos Boulevard Therefore, this policy is not applicable to the Project.
Public Facilities and Safety Element	
Goal 1: Reliable and cost-effective infrastructure systems and services that adequately serve residents and businesses.	
Policy 1.1 Water quality and supply. Work with Golden State Water Company to maintain high water quality and ensure adequate water supply for personal use, landscaping, and fire protection.	**No Conflict.** As discussed in EIR Section 4.9, *Hydrology and Water Quality*, the Project would obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit) and implement BMPs to address that potential pollutants of concern. As discussed in Section 4.17, *Utilities and Service Systems*, based on the water supplies available

General Plan Policy	Consistency
	and the estimated water demand of 50,63 Acre-Feet per year (AFY), there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years through 2045. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project. Therefore, the Project would not conflict with Policy 1.1.
Policy 1.3 Stormwater drainage. Coordinate with regional flood control agencies to protect residents and businesses from flood hazards, upgrading existing facilities to current standards whenever financially feasible.	**No Conflict.** As discussed in EIR Section 4.9, *Hydrology and Water* Quality, the Project would provide stormwater drainage to current standards, and the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. Impacts were determined to be less than significant. Therefore, the Project would not conflict with Policy 1.3
Policy 1.4 New development. New development shall pay its fair share of public facility and infrastructure improvements.	**No Conflict.** As discussed in Section 4.13, *Public Services*, the Project would be required to pay development impact fees to assist in providing for fire protection, police protection, school, parks and recreational, and other public facilities. Additionally, the Project would construct utility and roadway infrastructure needed to serve the Project (EIR Section 3.3.7). To the extent required, the Project will comply with the fair share requirements of this policy. Therefore, the Project would not conflict with Policy 1.4.
Policy 1.5 Waste management. A waste management system that meets or exceeds state recycling and waste diversion mandates while providing cost-effective disposal of waste for residents, businesses, and the City.	**No Conflict.** As discussed in Section 4.17, *Utilities and Service Systems*, the Project would not conflict with federal, State, or local regulations related to solid waste management. Additionally, the Project will coordinate with the City of Los Alamitos and the waste hauler to develop collection of recyclable material for the Project on a common schedule as set forth in applicable local, regional, and State programs. Therefore, the Project would not conflict with Policy 1.5.
Goal 2: High quality emergency services that establish a real and perceived sense of safety and security for residents, businesses, and visitors.	
Policy 2.1 Police and fire service. Maintain staffing, facilities, and training activities to effectively respond to emergency and general public service calls. Continue to contract fire protection services with the Orange County Fire Authority.	**No Conflict.** As discussed in EIR Section 4.13, *Public Services*, the Project would not result in impacts related to police and fire protection services. Additionally, the Project Applicant is required to pay development impact fees to assist in maintaining staffing, facilities, and training for fire protection and police protection services. The Project would be developed in an area of the City already served by fire and police services and would not expand that service area. Therefore, the Project would not conflict with Policy 2.1.
Policy 2.6 Hazardous materials. The use and storage of hazardous materials shall comply with applicable federal, state, and local laws to prevent and mitigate hazardous materials releases.	**No Conflict.** As discussed in EIR Section 4.8, *Hazards and Hazardous Materials*, during Project construction and operation, mandatory compliance with federal, State, and local regulations would ensure that the proposed Project would not create a significant hazard to the environment due to routine transport, use, or disposal of hazardous materials. With mandatory regulatory compliance, the Project would not pose a significant hazard to the public or the

General Plan Policy	Consistency
	environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. Therefore, the Project would not conflict with Policy 2.6.
Goal 3: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by natural hazards.	
Policy 3.2 Geologic and seismic risk. Prohibit development on unstable terrain, excessively steep slopes, and other areas deemed hazardous due to geologic and seismic hazards unless acceptable mitigation measures are implemented. Require that underground utilities be designed to withstand seismic forces and accommodate ground settlement.	**No Conflict.** As discussed in Section 4.6, *Geology and Soils*, all potential Project-related direct and indirect impacts related to geology and soils would be addressed through mandatory compliance with the CBSC, LAMC, other standard regulatory requirements, and the site-specific recommendations identified in the Geotechnical Report contained within *Technical Appendix F1* of this EIR. Therefore, the Project would not conflict with Policy 3.2.
Goal 4: An environment in which minimized noise contributes to the public's health, safety, and welfare.	
Policy 4.1 Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City's Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environs Land Use Plan for the JFTB.	**No Conflict.** As discussed in EIR Section 4.11, *Noise*, with the Project's proposed noise wall (PDF-N-1) and noise abatement measures (PDF-N-2), the Project would be compatible with the City's Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environs Land Use Plan for the JFTB. Therefore, the Project would not conflict with Policy 4.1.
Policy 4.3 Control sound at the source. Prioritize noise mitigation measures to control sound at the source over buffers, soundwalls, and other perimeter measures.	**No Conflict.** As discussed in EIR Section 4.11, *Noise*, the Project would not result in significant noise impacts during construction or operation. Impacts would be less than significant; and mitigation is not required. Additionally, the Project will construct a 7-foot-high noise barrier/soundwall along Lampson Avenue (PDF-N-1), which would further reduce operational noise impacts from the Project. Therefore, the Project would not conflict with Policy 4.3.
Policy 4.6 Aircraft noise. Work with the JFTB and Long Beach Airport to minimize the noise impact of small aircraft and helicopters on residential neighborhoods.	**No Conflict.** The northwestern portion of the Project site would locate residential uses within the 60 to 65 dBA CNEL noise level contour. As discussed in EIR Section 4.11, *Noise*, and further in this Section 4.10, *Land Use and Planning*, residential land uses exposed to noise levels less than 65 dBA CNEL are considered "conditionally consistent" which requires an acoustical analysis to ensure that the interior CNEL does not exceed 45 dBA CNEL. Based on future JFTB Los Alamitos aircraft noise levels ranging from 60 to 65 dBA CNEL. As described in Section 4.11, *Noise*, the Project would be designed to achieve a 25 dBA reduction with windows closed (PDF-N-2). Therefore, interior noise levels would range from 35 dBA to 40 dBA CNEL. With implementation of PDF-N-2, the Project would be designed to meet State and City noise requirements for all residential units exposed to aircraft noise from JFTB Los Alamitos. Therefore, the Project would not conflict with Policy 4.6.

General Plan Policy	Consistency
Growth Management Element	
Goal 1: Infrastructure and services that are provided to areas within City limits in a timely manner and, if determined appropriate, to areas outside City limits and within its sphere of influence.	
Policy 1.1 New development. New development shall pay its share of the costs of public facilities and services needed to serve the new residents.	**No Conflict.** As discussed in Section 4.13, *Public Services*, the Project would be required to pay development impact fees to assist in providing for fire protection, police protection, school, parks and recreational, and other public facilities. Additionally, the Project would construct utility and roadway infrastructure needed to serve the Project (EIR Section 3.3.7). Therefore, the Project would not conflict with Policy 1.1.
Policy 1.2 Development phasing. Require all new development within Los Alamitos to establish a development phasing plan commensurate with required improvements.	**No Conflict.** The purpose of this policy is to ensure that necessary infrastructure is in place prior to development. The Project would construct all necessary infrastructure improvements prior to occupancy of the proposed residential development. Therefore, the Project would not conflict with Policy 1.2.
Policy 1.4 Joint Forces Training Base. Maintain proactive communications with the Joint Forces Training Base (JFTB) regarding processes, operations, or projects in the City or at the JFTB that have the potential to impact the City of Los Alamitos, its residents, its businesses, or base operations.	**No Conflict.** The Project's Notice of Preparation and Notice of Availability of the Draft EIR was sent to the JFTB during the public review period. Additionally, the Project Applicant has proactively communicated with JFTB through the entitlement process. The Project site is located within the Federal Aviation Regulation Part 77 Notification Area and Horizontal Imaginary Surface for the Los Alamitos JFTB. Based on the FAA's Determination of No Hazard to Air Navigation (*Technical Appendix J2*), the proposed structures do not exceed obstruction standards and would not be a hazard to air navigation based on the proposed structures' height. Additionally, marking and lighting are not necessary for aviation safety. Therefore, the Project would not conflict with Policy 1.4.
Goal 3: Development that is consistent with the Airport Environs Land Use Plans for the Joint Forces Training Base and Orange County Heliports.	
Policy 3.1 Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City's Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environs Land Use Plan (AELUP) for the JFTB.	**No Conflict.** As discussed in EIR Section 4.11, *Noise*, with the Project's proposed noise wall (PDF-N-1) and noise abatement measures (PDF-N-2), the Project would be compatible with the City's Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards, and the Airport Environs Land Use Plan for the JFTB. Therefore, the Project would not conflict with Policy 3.1.
Policy 3.2 Federal Aviation Regulation Part 77. Do not approve buildings and structures that would penetrate Federal Aviation Regulation (FAR) Part 77 Imaginary Obstruction Surfaces for JFTB, Los Alamitos unless found consistent by the Airport Land Use Commission (ALUC). Additionally, in accordance with FAR Part 77, required applicants proposing buildings or structures that penetrate the 100:1 Notification Surface to file a Form 7460-1 Notice of Proposed	**No Conflict.** The Project site is located within the Federal Aviation Regulation Part 77 Notification Area and Horizontal Imaginary Surface for the Los Alamitos JFTB. Based on the FAA's Determination of No Hazard to Air Navigation (*Technical Appendix J2*), the proposed structure do not exceed obstruction standards and would not be a hazard to air navigation based on the proposed structures' height. Additionally, marking and lighting are not necessary for aviation safety. Therefore, the Project would not penetrate FAR Part 77 Imaginary Obstruction Surfaces for JFTB, Los Alamitos would not conflict with Policy 3.2.

General Plan Policy	Consistency
Construction or Alteration with FAA and provide a copy of the FAA determination to the City and the ALUC for Orange County.	
Policy 3.5 New residential units. Do not approve the construction of new residential units within the 65 dBA CNEL noise contour for the JFTB.	**No Conflict.** The northwestern portion of the Project site would locate residential uses within the 60 to 65 dBA CNEL noise level contour. The Project is not within the 65 dBA CNEL noise contour for the JFTB. Therefore, the Project would not conflict with Policy 3.2.
Policy 3.6 JFTB noise contours. Require the use of JFTB noise contours to ensure new development is compatible with the noise environment.	**No Conflict.** As discussed in Section 4.11, *Noise*, of this EIR, the majority of the Project site is outside the 60 dBA CNEL noise contour for Los Alamitos JFTB and the northwestern portion of the Project site would locate residential uses within the 60 to 65 dBA CNEL noise level contour. Residential land uses exposed to noise levels less than 60 dBA CNEL are "normally consistent," and less than 65 dBA CNEL are considered "conditionally consistent" which requires an acoustical analysis to ensure that the interior CNEL does not exceed 45 dBA CNEL. Residential uses are considered "conditionally consistent" with AELUP Noise limitations and must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. Residential use sound attenuation is required to ensure that the interior CNEL does not exceed 45 dB. (ALUC, 2017) Typical building construction would provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." Based on future JFTB Los Alamitos aircraft noise levels ranging from 60 to 65 dBA CNEL for the northwestern portion of the Project site. As described in Section 4.11, Noise, the Project would be designed to achieve a 25 dBA reduction with windows closed (PDF-N-2). Therefore, interior noise levels would range from 35 dBA to 40 dBA CNEL with windows closed. Interior noise levels would be lower for the rest of the site outside the 60 dB CNEL contour. With implementation of PDF-N-2, the Project would be designed to meet State and City noise requirements for all residential units exposed to aircraft noise from JFTB Los Alamitos. Therefore, the Project would not expose people residing or working in the project area to excessive noise levels from airport or aircraft operations, and impacts would be less than significant. Therefore, the Project would not conflict with Policy 3.6.
Policy 3.7 Deed disclosure notice. Provide notice of airport in the vicinity where residential development is being proposed within the 60 dBA CNEL noise contours for the JFTB. Require that the following language be included as part of the Deed Disclosure Notice: NOTICE OF AIRPORT IN VICINITY	**No Conflict.** As required by State law, the City will require a deed disclosure notice to inform future residents that they are within an airport influence area and may experience in annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). The Project Applicant will be required to comply with the condition of approval. Therefore, the Project would not conflict with Policy 3.7.

General Plan Policy	Consistency
This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you	

(City of Los Alamitos, 2015a)

4.10.6 Cumulative Impact Analysis

This Project, in conjunction with other cumulative related projects would not physically divide an established community. As discussed under Threshold a, the Project would not physically divide an established community because the Project site is currently developed, in an urbanized area and would not introduce new major roadways or other infrastructure improvements that would bisect or transect the surrounding communities. Similarly, the City is primarily built out and there are no cumulative related projects that could combine with the Project that would physically divide an established community.

The Project, in conjunction with other cumulative development in accordance with the City's General Plan, would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As discussed under Threshold b, the Project is consistent with SCAG's Connect SoCal, the City's land use and zoning designations for the Project site and would not conflict with any aspects of the City's General Plan or any other applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects. Cumulative development would also be subject to site-specific environmental and planning reviews to ensure consistency with applicable regional and local plans reviewed in this section. Therefore, cumulatively considerable impacts from cumulative projects related to policy consistency would be less than significant.

4.10.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would not physically divide an established community.

Threshold b: Less-than-Significant Impact. The Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.10.8 Mitigation

No mitigation is required.

4.10.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.11 NOISE

This subsection addresses the environmental issue of noise, including existing noise levels in the Project area and the Project's potential to introduce new or elevated sources of noise. The analysis contained herein incorporates information contained in a technical report prepared by Urban Crossroads titled, "4665 Lampson Avenue Noise Impact Analysis", and dated April 10, 2024. The report is included as *Technical Appendix K* to this EIR (Urban Crossroads, 2024). Refer to Section 8.0, *References*, for a complete list of reference sources used in the analysis presented in this subsection.

4.11.1 ACOUSTICAL FUNDAMENTALS

A. Noise Definitions

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 100 feet, which can cause serious discomfort. Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

B. Noise Descriptors

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in dBA. The L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Los Alamitos relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

C. Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on geometric spreading, ground absorption, atmospheric effects, and shielding.

1. Geometric Spreading

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

2. Ground Absorption

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source.

3. Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

4. Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet

in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure.

D. Land Use Compatibility with Noise

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized.

E. Vibration

Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

The background vibration-velocity level in residential areas is generally 50 vibration decibels (VdB). Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

4.11.2 Existing Conditions

A. Existing Study Area Ambient Noise Conditions

Urban Crossroads recorded 24-hour noise readings at four (4) locations in the Project area on May 23, 2022. The noise measurement locations are identified in Figure 4.11-1, *Ambient Noise Measurement* Locations. The results of the existing noise level measurements are summarized below. Noise measurement worksheets for the hourly noise levels and the minimum and maximum observed noise

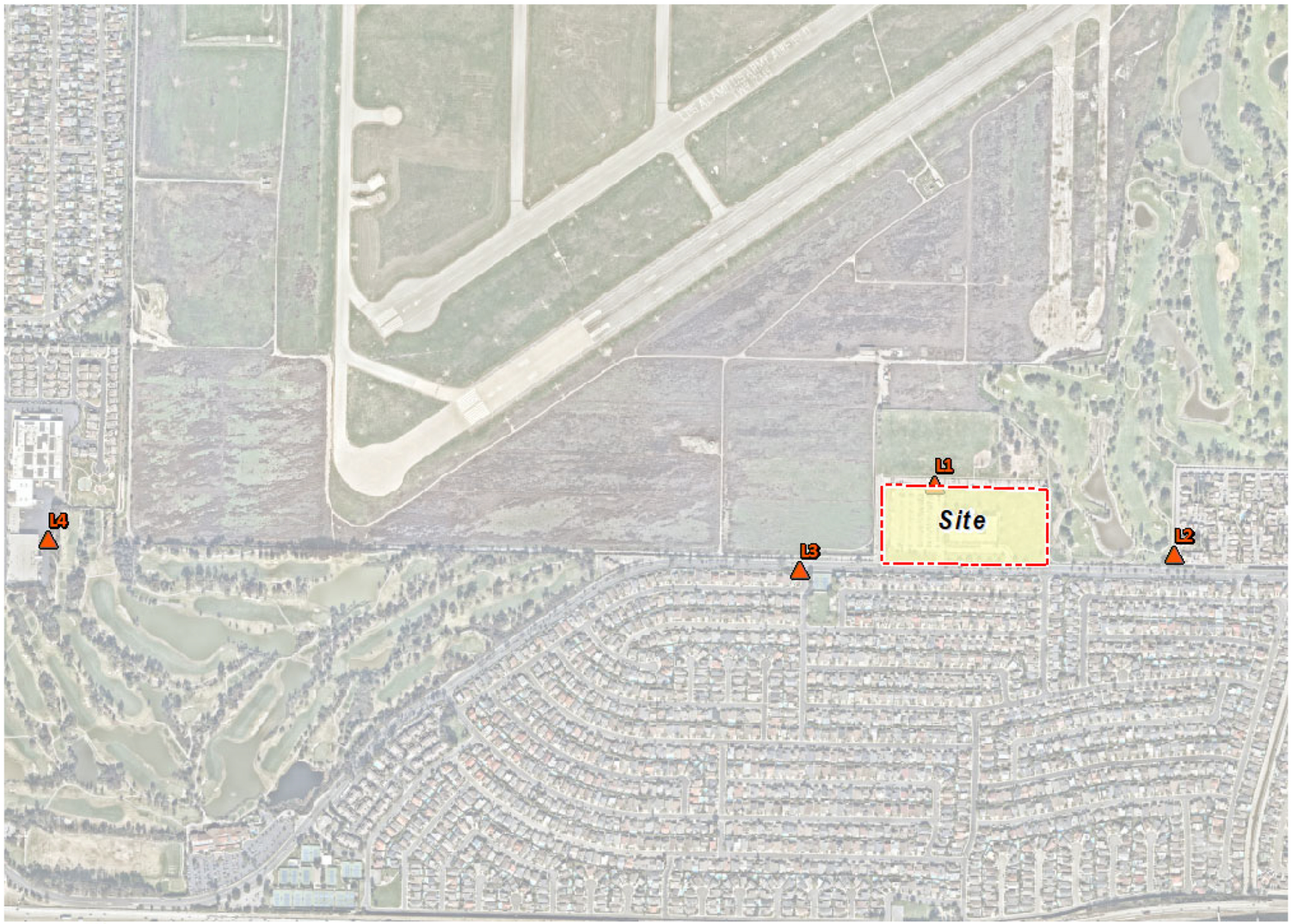
levels at each measurement location are provided in the Noise Analysis (*Technical Appendix K* of this EIR).

- Location L1, represents the noise levels located approximately 10 feet north of the Project site near Arbor Dog Park at 4665 Lampson Avenue. The noise level measurements collected show an average daytime noise level calculated to be 49.9 dBA L_{eq} and an average nighttime noise level calculated to be 42.4 dBA L_{eq} at location L1.
- Location L2 represents the noise levels located approximately 845 feet east of the Project site near single-family residence at 5001 Lunar Drive. The noise level measurements collected show an average daytime noise level calculated to be 60.8 dBA L_{eq} and an average nighttime noise level calculated to be 52.4 dBA L_{eq} at location L2.
- Location L3 represents the noise levels located approximately 540 feet southwest of the Project site near single-family residence at 4701 Ironwood Avenue. The noise level measurements collected show an average daytime noise level calculated to be 68.7 dBA L_{eq} and an average nighttime noise level calculated to be 60.7 dBA L_{eq} at location L3.
- Location L4 represents the noise levels located approximately 5,486 feet west of the Project site near Old Ranch Country Club Golf Course at 3901 Lampson Avenue. The noise level measurements collected show an average daytime noise level calculated to be 56.5 dBA L_{eq} and an average nighttime noise level calculated to be 55.1 dBA L_{eq} at location L4.

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with the arterial roadway network and the nearby community facility land uses, including but not limited to JFTB Los Alamitos aircraft operations, Navy Golf Course, and Arbor Park located adjacent to the northern, eastern, western Project site boundaries. This includes the auto and truck activities on Lampson Avenue adjacent to the Project site and near the noise level measurement locations.

B. Existing Groundborne Vibration

Based on the nature of the existing uses on the Project site, there are no sources of groundborne vibration on the Project site under existing conditions because no heavy impact machinery is used on the site.



Source(s): Urban Crossroads (03-28-2023)

Figure 4.11-1

Not to Scale

Ambient Noise Measurement Locations

C. *Existing Off-site Traffic Noise Levels*

Table 4.11-1, *Existing Conditions Roadway Noise Levels*, presents the Existing Conditions CNEL noise levels along 14 roadway segments, which range from 68.9 to 71.6 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography, which over predicts the noise levels and provides a conservative analysis. Accounting for noise attenuation features would result in lower noise levels compared to those reported below.

Table 4.11-1 Existing Conditions Roadway Noise Levels

ID	Road	Segment	Receiving Land Use[1]	CNEL at Nearest Receiving Land Use (dBA)[2]
1	Lampson Ave.	e/o[3] Los Alamitos Blvd.	Sensitive	71.6
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.
[3] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

4.11.3 Regulatory Framework

The following is a brief description of the federal, state, and local environmental laws and related regulations related to noise.

A. Federal

1. Noise Control Act of 1972

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of Federal research and activities in noise control; (2) authorize the establishment of Federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. (EPA, 2022f)

While primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The EPA is directed by Congress to coordinate the programs of all Federal agencies relating to noise research and noise control. (EPA, 2022f)

2. Federal Transit Administration

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents. In the interest of promoting quality and uniformity in assessments, the manual is used in performing noise and vibration analyses for inclusion in environmental documents. The manual sets forth the methods, construction standards, and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining mitigation for same, as applicable. (FTA, 2018, p. 1).

According to the FTA, project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. The FTA provides guidelines for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

3. Federal Aviation Administration

The FAA regulates the maximum noise level that an individual civil aircraft can emit by requiring aircraft to meet certain noise certification standards. These standards designate changes in maximum noise level requirements by "stage" designation. The standard requires that the aircraft meet or fall below designated noise levels. For civil jet aircraft, there are four stages identified, with Stage 1 being the loudest and Stage 4 being the quietest. For helicopters, two different stages exist, Stage 1 and Stage 2. As with civil jet aircraft, Stage 2 is quieter than Stage 1. In addition, the FAA is currently working

to adopt the latest international standards for helicopters, which will be called Stage 3 and will be quieter than Stage 2. (FAA, 2022a)

The FAA has undertaken a phase out of older, noisier civil aircraft, resulting in some stages of aircraft no longer being in the fleet. Currently within the contiguous US, civil jet aircraft over 75,000 pounds maximum take-off weight must meet Stage 3 and Stage 4 to fly. In addition, aircraft at or under 75,000 pounds maximum take-off weight must meet Stage 2, 3, or 4 to operate within the U.S. In addition, by December 31, 2015, all civil jet aircraft, regardless of weight must meet Stage 3 or Stage 4 to fly within the contiguous U.S. Both Stage 1 and Stage 2 helicopters are allowed to fly within the U.S. (FAA, 2022a)

The U.S. noise standards are defined in the CFR Title 14 Part 36 – Noise Standards: Aircraft Type and Airworthiness Certification (14 CFR Part 36). The FAA publishes certificated noise levels in the advisory circular, Noise Levels for U.S Certificated and Foreign Aircraft. This advisory circular provides noise level data for aircraft certificated under 14 CFR Part 36 and categorizes aircraft into their appropriate "stages." Any aircraft that is certified for airworthiness in the U.S. needs to also comply with noise standard requirements to receive a noise certification. The purpose of the noise certification process is to ensure that the latest available safe and airworthy noise reduction technology is incorporated into aircraft design and enables the noise reductions offered by those technologies to be reflected in reductions of noise experienced by communities. As noise reduction technology matures, the FAA works with the international community to determine if a new stringent noise standard is needed. If so, the international community through the International Civil Aviation Organization (ICAO) embarks on a comprehensive analysis to determine what that new standard will be. (FAA, n.d.)

The current FAA noise standards applicable to new type certifications of jet and large turboprop aircraft is Stage 4. It is equivalent to the ICAO Annex 16, Volume 1 Chapter 4 standards. Recently, the international community has established and approved a more stringent standard within the ICAO Annex 16, Volume 1 Chapter 14, which became effective July 14, 2014. The FAA adopted this standard and promulgated the rule for Stage 5 effective for new type certificates after December 31, 2017 and December 31, 2020, depending on the weight of the aircraft. The Final Rule for Stage 5 was published in the Federal Register on October 4, 2017. (FAA, n.d.)

For helicopters, the FAA has noise standards for a Stage 3 helicopter that became effective on May 5, 2014. These more stringent standards apply to new type helicopters and are consistent with ICAO Annex 16, Volume 1 Chapter 8 and Chapter 11. (FAA, n.d.)

The FAA Modernization and Reform Act of 2012, in Section 513, had a prohibition on operating certain aircraft weighing 75,000 pounds or less not complying with Stage 3 noise levels, and on July 2, 2013, the FAA published a Final Rule in the Federal Register for the Adoption of Statutory Prohibition the Operation of Jets Weighing 75,000 Pounds or Less That Are Not Stage 3 Noise Compliant. In 1990, Congress passed the Aviation Noise and Capacity Act, which required that by the year 2000 all jet and large turboprop aircraft at civilian airports be Stage 3. (FAA, n.d.)

4. Federal Highway Administration

The FHWA is the agency responsible for administering the Federal-aid highway program in accordance with Federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, applies to highway construction projects where a State department of transportation has requested Federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design. (FHWA, 2022)

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in Title 23 of the United States Code of Federal Regulations Part 772. The regulations require the following during the planning and design of a highway project:

- Identification of traffic noise impacts;
- Examination of potential mitigation measures;
- The incorporation of reasonable and feasible noise mitigation measures into the highway project; and
- Coordination with local officials to provide helpful information on compatible land use planning and control. (FHWA, 2022)

The regulations contain noise abatement criteria, which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require meeting the abatement criteria in every instance. Rather, they require highway agencies make every reasonable and feasible effort to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of Federal-aid highway funds for construction or reconstruction of a highway. (FHWA, 2022)

5. Construction-Related Hearing Conservation

The Occupational Safety and Health Administration (OSHA) hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposure over their entire working lifetimes. Standard 29 CFR, Part 1910 indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels. (OSHA, 2002)

6. Federal Interagency Committee on Noise

The 1990 Federal Interagency Committee on Noise (FICON) was formed to review federal policies that govern the assessment of airport noise impacts. FICON developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and L_{eq}.

B. State

1. Noise Requirements

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that addresses noise, typically in a separate Noise Element but in certain jurisdictions combined with other elements, which is to be addressed per guidelines adopted by the Governor's Office of Planning and Research. The purpose of addressing noise issues in an adopted General Plan is to "*limit the exposure of the community to excessive noise levels*." In addition, the CEQA requires that the potential noise impacts of a project be analyzed.

2. California Public Utilities Code

State Law related to airport land use planning is governed in part by CPUC Sections 21670–21676.5. CPUC provides requirements for the establishment of ALUC and airport land use compatibility plans pursuant to Section 21674.5 (Department of Transportation, Division of Aeronautics, Airport Land Use Planning Handbook). Section 21675(b) requires an ALUC to update its airport land use compatibility plan for a military airport like JFTB Los Alamitos so that it "shall be consistent" with the safety and noise standards prepared for that military airport.

3. California Assembly Bill (AB) 2496

AB 2496 Vehicles: Exhaust Systems requires a court to require a certificate of compliance for a violation of the noise limit requirements mentioned for mufflers or exhaust systems for specified vehicles. The bill requires the court to utilize notification procedures and if a certificate of compliance is not provided to the court within three months of the violation date, the bill requires the court to treat this failure as noncompliance and inform the Department of Motor Vehicles.

This bill would also require stations providing referee functions to provide for the testing of exhaust systems of motor vehicles and the issuance of certificates of compliance for vehicles that have received a citation for installing, operating, or engaging in the business of installing a whistle-tip onto a vehicle's exhaust system and for motorcycles that have received a citation for the violations mentioned above.

4. California Senate Bill (SB) 1079

SB 1079 Vehicles: authorizes local jurisdictions to use sound-activated enforcement devices to capture vehicle noise levels that exceed legal limits. Under California Vehicle Code, exhaust noise is limited to 95 dbA for vehicles and 80 dbA for motorcycles. However, vehicle owners can install new exhaust systems or make other vehicle modifications that change the level of sound produced by their vehicle. These illegal modifications are accessible and easily installed at any in-home garage, resulting in much louder noise disruptions than would be allowed by law.

5. Caltrans Technical Noise Supplement

The purpose of the Caltrans Technical Noise Supplement is to provide technical background information on transportation-related noise in general and highway traffic noise in particular. It is designed to elaborate on technical concepts and procedures referred to in the protocol. Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA when exposed to steady single-frequency (pure tone) signals in the midfrequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA.

6. Caltrans Transportation and Construction Vibration Guidance Manual

The Caltrans Transportation and Construction Vibration Guidance manual provides screening tools for assessing the potential for adverse vibration effects related to human perception and structural damage. General information on the potential effects of vibration on vibration-sensitive research and advanced technology facilities is also provided.

C. Local

1. City Noise Standards

The General Plan is a tool for managing noise by planning for and maintaining compatibility between sensitive land uses and noise sources. The City has identified two separate types of noise sources: (1) transportation, and (2) stationary. To control transportation related noise sources such as arterial roads, freeways, airports, and railroads, the City has established guidelines for acceptable community noise levels in the Public Facilities and Safety Element of the General Plan. Noise from stationary sources is regulated through specific standards in Chapter 17.20 of the Los Alamitos Municipal Code (LAMC) and Division 6 of the Orange County Municipal Code (Rossmoor).

The noise criteria identified in the City of Los Alamitos Public Facilities and Safety Element are guidelines to evaluate the land use compatibility of transportation-related noise. The compatibility criteria, shown on Table 4.11-2, *Land Use and Noise Compatibility Matrix*, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The General Plan identifies goals related to noise through its elements. These goals and policies and

discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency* Analysis, in EIR Subsection 4.10, *Land Use and Planning*.

Table 4.11-2 Land Use and Noise Compatibility Matrix

LAND USES	EXISTING NOISE LEVEL (dBA CNEL)						
Example Land Uses	**<**	**55**	**60**	**65**	**70**	**75**	**80>**
Amphitheater, concert hall, auditorium, meeting hall	B	B	C	C	D	D	D
Mobile home	A	A	B	C	C	D	D
Hospital, library, school, faith/religious uses	A	A	B	C	C	D	D
Hotel, motel, transient lodging	A	A	B	B	C	C	D
Single family, multifamily, faith/religious uses	A	A	B	B	C	D	D
Parks	A	A	A	B	C	D	D
Office building, research & development, professional office, city office building, and hotel	A	A	A	B	B	C	D
Amusement park, miniature golf, go-cart track, health club, equestrian center	A	A	A	B	B	D	D
Golf courses, nature centers, cemeteries, wildlife reserves, wildlife habitat	A	A	A	A	B	C	C
Commercial retail, bank, restaurant, movie theater	A	A	A	A	B	B	C
Automobile service station, auto dealer, manufacturing, warehousing, wholesale, utilities	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

Notes:
Community Noise Equivalent Level (CNEL). The energy-average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the levels from 7:00 PM to 10:00 PM and 10 dB added from 10:00 PM to 7:00 AM.

Compatibility Zones. The following zones indicate the degree to which listed land uses are compatible with noise levels shown in the table.

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 are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C. Normally Incompatible. New construction or development should normally be discouraged. If new construction or development does proceed, a detailed analysis or noise reduction requirements must be made and needed noise insulation features must be included in the design.

Zone D. Clearly Incompatible. New construction or development should generally not be undertaken.

Source: City of Los Alamitos General Plan Public Facilities and Safety Element, Table 4.

2. Airport Land Use Compatibility Plan

The Los Alamitos JFTB is located adjacent to, and northwest of the Project. The Project site is located within the Airport Environs Land Use Plan Airport Planning Area. Exhibit 3-B of the Project's Noise

Impact Analysis shows the Project site in relation to the airport's noise level contour boundaries, as provided by the AELUP for Joint Forces Training Base Los Alamitos.

Based on the AELUP noise level contours, shown on Exhibit 3-B of the Project's Noise Impact Analysis, the majority of the Project site sits within the 60 dBA CNEL but outside the 65 dBA CNEL noise level contour boundary of the JFTB Los Alamitos.

Zone 65 dBA CNEL and above are sufficient to warrant restrictions on residential uses and to require sound attenuation measures on other uses. All residential units are inconsistent in this area unless it can be shown that such units are sufficiently sound attenuated for present and projected noise exposures, which shall be the energy sum of all noise impacting the project, so as not to exceed an interior standard of 45 dB CNEL, with an accompanying dedication of an avigation easement for noise to the airport proprietor applicable to single family residences, multi-family residences and mobile homes. Furthermore, all residential units are to be sufficiently indoor oriented so as to preclude noise impingement on outdoor living areas.

Zone 60 dBA CNEL or greater, less than 65 dBA CNEL is sufficient to require sound attenuation as set forth in the California Noise Insulation Standards, Title 25, California Code of Regulations. Single noise events in this area create disturbances to many inhabitants. Even though ALUC would not find residential units incompatible in this area, the Commission strongly recommends that residential units be limited or excluded from this area unless sufficiently sound attenuated. The residential use interior sound attenuation requirement shall be a CNEL value not exceeding an interior level of 45 dB. In some instances, designated outdoor common or recreational areas within this zone may provide outdoor signage informing the public of the presence of operating aircraft.

Exhibit 3-C of the Project's Noise Impact Analysis shows the Project site in relation to the airport's noise level contour boundaries, as more recently published in 2020 by the US Army Public Health Center in the Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos (U.S. Army Public Health Center, 2020). The most recent 2020 noise level contours are based on 46,235 aircraft operations. As shown, a portion of the northwestern portion of the Project site is within the 60 dBA CNEL noise level contour boundary of the JFTB Los Alamitos. Table 4.11-3, the Orange County Airport Land Use Commission's *Limitations on Land Use due to Aircraft Noise*, provides a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. Residential land uses located outside the 60 dBA contour are considered normally consistent, residential land uses located within the 60 dBA contour are considered conditionally consistent and are required to ensure that the interior CNEL does not exceed 45 dBA CNEL. Residential land uses located within the 65 dBA contour are considered normally inconsistent.

Table 4.11-3 Limitations on Land Use due to Aircraft Noise

AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY
AIRPORT ENVIRONS LAND USE PLAN
LIMITATIONS ON LAND USE DUE TO NOISE
(Applicable to Aircraft Noise Sources)

LAND USE CATEGORY	COMMUNITY NOISE EQUIVALENT LEVEL dB						
	55	60	65	70	75	80	
Residential (all types): Single and Multi-Family Residences							
Community Facilities: Churches, Libraries, Schools, Preschools, Day-Care Centers, Hospitals, Nursing/Convalescent Homes, & Other noise sensitive uses							
Commercial: Retail, Office							
Industrial:							

NORMALLY CONSISTENT

Conventional construction methods used. No special noise reduction requirements.

CONDITIONALLY CONSISTENT

Must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. Residential use sound attenuation required to ensure that the interior CNEL does not exceed 45 dB. Commercial and industrial structures shall be sound attenuated to meet Noise Impact Zone "1" criteria (refer to Section 3.2.3).

NORMALLY INCONSISTENT

All residential units are inconsistent unless sound attenuated to ensure that the interior CNEL does not exceed 45 dB, and that all units are indoor oriented so as to preclude noise impingement on outdoor living areas.

4.11.4 METHODOLOGY

A. Noise Receiver Locations

To assess the potential for long-term operational and short-term construction noise impacts, sensitive receiver locations were identified as representative locations for analysis, shown on Figure 4.11-2, *Noise Receiver Locations*, and Figure 4.11-3, *Construction Activity and Receiver Locations*. Receiver locations are modeled points used to assess impacts. The measurements shown on Figure 4.11-2 are representative of receiver locations, because not all receiver locations are accessible (e.g., located on

private property, unable to physically access, etc.) Thus, the receiver locations were chosen to be acoustically representative or similar in nature.

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, four representative receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA. Other sensitive land uses in the Project study area that are located farther than those identified below will experience lower noise levels than those presented herein due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the Project boundary to each receiver location.

- R1: Location R1 represents existing noise sensitive Arbor Dog Park at 4665 Lampson Avenue, approximately 173 feet north of the Project site. Receiver R1 is placed at the Park's open space. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R2: Location R2 represents the existing noise sensitive residence at 12462 Lunar Drive, approximately 887 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receiver R2 is placed at the building façade. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.
- R3: Location R3 represents the existing noise sensitive residence at 4625 Ironwood Avenue, approximately 82 feet south of the Project site. Receiver R3 is placed at the private outdoor living areas (backyards) facing the Project site. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment.
- R4: Location R4 represents the existing noise sensitive residence at 12322 Provincetown Street, approximately 5,046 feet west of the Project site. Receiver R4 is placed at the private outdoor living areas (backyards) facing the Project site.

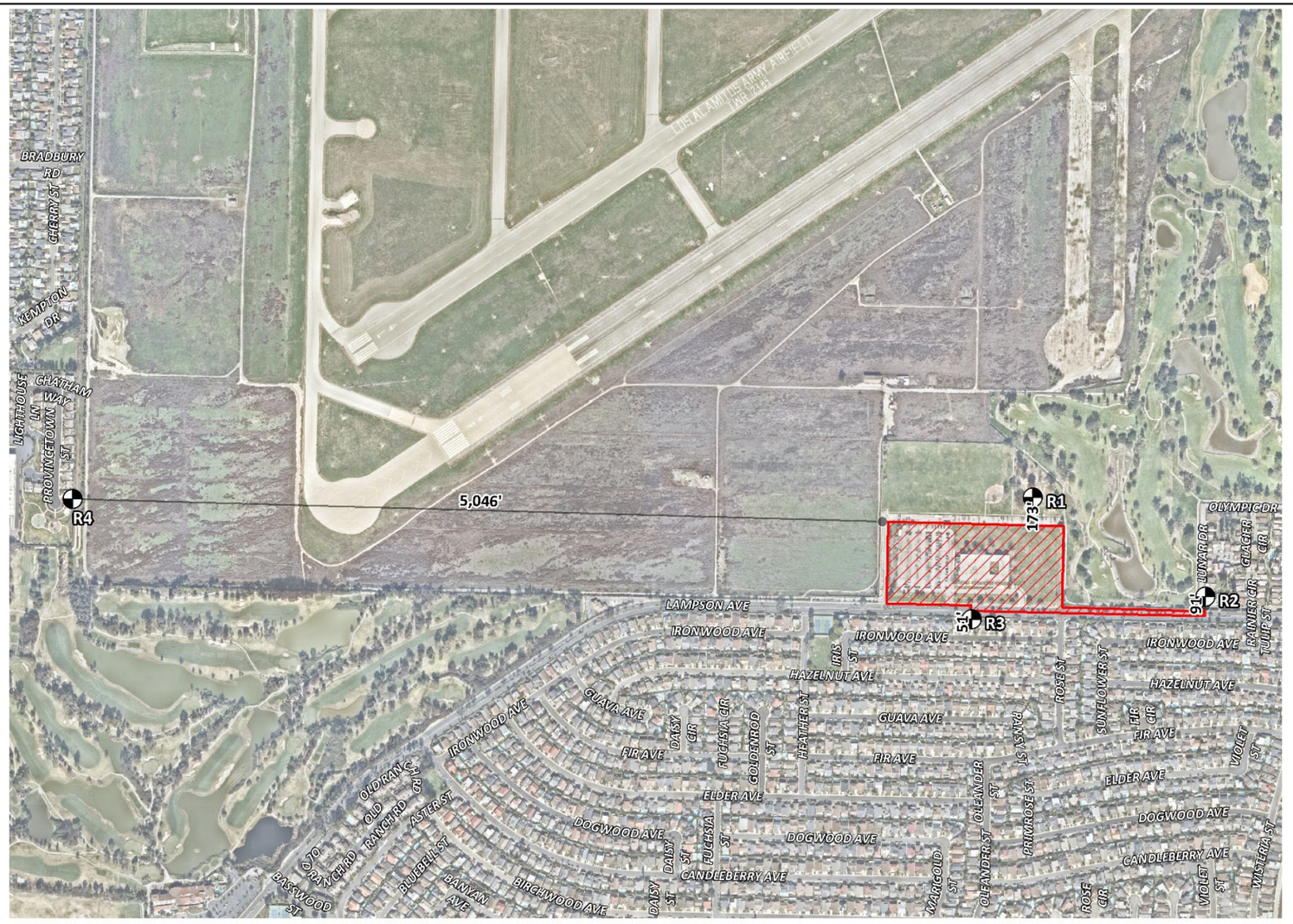


Source(s): Urban Crossroads (04-10-2024)

Figure 4.11-2

Not to Scale

Noise Receiver Locations – Operations



Source(s): Urban Crossroads (04-10-2024)

Figure 4.11-3

Not to Scale

Construction Activity and Receiver Locations

B. Construction Noise

This construction noise analysis was prepared using reference construction equipment noise levels from the FHWA published Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

The construction noise analysis evaluates Project construction-related noise levels at the closest nearby receiver locations in the Project area, as shown on Figure 4.11-3, *Construction Activity and Receiver Locations*. Using the reference construction equipment noise levels and the CadnaA (Computer Aided Noise Abatement) noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. To assess a reasonable worst-case construction scenario and account for the dynamic nature of construction activities, the Project construction noise analysis models the equipment combination with the highest reference level as a moving point within the construction area (Project site boundary).

C. Operational Noise

The operational noise analysis evaluates the potential daytime and nighttime activities at the Project site. The proposed residential development is expected to include typical noise sources associated with residential land uses in the Project study area such as roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities.

To estimate the Project's potential operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. To fully describe the exterior operational noise levels from the Project, Urban Crossroads developed a noise prediction model using the CadnaA computer program. Refer to subsection 10.3 of the Project's Noise Analysis (*Technical Appendix K* of this EIR) for a description of the CadnaA Noise Prediction Model parameters.

D. Transportation Noise

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the FHWA Traffic Noise Prediction Model- FHWA-RD-77-108. The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California, the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Subsection 6.1 from the Project's Noise Impact Analysis (*Technical Appendix K*) present the detailed model inputs for roadway parameters, average daily traffic volumes, vehicle mix, and time of day vehicle splits that were assigned to each of the roadway segments included in the transportation noise analysis.

E. Vibration

Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the FTA. There are no sources of vibration associated with the proposed residential uses.

F. Airport Noise

The analysis of exposure of excessive noise levels due to proximity to airport operations is evaluated by determining whether the Project places residents or workers within noise contours deemed incompatible for sensitive land uses. This analysis included a review of the City's General Plan, JFTB Los Alamitos AELUP, and the State of California, Division of Aeronautics' California Airport Land Use Planning Handbook.

4.11.5 Basis for Determining Significance

According to Section XIII of the CEQA Guidelines, the proposed Project would result in a significant impact to noise if the Project or any Project-related component would (OPR, 2022):

- *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*

- *Generation of excessive ground borne vibration or ground borne noise levels;*

- *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.*

While the City of Los Alamitos General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for purposes of evaluating noise impacts pursuant to CEQA. Below is a discussion of the significance criteria used to evaluate the project's potential noise impacts pursuant to CEQA.

A. Noise Level Increases

In relation to the first threshold, under CEQA, consideration must be given to the existing baseline ambient noise levels the location of noise-sensitive receivers, and the magnitude of the potential to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new

noise is the comparison of it to the existing environment to which one has adapted, i.e., the ambient noise environment.

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged.

The FICON guidance provides criteria to assess the impacts of substantial temporary or permanent increases in baseline ambient noise levels. The acceptability of a noise level increase is reduced when the baseline noise levels, *i.e.*, those noise levels that exist without the Project, already exceed certain exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or readily perceptible, 3 dBA or barely perceptible, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the FHWA and Caltrans.

B. Vibration

In relation to the second threshold, vibration-generating activities were evaluated using the thresholds of significance outlined in the Caltrans Transportation and Construction Vibration Guidance Manual. These guidelines identify the maximum acceptable continuous vibration building damage threshold of 0.3 peak particle velocity (PPV) (in/sec) for "older residential structures" which is used in this noise study to assess potential impacts due to Project construction vibration levels on surrounding residential uses. The nearest residential structures are located south of the Project site across Lampson Avenue.

C. Aircraft/Airport

In relation to the third threshold, the City provides policies regarding compatibility with JFTB Los Alamitos in Policy 4.1, Land use compatibility. Policy 4.1, Land Use compatibility states "Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City's Noise Ordinance, the Land Use and Noise Compatibility Matrix, the State Interior and Exterior Noise Standards and the AELUP for the JFTB."

The noise compatibility criteria identified in the AELUP are guidelines to evaluate the land use compatibility of aircraft-related noise. The compatibility criteria, shown on Exhibit 3-D of the Project's Noise Impact Analysis, indicates residential land uses exposed to noise levels less than 65 dBA CNEL are "normally consistent" and no special noise reduction requirements are required. Residential land uses exposed to noise levels less than 70 dBA CNEL are considered "conditionally consistent" with the AELUP and would be required to ensure that the interior CNEL does not exceed 45 dBA CNEL. For noise levels greater than 70 dBA CNEL, the AELEP considers residential land use inconsistent, unless interior noise levels are reduced to 45 dBA CNEL and that all units are interior oriented to preclude impacts on exterior use areas. The ALEUP does not require any additional considerations for exterior locations exposed to noise levels below 70 dBA CNEL.

The AELUP compatibility criteria are generally consistent with the City of Los Alamitos General Plan Policy 4.1, where the residential land uses of the Project are considered "clearly compatible" with

unmitigated exterior noise levels of less than 60 dBA CNEL and "normally compatible" with unmitigated exterior noise levels approaching 70 dBA CNEL,

> *new construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice. For normally incompatible [exterior noise levels, exceeding 70 dBA CNEL], new construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements are made and needed noise insulation features must be included in the design.*

Therefore, for purposes of this analysis, exposure of exterior use areas to noise levels in excess of 70 dBA CNEL would be considered significant, and exposure of residential land uses to noise levels in excess of 65 dBA CNEL would be considered significant unless noise levels in interior habitable rooms are reduced to 45 dBA CNEL.

D. Summary of Significance Criteria

Noise impacts shall be considered significant if any of the following occur as a result of the proposed development. Table 4.11-4, *Summary of Noise Significance Criteria* shows the significance criteria summary matrix that includes the allowable criteria used to identify potentially significant incremental noise level increases.

Table 4.11-4 Summary of Noise Significance Criteria

Analysis	Condition(s)	Significance Criteria	
		Daytime	Nighttime
On-Site Traffic[1]	Exterior Noise Level Criteria[1]	Refer to Table 4.11-2	
	Interior Noise Level Standard[1]	45 dBA CNEL	
On-Site Aircraft[2]	Exterior Noise Level Criteria[1,2]	Refer to Table 4.11-2 and Table 4.11-3	
	Interior Noise Level Standard[2]	45 dBA CNEL	
Off-Site Traffic[3]	If ambient is < 60 dBA CNEL[3]	≥ 5 dBA CNEL Project increase	
	If ambient is 60-65 dBA CNEL[3]	≥ 3 dBA CNEL Project increase	
	If ambient is >65 dBA CNEL[3]	≥ 1.5dBA CNEL Project increase	
Operational	Exterior Noise Level Standards[4]	55 dBA L_{eq}	50 dBA L_{eq}
	If ambient is < 60 dBA Leq[3]	≥ 5 dBA L_{eq} Project increase	
	If ambient is 60-65 dBA Leq[3]	≥ 3 dBA L_{eq} Project increase	
	If ambient is > 65 dBA Leq[3]	≥ 1.5dBA L_{eq} Project increase	
Construction	Noise Level Threshold[5]	80 dBA L_{eq}	
	Vibration Level Threshold[6]	0.30 in/sec PPV	

[1]City of Los Alamitos General Plan Public Facilities and Safety Element
[2]Orange County ALUC, Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos, August 2017

[3]FICON, 1992
[4]LAMC, Section 17.20.050
[5]Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual
[6]Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
(Urban Crossroads, 2024)

4.11.6 Project Design Features

The Project includes the following PDFs that will result in a reduction of the Project's impacts.

PDF N-1 Prior to the issuance of occupancy permits, the Project will construct a 7-foot-high noise barrier along Lampson Avenue. The noise control barrier will be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. Since the pad elevations varies, the top of each wall and/or berm combination will be 7' above each applicable pad elevation. When the roadway or terrain is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the roadway. The barrier shall be built with a material surface weight of at least 4 pounds per square foot, with no decorative cutouts, perforations, or line-of-sight openings between residences and Lampson Avenue. The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of at least four pounds per square foot;
- Material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA;
- Earthen berm; or,
- Any combination of these construction materials

PDF N-2 To comply with the State of California and City of Los Alamitos 45 A-weighted Decibels (dBA) Community Noise Equivalent Level (CNEL) interior noise standards for residential land use, the Project will provide the following or equivalent noise abatement measures on building plans:

- Windows & Glass Doors: At a minimum the Project will provide windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 27. Additionally, all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos will be provided windows and glass doors that are well-fitted, well-weather-stripped assemblies with minimum sound transmission class (STC) ratings of 29.

- Doors (Non-Glass): All exterior doors shall be well weather-stripped and have Well-sealed perimeter gaps around the doors are essential to achieve the minimum STC rating.
- Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided in compliance with applicable State and local Building Codes (e.g. California Building Code, Chapter 3, R338.3).

4.11.7 Impact Analysis

Threshold a:	***Would the Project generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

The analysis presented on the following pages summarizes the Project's potential construction noise levels and operational noise levels, including off-site noise that would be generated by Project-related traffic.

A. Construction Noise

Construction activities on the Project site would proceed in six stages: 1) demolition, 2) site preparation, 3) grading, 4) building construction, 5) paving, and 6) application of architectural coating. Noise generated by the Project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined could reach high noise levels and would cause a short-term increase in ambient noise levels. The Project's potential construction noise levels at nearby receiver locations are summarized in Table 4.11-5, *Construction Equipment Noise Level Summary*.

Table 4.11-5 Construction Equipment Noise Level Summary

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})						
	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	59.1	58.0	58.6	52.0	52.5	50.8	58.6
R2	54.8	53.7	54.3	47.7	48.2	46.5	54.3
R3	63.6	62.5	63.1	56.5	57.0	55.3	63.1
R4	35.1	34.0	34.6	28.0	28.5	26.8	34.6

[1] The nearest construction noise source and receiver locations are shown on Figure 4.11-3 (*Technical Appendix K* of this EIR). All receivers are shown on Figure 4.11-2.
[2]Construction noise level calculations based on distance from the Project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1 of the Project's Noise Impact Analysis (*Technical Appendix K* of this EIR).

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used to assess the daytime construction noise level impacts based on the FTA's *Transit Noise and Vibration Impact Assessment Manual*. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. This threshold takes into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The construction noise analysis shows that noise impacts at the nearest receiver locations will be less than the daytime 80 dBA L_{eq}[1] significance threshold during Project construction activities. Because the highest construction related noise level is 63.31 dBA L_{eq} at the nearest sensitive receiver, the noise impacts due to Project construction noise are considered less than significant and no mitigation is required.

B. Operational Noise – Stationary Sources

On-site Project-only operational noise sources are expected to include: roof-top and ground-mounted air conditioning units, parking lot vehicle movements, outdoor activity, and trash enclosure activities. The daytime and nighttime Project operational noise levels at nearby sensitive receptor locations are summarized on Table 4.11-6, *Project Daytime and Nighttime Operational Noise Levels*.

Table 4.11-6 Project Daytime and Nighttime Operational Noise Levels

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{max})			
	R1	R2	R3	R4
Daytime				
Air Conditioning Units	40.8	30.8	42.5	16.3
Parking Lot Movements	38.5	31.1	41.7	11.7
Outdoor Activity	40.7	32.7	45.7	13.0
Trash Enclosure Activity	25.6	18.1	28.8	7.1
Total (all Noise Sources)[2]	**44.9**	**36.4**	**48.4**	**18.9**
55 dBA L_{eq} Threshold Exceeded?	**No**	**No**	**No**	**No**

[1] Construction activities are planned to typically occur between 7:00 a.m. and 6:00 p.m. and would comply with the City of Los Alamitos limitation on allowable hours of construction per LAMC Section 17.20.020.

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA L_{max})			
	R1	R2	R3	R4
Nighttime				
Air Conditioning Units	38.1	28.1	39.8	13.6
Parking Lot Movements	37.6	30.2	40.8	10.8
Outdoor Activity	0.0	0.0	0.0	0.0
Trash Enclosure Activity	24.6	17.1	27.8	6.2
Total (all Noise Sources) [2]	**40.9**	**32.3**	**43.3**	**15.6**
50 dBA L_{eq} Threshold Exceeded?	**No**	**No**	**No**	**No**

[1]See Exhibit 10-A of the Project's Noise Impact Analysis for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

2 Because decibels are based on a logarithmic scale, total noise source is calculated by quantifying the sound pressure of individual noise sources. The doubling of sound pressure results in a 3 dB increase, while the halving of sound pressure results in a 3 dB decrease. For example, two noise sources that emit a sound level of 40 dB(A) when combined will result in a noise level of 43 dB(A).

(Urban Crossroads, 2024)

As shown in Table 4.11-6, operational noise levels associated with the Project will be less than the City of Los Alamitos's 55 dBA L_{eq} daytime and 50 dBA L_{eq} nighttime exterior noise level standards at the nearest receiver locations. Therefore, operational noise impacts would be less than significant at the nearest noise-sensitive receiver locations and no mitigation is required.

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearest receiver locations potentially impacted by Project operational noise sources. As indicated on Tables 10-5 and 10-6 of the Project's Noise Report, the Project would generate an unmitigated daytime and nighttime operational noise level increases ranging from less than 0.0 to 1.2 dBA L_{eq} at the nearest receiver locations. Project-related operational noise level increases would be less than significant and no mitigation is required.

C. Operational – Off-site Transportation

To assess the off-site traffic CNEL noise level impacts associated with development of the proposed Project, noise level contours were developed based on 4665 Lampson Avenue Traffic Analysis. Noise level contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise level contours were developed for six traffic scenarios based on the Traffic Analysis (*Technical Appendix N1*): Existing, Existing Plus Project, Opening Year Without and With Project, and General Plan Buildout Without and With Project conditions.[2]

The noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing

[2] Tables 8-1 through 8-6 of the Project's Noise Impact Analysis (*Technical Appendix K*) present a summary of the exterior dBA CNEL traffic noise levels. Appendix 8.1 of the Project's Noise Impact Analysis (*Technical Appendix K*) includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.

noise barriers or topography that may attenuate ambient noise levels, which represents worst case conditions.

As shown on Table 4.11-7, *Existing Off-Site Project-Related Traffic Noise Impacts*, the Existing 2023 with Project will generate a noise level increase of up to 0.4 dBA CNEL on the study area roadway segments. Based on the significance criteria for off-site traffic noise impacts, the Project-related noise level increases are considered less than significant under Existing plus Project conditions at the land uses adjacent to roadways conveying Project traffic.

Table 4.11-8, *Opening Year Off-Site Project-Related Traffic Noise Impacts*, shows that the Opening Year Project off-site traffic noise level increases of up to 0.4 dBA CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated Opening Year Project-related traffic noise levels.

Table 4.11-9, *General Plan Buildout Off-Site Project-Related Traffic Noise Impacts*, shows that the General Plan Buildout Project off-site traffic noise level with the Project increases of up to 0.3 dBA CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would experience less than significant noise level increases due to unmitigated General Plan Buildout Project-related traffic noise levels with the Project.

Based on the significance criteria for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience substantial noise level increases due to Project-related traffic noise level increases and off-site traffic related noise impacts would less than significant. No mitigation is required.

Table 4.11-7 Existing Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o[4] Los Alamitos Blvd.	Sensitive	71.6	71.8	0.2	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	71.6	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	70.7	0.3	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	70.1	0.3	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	70.2	0.4	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	70.1	0.3	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	70.0	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	70.2	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	70.6	0.3	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	69.4	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	69.5	0.4	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	69.0	0.1	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	70.8	0.1	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	70.7	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?
[4] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

Table 4.11-8 Opening Year Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o[4] Los Alamitos Blvd.	Sensitive	72.3	72.4	0.1	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.0	72.2	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.0	71.3	0.3	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.5	70.8	0.3	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	70.6	70.8	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.5	70.8	0.3	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.5	70.7	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.7	70.9	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.1	71.3	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.7	69.8	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.4	69.8	0.4	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	69.5	69.6	0.1	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.2	71.2	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.1	71.1	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?
[4] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

Table 4.11-9 General Plan Buildout Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]			Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				No Project	With Project	Project Addition		Limit	Exceeded?
1	Lampson Ave.	e/o[4] Los Alamitos Blvd.	Sensitive	72.7	72.8	0.1	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	72.2	72.4	0.2	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	71.2	71.5	0.3	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	70.7	71.0	0.3	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	70.8	71.0	0.2	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	70.7	71.0	0.3	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	70.7	70.9	0.2	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.9	71.1	0.2	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	71.3	71.5	0.2	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	70.2	70.3	0.1	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	70.1	70.2	0.1	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	70.0	70.0	0.0	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	71.6	71.6	0.0	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	71.5	71.5	0.0	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?
[4] Refers to the direction of the roadway segment (i.e. e/o = east of, n/o = north of, s/o = south of).

Threshold b: ***Would the Project generate excessive groundborne vibration or groundborne noise levels?***

A. Construction Analysis

Construction activities on the Project site would utilize equipment that has the potential to generate vibration, such as small bulldozers, large bulldozers, jackhammers, and loaded trucks. Vibration levels at sensitive receptors near the Project site during Project construction are summarized on Table 4.11-10, *Project Construction Vibration Levels*. At distances ranging from 51 to 5,046 feet from the Project construction activities, construction vibration velocity levels are estimated to range from less than 0.00 to 0.03 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec), the typical Project construction vibration levels would be below the building damage thresholds at all receiver locations. Therefore, the Project-related vibration impacts are considered less than significant during the construction activities at the Project site and no mitigation is required.

Table 4.11-10Project Construction Vibration Levels

Receiver Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds Exceeded
		Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Highest Vibration level	
R1	173’	0.00	0.00	0.00	0.00	0.00	No
R2	91’	0.00	0.01	0.01	0.01	0.01	No
R3	51’	0.00	0.01	0.03	0.03	0.03	No
R4	5,046’	0.00	0.00	0.00	0.00	0.00	No

[1]Construction receiver locations are shown on Figure 4.11-3.
[2]Distance from receiver location to Project construction boundary.
[3]Based on the Vibration Source Levels of Construction Equipment
(Urban Crossroads, 2024)

B. Operational Analysis

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration at or beyond the Project site. The Project would not result in the exposure of persons to excessive groundborne vibration or noise levels during long-term operation. Impacts would be less than significant and no mitigation is required.

Threshold c:	***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?***

The Project site is located within the AELUP for JFTB Los Alamitos. An on-site exterior aircraft noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent JFTB Los Alamitos aircraft noise sources in the Project study area, and to identify environmental impacts from the proposed Project and potential noise abatement measures for the proposed Project that would achieve acceptable Project noise levels, if required.

The JFTB Los Alamitos is located adjacent to, and northwest of the Project. Figure 4.11-4, *APHC 2020 Airport Noise Level Contour Boundaries* shows the Project site in relation to the airport's projected noise level contour boundaries, as provided by the 2020 Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos. As shown on Figure 4.11-5, *On-Site Aircraft Noise Level Contours*, the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours. Residential land uses exposed to noise levels less than 60 dBA CNEL are "normally consistent." Residential uses are considered "conditionally consistent" with AELUP Noise limitations, so long as sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations is implemented to ensure that the interior CNEL does not exceed 45 dB. (ALUC, 2017).

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction would provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings.

The Project will provide mechanical ventilation (e.g. air conditioning) in all units. With implementation of PDF-N-2, which includes the use of windows with a STC rating of 29 on all second floor facades adjacent to Lampson Avenue and JFTB Los Alamitos, the Project would be designed to achieve a 25 dBA reduction and meet the 45 dBA CNEL interior noise standard. Accordingly, the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations, and impacts would be less than significant. No mitigation is required.

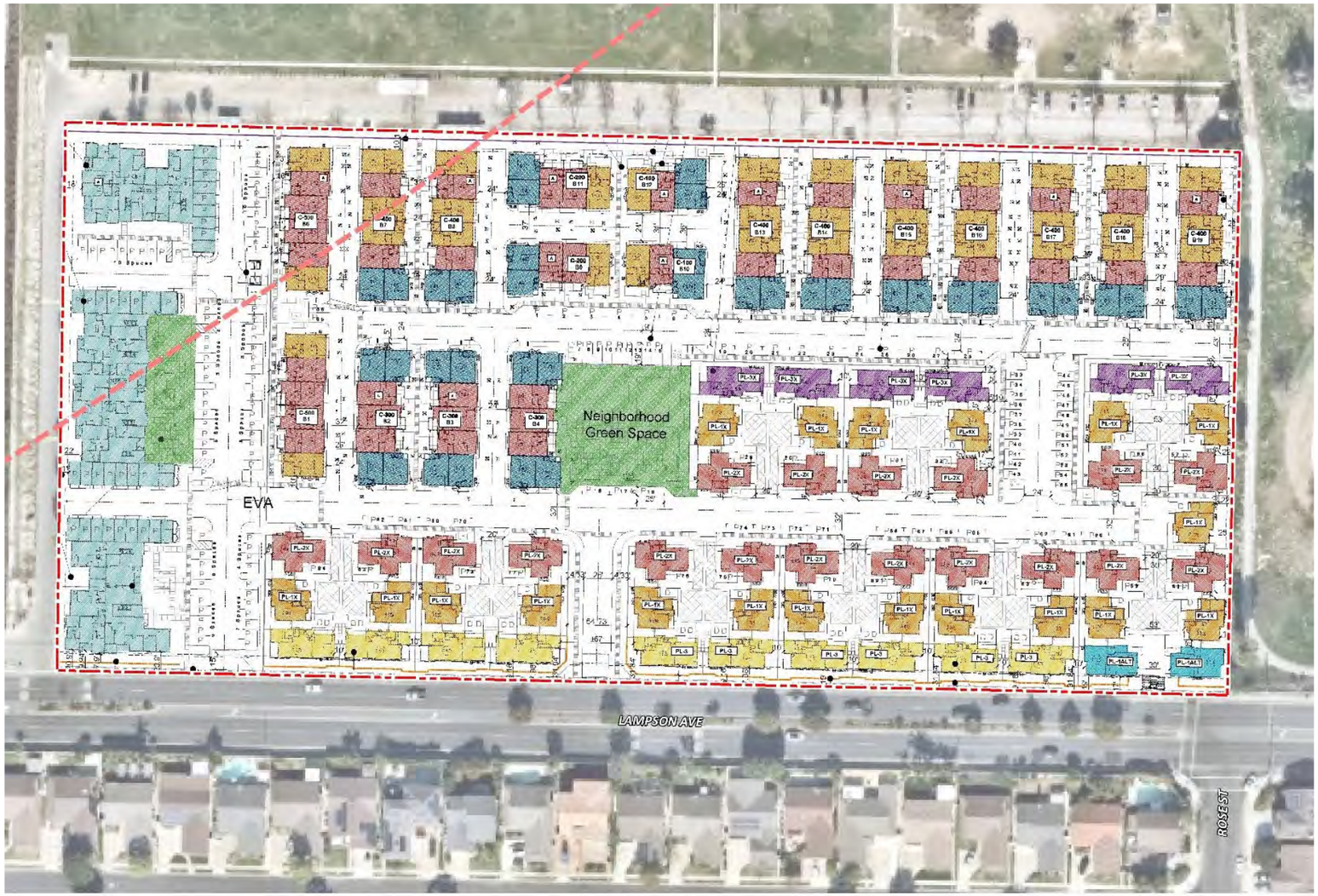


Source(s): Urban Crossroads (05-26-2023)

Figure 4.11-4

Not to Scale

APHC 2020 Airport Noise Level Contour Boundaries



Source(s): Urban Crossroads (05-26-2023)

Figure 4.11-5

Not to Scale

On-Site Aircraft Noise Level Contours

4.11.8 Cumulative Impact Analysis

A. Construction Noise

Construction activities associated with the proposed Project, especially activities involving heavy equipment, could create intermittent periods of noise when construction equipment is in operation and could cause a short-term increase in ambient noise levels. The list of cumulative projects that have the potential to collectively increase noise is provided in Table 4.0-1 and the locations are shown in Figure 4.0-1 in Section 4.0, *Environmental Analysis*, of this EIR. As shown, there are no on-going or imminent construction projects in the immediate vicinity of the proposed Project site with construction periods that are expected to overlap with the Project. Accordingly, there is no potential for Project-related construction activities to contribute to cumulatively-considerable impacts to sensitive receptor locations.

B. Operational Noise

The analysis presented under Threshold a addresses the Project's contribution of noise to existing cumulative noise sources (i.e., ambient noise) in the Project area. As described above, the Project would not result in an increase in the cumulative noise levels at sensitive receiver locations.

Table 4.11-11, *Cumulative Project Traffic Noise Increases*, shows that the Project's potential off-site contribution to cumulative traffic noise levels ranges from 0.7 to 1.0 dBA CNEL. Based on the significance criteria for off-site traffic noise presented for off-site traffic noise impacts, land uses adjacent to the study area roadway segments would not experience cumulatively considerable noise level increases due to Project-related traffic noise level increases and cumulative impacts would be less than significant.

C. Groundborne Vibration and Noise

During construction, the Project's peak vibration impacts would occur during the grading phase when large pieces of equipment, like bulldozers, are operating on-site. (During the non-grading phases of Project construction, when smaller pieces of equipment are used on-site, the Project's vibration would be minimal.) Vibration effects diminish rapidly from the source; therefore, the only sources of cumulative vibration in the vicinity of the Project site could occur on properties abutting these sites. As described above, there are no known active or pending construction projects abutting the Project site that would overlap with the Project's proposed construction schedule. Accordingly, there is no potential for the Project to contribute to the exposure of persons to substantial temporary groundborne vibration or noise.

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration beyond the Project site. Therefore, Project vibration would not combine with vibration sources from other related projects. The Project would not cumulatively-contribute to the exposure of persons to excessive groundborne vibration or noise levels during long-term operation.

Table 4.11-11 Cumulative Project Traffic Noise Increases

ID	Road	Segment	Receiving Land Use[1]	CNEL at Receiving Land Use (dBA)[2]					Noise-Sensitive Land Use?	Incremental Noise Level Increase Threshold[3]	
				Existing	Existing With Project	GPBO 2045 With Project	Cumulative Increase	Project Contribution		Limit	Exceeded?
1	Lampson Ave.	e/o Los Alamitos Blvd.	Sensitive	71.6	71.8	72.8	1.2	1.0	Yes	1.5	No
2	Lampson Ave.	e/o Old Ranch Plaza	Sensitive	71.4	71.6	72.4	1.0	0.8	Yes	1.5	No
3	Lampson Ave.	e/o Basswood St.	Sensitive	70.4	70.7	71.5	1.1	0.8	Yes	1.5	No
4	Lampson Ave.	e/o Candleberry St.	Sensitive	69.8	70.1	71.0	1.2	0.9	Yes	1.5	No
5	Lampson Ave.	e/o Heather St.	Sensitive	69.8	70.2	71.0	1.2	0.8	Yes	1.5	No
6	Lampson Ave.	e/o Driveway 1	Sensitive	69.8	70.1	71.0	1.2	0.9	Yes	1.5	No
7	Lampson Ave.	e/o Driveway 2	Sensitive	69.8	70.0	70.9	1.1	0.9	Yes	1.5	No
8	Lampson Ave.	e/o Rose St.	Sensitive	70.0	70.2	71.1	1.1	0.9	Yes	1.5	No
9	Lampson Ave.	e/o Tulip St.	Sensitive	70.3	70.6	71.5	1.2	0.9	Yes	1.5	No
10	Lampson Ave.	e/o Valley View St.	Sensitive	69.3	69.4	70.3	1.0	0.9	Yes	1.5	No
11	Los Alamitos Blvd.	n/o Lampson Ave.	Sensitive	69.1	69.5	70.2	1.1	0.7	Yes	1.5	No
12	Los Alamitos Blvd.	s/o Lampson Ave.	Non-Sensitive	68.9	69.0	70.0	1.1	1.0	No	n/a	No
13	Valley View St.	n/o Lampson Ave.	Sensitive	70.7	70.8	71.6	0.9	0.8	Yes	1.5	No
14	Valley View St.	s/o Lampson Ave.	Sensitive	70.7	70.7	71.5	0.8	0.8	Yes	1.5	No

[1] Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.
[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.
[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4-1)?

D. Airport Noise

There are no conditions associated with implementation of the Project that would contribute to airport noise or exposure of additional people to unacceptable levels of airport noise. Figure 4.11-4, *APHC 2020 Airport Noise Level Contour Boundaries* shows the Project site in relation to the airport's projected noise level contour boundaries, as provided by the 2020 Noise Assessment for Los Alamitos Airfield, Joint Forces Training Base Los Alamitos. As shown on Figure 4.11-5, *On-Site Aircraft Noise Level Contours* , the northwestern portion of the Project site would locate residential uses between the 60 and 65 dBA CNEL noise level contours. As discussed in Threshold c based on the Project's design, the Project would not expose people residing or working in the Project area to excessive noise levels from airport or aircraft operations, and impacts would be less than significant. The Project would not, when combined with related projects, affect airport-related military operations and related noise impacts. Therefore, the Project would not cumulatively-contribute to the exposure of persons residing or working in the Project area to excessive airport-related noise levels. All other development projects within the AELUP for JFTB Los Alamitos would be subject to the compatibility criteria and would be required to comply with statutory and regulatory noise requirements.

4.11.9 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would not exceed significance thresholds for construction noise levels, operational noise levels, and off-site traffic noise levels. As such, the Project would not generate substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts would be less than significant.

Threshold b: Less-than-Significant Impact. The Project's construction and operational activities would not exceed vibration thresholds. As such, the Project would not generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.

Threshold c: Less-than-Significant Impact. The Project site is located within the AELUP for JFTB Los Alamitos. Using standard construction requirements and complying with statutory and regulatory noise requirements for all residential units exposed to aircraft noise from JFTB Los Alamitos, the Project would not expose people residing or working in the project area to excessive noise levels from airport or aircraft operations. Impacts would be less than significant.

4.11.10 Mitigation

No mitigation is required.

4.11.11 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.12 POPULATION AND HOUSING

The following analysis discloses existing population and housing data for the City of Los Alamitos (City) and assesses the potential for the Project to result in direct or indirect impacts on population and housing. The analysis in this Subsection is based, in part, on information contained within the City's General Plan, and population and housing projections from the California Department of Finance (DOF) and Southern California Association of Governments (SCAG). All references used in this Subsection are listed in this EIR Section 8.0, *References*.

4.12.1 EXISTING CONDITIONS

The Project site is currently developed with a vacant two-story, 88,000 sf commercial office building and parking lot. Therefore, the Project site does not currently contain any population.

A. Southern California Association of Governments (SCAG)

SCAG's Connect SoCal, adopted in September 2020, is a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) plan developed pursuant to SB 375 to assist in the State's reduction of greenhouse gas emissions by considering land use allocation in its regional transportation plan. Connect SoCal thus builds upon and expands land use and transportation strategies to increase mobility options and achieve more sustainable growth patterns. Table 4.12-1, *SCAG Population, Households and Employment Projections*, summarizes SCAG's Connect SoCal growth projections to the year 2045 for both the City and Orange County.

Table 4.12-1 SCAG Population, Households and Employment Projections

Jurisdiction	2016	2045	Increase	Percent Change
Population				
City of Los Alamitos	11,600	12,300	700	6.03%
Orange County	3,180,000	3,535,000	355,000	11.16%
Households				
City of Los Alamitos	4,100	4,400	300	7.32%
Orange County	1,025,000	1,154,000	129,000	12.59%
Employment				
City of Los Alamitos	14,800	16,000	1,200	8.11%
Orange County	1,710,000	1,980,000	270,000	15.79%

Source: (SCAG, 2020b)

1. Jobs-Housing Ratio

The jobs-housing ratio is a general measure of the number of jobs as compared to housing in a defined geographic area, without regard to economic constraints or individual preferences. The jobs-housing ratio as well as the type of jobs versus the price of housing, has implications for, among other things, mobility, air quality, and the distribution of tax revenues. A project's effect on the jobs-housing ratio is one indicator of how it will affect growth and quality of life in the project area. SCAG applies the jobs-housing ratio at the regional and subregional levels to analyze the fit between jobs, housing, and

infrastructure. SCAG's April 2001 report titled, The New Economy and Jobs/Housing Balance in Southern California (SCAG-D), states that:

> *. . a balance between jobs and housing in a metropolitan region can be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., community or subregion). Alternatively, a jobs-to-housing balance can be defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply.*

The concept of jobs-housing balance has been widely discussed by SCAG and the South Coast AQMD over the past decade as a means of achieving regional air quality improvement goals. The basic concept is directed at minimizing commute distances, reducing infrastructure needs and costs, mitigating traffic congestion, conserving energy, and improving air quality. SCAG has incorporated jobs-housing balance into its growth forecast, transportation, and air quality policies. The term jobs-housing balance is the concept that if an area is balanced, it includes the correct number (or balance) of housing and employment opportunities so that the majority of the people living within a given subregion can also work in that same subregion. Job-rich subregions have ratios greater than the regional average, and housing-rich subregions have ratios lower than the regional average. An appropriate jobs-housing ratio for any given geographic area is area specific, in that each locale presents differing demographic characteristics. Jobs-housing ratios are also dynamic and fluctuate over time. Generally, a ratio of less than 1 to 1 indicates a jobs-poor area, and a ratio of one or more than 1 to 1 indicates a jobs-rich area (SCAG, 2001, p. 15).

As shown in Table 4.12-2, *Jobs-Housing Ratio*, the City's jobs-housing ratio of 3.61 is above the recommended target of 1.0 and is anticipated to increase by 0.83 percent between 2016 and 2045. The jobs-housing ratio in the City indicates that the City is jobs-rich rather than housing-rich. In other words, there are disproportionately more jobs in the City of Los Alamitos than there are housing units. Orange County overall is also above the recommended jobs-housing ratio target of 1.0 and is anticipated to increase by 2.4 percent by the year 2045.

Table 4.12-2 Jobs-Housing Ratio

Jurisdiction	2016	2045	Increase/Decrease	Percent Change
City of Los Alamitos	3.61	3.64	0.03	0.83%
Orange County	1.67	1.71	0.04	2.40%

Based on values in Table 4.12-1. Calculated by Employment/Households

B. City of Los Alamitos

In 2022, the DOF estimated the population in the City of Los Alamitos to be 11,873 individuals in 11,625 households and 248 group quarters[1]. The City's housing demographic consists of 2,072 single-family detached residences, 367 single-family attached residences, 800 2 to 4 family residences, 1,083

[1] A group quarters is a place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents.

5 plus family residences, and 108 mobile residences. The City has a total of 4,429 dwelling units and a vacancy rate of 2.5%. (DOF, 2022)

As shown in Table 4.12-3, *City of Los Alamitos General Plan Population, Households, and Employment Projections vs. SCAG*, the City's Updated General Plan projected buildout for the year 2035 exceeded the SCAG's 2045 population projections by 1.33% and household projections by 12.64% due to differences in data sources.

Table 4.12-3 City of Los Alamitos General Plan Population, Households, and Employment Projections vs. SCAG

	City of Los Alamitos (2035)	SCAG 2045	Difference
Population	14,486[1]	12,300	1,397
Households	5,541[2]	4,400	372
Employment	18,022	16,000	2,791
Job-Housing Ratio	3.25	3.64	0.14

[1]Assuming an average household size of 2.63, consistent with the City's adopted 2021-2029 Housing Element and the Project's VMT report (*Technical Appendix N2*)
[2]Assuming a total of 769 units from the 2021-2029 Housing Element based on SCAG 6th Cycle Final RHNA Allocation Plan.
Source: (City of Los Alamitos, 2014a, Table 1-2); (SCAG, 2020b); (City of Los Alamitos, 2023b)

2. Regional Housing Needs Assessment

SCAG is responsible for allocating housing needs to each jurisdiction in its region, including Los Alamitos. A local jurisdiction's "fair share" of regional housing need (also known as the Regional Housing Needs Allocation [RHNA]) is the number of additional housing units needed to accommodate the expected growth in the number of households and to replace expected demolitions and conversion of housing units to non-residential uses.

The allocation is divided into four income categories: very-low, low, moderate and above-moderate income. Cities must also plan for the growth needs in the extremely low-income category, which is assumed to be a subset equal to 50 percent of the very low income allocation. The RHNA allocation is not a requirement for jurisdictions to construct these units; it is only a requirement to create policies and programs to encourage the construction of units and to identify adequate sites to accommodate the jurisdiction's "fair share."

In August of 2019, the State Department of Housing and Community Development (HCD) issued its final Regional Housing Need Determination to SCAG, stating that the minimum regional housing need for the six-county region (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) is 1,344,740 new housing units. HCD then directed SCAG to develop a methodology for allocating all 1.34 million units throughout the region, based on statutory guidelines for housing needs and development. As part of SCAG's RHNA allocation process, many cities in Orange County, including the City of Los Alamitos, filed an appeal to SCAG regarding its allocation. However, the RHNA Subcommittee's recommendation for an equitable housing solution that was unanimously supported

by SCAG's Community, Economic and Human Development Committee was overturned through a last-minute decision by its Regional Council to redistribute significantly more housing into Orange County and Los Angeles County. This resulted in Los Alamitos's draft RHNA allocation increasing from 61 units in the 5th Cycle to 769 units in 6th Cycle. As shown in Table 4.12-4, *City of Los Alamitos Regional Housing Needs Allocation* , the City's RHNA allocation is 769 housing units based on SCAG 6th Cycle Final RHNA Allocation Plan.

Table 4.12-4 City of Los Alamitos Regional Housing Needs Allocation

Income Group	Total Housing Units Allocated	Percentage of Units
Extremely Low	97	12.6%
Very Low	97	12.6%
Low	119	15.5%
Moderate	145	18.9%
Above Moderate	311	40.4%
Total	**769**	**100%**

[1]Although not provided in the RHNA, State law requires cities to plan for units to accommodate extremely low income, which can be estimated at 50% of very-low income, or 97 units.
Source: Based on SCAG 6th Cycle Final RHNA Allocation Plan, adopted March 2021

4.12.2 Regulatory Framework

A. Federal

1. Fair Housing Act

According to the U.S. Department of Housing and Urban Development (HUD), the federal Fair Housing Act protects people from discrimination when they are renting or buying a home, getting a mortgage, seeking housing assistance, or engaging in other housing-related activities. Additional protections apply to federally assisted housing. (HUD, n.d.)

2. U.S. Census Bureau

The U.S. Census Bureau is the leading source of statistical information about the nation's people. Population statistics come from decennial censuses, which count the entire U.S. population every ten years, along with several other surveys. The American Community Survey (ACS) is an ongoing annual survey intended to help communities decide where to target services and resources. Demographic surveys measure income, poverty, education, health insurance coverage, housing quality, crime victimization, computer usage, and many other subjects. Economic surveys are conducted monthly, quarterly, and yearly, and cover selected sectors of the nation's economy. (USCB, 2022)

B. State and Regional

1. State Housing Law

The State law regulating residential occupancies is entitled the "State Housing Law" and is found in the California Health and Safety Code (HSC), Division 13, Part 1.5, Sections 17910 to 17998.3. Regulations implementing the State Housing Law mandate statewide residential building standards for

new construction, which are found in the California Code of Regulations, Title 24, also referred to as the California Green Building Standards Code (CalGreen). (CA Legislative Info, n.d.)

2. Housing Elements

California planning and zoning law requires each city and county to adopt a general plan for future growth (Government Code Sections 65100 to 65763). 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 HCD estimates the relative share of California's projected population growth that would occur in each county based on DOF population projections and historical growth trends. These figures are compiled by HCD in a RHNA for each region of California. Where there is a regional council of governments, HCD provides the RHNA to the council. Such is the case for the City, which is a member of SCAG. The council, in this case SCAG, 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. 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 (Section 65583) requires that the housing element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and shall make adequate provision for the existing and projected needs of all economic segments of the community. (CA Legislative Info, n.d.)

On February 21, 2023, the Los Alamitos City Council adopted the comprehensive update of the City's Housing Element for the reporting period of 2021-2029 (Resolution No. 2023-02). Upon adoption of the City's 2021-2029 Housing Element Update, City Council adopted Resolution No. 2023-01 approving General Plan Amendment (GPA) 22-02 to ensure that the zoning code updates in Ordinance 2023-1 will maintain internal consistency with the actions, goals, objectives, and policies of the General Plan and will not create any inconsistencies therein. HCD certified the City's 2021-2029 Housing Element on February 21, 2023.

The Housing Element of the General Plan contains the official policies for the construction, rehabilitation and preservation/conservation of housing in the City of Los Alamitos. The Housing Element is built upon identification and analysis of existing and projected housing needs, resources, opportunities and past performance. The Housing Element contains detailed analysis of the City's economic, demographic and housing characteristics. The Housing Element addresses housing opportunities for current and future Los Alamitos residents through 2029 and provides policy guidance for local decision making related to housing in the City.

3. State Density Bonus Law

The State Density Bonus Law codified in Government Code Section 65915 to 65918 provides a mechanism that allows housing developers to increase density on a property above the maximum allowed under a jurisdiction's General Plan or zoning and to request relief from development standards in exchange for offering to build or donate land for affordable or senior housing units. A developer who meets the requirements of the State law is entitled to receive the density bonus and other benefits as a matter of right, including up to a 50 percent increase in project densities for most projects and up to an 80 percent increase in density for project that are completely affordable. (CA Legislative Info, n.d.)

4. Regional Housing Needs Assessment

California Government Code Section 65584(d) requires that councils of governments (COGs), also known as metropolitan planning organizations (MPOs), which includes the Southern California Association of Governments (SCAG), to determine the existing and future housing needs for its region. SCAG is also required to determine the allocation of housing that must be accommodated in each city and county in the SCAG region. SCAG's RHNA provides an allocation of the existing and future housing needs by jurisdiction; this is based on income level, existing housing needs in each city and county, and the fair share allocation of the projected regional population growth. The allocations are driven by the intent that a better balance between jobs and housing should occur in various areas of the region and that every city should incur its fair share in the development of affordable housing units and in meeting future housing needs. All local governments are required to set aside sufficient land, adopt programs, and provide funding (to the extent feasible), to facilitate and encourage housing production commensurate with that housing need. The City of Los Alamitos addresses its RHNA allocation through its General Plan Housing Element Update. The RHNA prepared by SCAG projects Los Alamitos's share of regional housing need for 2021-2029 as 769 housing units consisting of 194 very low income (including extremely low income), 119 low income, 145 moderate income, and 311 above-moderate income units. (SCAG, 2021)

5. Housing Accountability Act

California Government Code Section 65589.5, also known as the Housing Accountability Act, prohibits a local agency from disapproving, or conditioning approval in a manner that renders infeasible, a housing development project for very low, low-, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record. The act specifies that one way to satisfy that requirement is to make findings that the housing development project or emergency shelter is inconsistent with both the jurisdiction's zoning ordinance and general plan land use designation as specified in any element of the general plan as it existed on the date the application was deemed complete. The act requires a local agency that proposes to disapprove a housing development project that complies with applicable, objective general plan and zoning standards and criteria that were in effect at the time the application was deemed to be complete, or to approve it on the condition that it be developed at a lower density, to base its decision upon written findings supported by substantial evidence on the record that specified

conditions exist, and places the burden of proof on the local agency to that effect. The Housing Accountability Act was recently strengthened by the enactment of Senate Bill 330 in 2019, which among other things amended the Housing Accountability Act and established the Housing Crisis Act of 2019. (CA Legislative Info, n.d.)

6. Southern California Association of Governments (SCAG)

SCAG determines regional housing needs and the share of the regional needs to be addressed by Orange County and its constituent cities. SCAG is a Joint Powers Agency and is the designated Council of Governments (COG), Regional Transportation Planning Agency (RTPA), and Metropolitan Planning Organization (MPO) for the six-county region of Los Angeles, Orange, Ventura, San Bernardino, Riverside, and Imperial counties. SCAG's Regional Comprehensive Plan and Guide (RCPG) and RHNA are tools for coordinating regional planning and housing development strategies in southern California. (SCAG, n.d.)

C. Local

1. City of Los Alamitos General Plan Housing Element

Development of housing in the City of Los Alamitos is guided by the goals, objectives, and policies of the general plan and housing element. The City adopted its updated Housing Element to reflect the 2021-2029 cycle on February 21, 2023. The Project-applicable goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis,* in EIR Subsection 4.10, *Land Use and Planning*.

4.12.3 Methodology

The Project's demographics are examined in the context of existing and projected population for the City of Los Alamitos. This analysis considers consistency with the City's General Plan and SCAG's Connect SoCal. Information on population, housing, and employment for the planning area is available from several sources including:

- **California Department of Finance**. The DOF prepares and administers California's annual budget. Other duties include estimating population demographics and enrollment projections. DOF's "Table E-5: City/County Population and Housing Estimates" reports on population and housing estimates for the state, counties, and cities, January 2021 to 2022, benchmarked to base year 2020.

- **Southern California Association of Governments.** Policies and programs adopted by SCAG to achieve regional objectives are expressed in its 2020 RTP/SCS.

- **City of Los Alamitos General Plan.** The City's General Plan establishes the goals and policies relevant to land use, growth, and development of the City through the year 2035.

The potential impacts of the Project were evaluated relative to the existing demographic condition, jobs/housing balance and socioeconomic profiles. The Project would be considered consistent with the City's General Plan and SCAG's Connect SoCal if it is compatible with the general intent of such plans and would not preclude attainment of primary goals of such plans.

4.12.4 Basis for Determining Significance

According to Section XIV of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to population and housing if the Project or any Project-related component would (OPR, 2022):

- *Induce substantial unplanned 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);*
- *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.*

4.12.5 Impact Analysis

Threshold a: Would the Project induce substantial unplanned 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)?

The Project would redevelop the Project site, which currently includes a vacant office building, with a residential development consisting of a variety of different product types, including single family detached homes, townhomes, and apartments. The unit mix would include 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes, totaling 246 residential units. The overall density for the Project would be 20 dwelling units per acre. This analysis assesses whether the construction and operation of the Project would induce direct or indirect substantial unplanned population growth.

A. Construction

The Project would be developed over an approximately 39.5-month construction period. Project construction activities would require contractors and laborers. It is anticipated that general construction labor would be available from the local and regional labor pool and would not result in substantial population growth because the construction workers would commute from their respective homes. Additionally, each construction phase (e.g., demolition, grading, paving, electrical etc.) requires different skills and specialties, which would be needed for the length of time of that phase. Because of that, the Project's construction phases would not result in a long-term increase in employment which could induce substantial unplanned population growth from short-term construction activities. Therefore, the Project would not directly or indirectly induce substantial population growth in the City during construction. Impacts would be less than significant and no mitigation is required.

B. Operation

1. Direct Impacts

The Project would result in the development of 246 dwelling units. Assuming an average household size of 2.63, consistent with the household size reported in the City's 2021-2029 Housing Element, the Project would generate approximately 647 new residents in the City.

As shown in Table 4.12-5, *Estimated Population and Housing in Los Alamitos with Project*, the Project's proposed 246 households and 647 residents were assumed in the growth projections of the City's General Plan.

Table 4.12-5 Estimated Population and Housing in Los Alamitos with Project

	Existing (2022)[1]	Buildout Year (2027) Without Project[2]	Project	Existing (2022) Plus Project	Buildout Year (2027) Plus Project	City General Plan Projections (2035) [1]
Population	11,873	12,878	647[3]	12,520	13,525	14,486[3]
Household	4,429	4,857	246	4,675	5,103	5,541[4]
Employment	15,048[2]	16,192	-	15,048	16,192	18,022
Job-Housing Ratio	3.40	3.33	-	3.22	3.17	3.25

[1]Values are from Section 4.12.1B.

[3]Assuming an average household size of 2.63, consistent with the City's adopted 2021-2029 Housing Element and the Project's VMT report (*Technical Appendix N2*)

[4] A total of 769 units from the 2021-2029 Housing Element based on SCAG 6th Cycle Final RHNA Allocation Plan was added to the City's General Plan Projections for household.

On February 21, 2023, the City adopted its General Plan Housing Element to reflect the 2021-2029 cycle. As shown in Table 4.12-4, *City of Los Alamitos Regional Housing Needs Allocation* , the City's RHNA allocation is 769 housing units based on SCAG 6th Cycle Final RHNA Allocation Plan. The Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units (169 units as above moderate income, 39 units as low income, and 38 units as very low income). Development of the Project with a total of 246 units of which 77 are affordable would be consistent with the City's 2021–2029 Housing Element.

The City's General Plan designates the Project site for "Multiple Family Residential-25" land use and the Project site is zoned as "Multi-Family Residential (R-3)." The R-3 zone applies to lots intended to provide multi-family housing. The maximum permitted density is 25 dwelling units per net acre. As discussed above, the Project would include a total of 246 units with an overall density of 20 dwelling units per acre, which is less than the 25 dwelling units per acre allowed by the underlying General Plan and zoning designations. Therefore, the Project would be consistent with the General Plan land use and zoning designation and the associated growth anticipated for the Project site pursuant to the General Plan as amended.

The jobs-housing ratio is a general measure of the number of jobs versus housing in a defined geographical area and the recommended target is 1.0. As shown in Table 4.12-5, above, the City is "jobs-rich" and at a ratio of 3.4 jobs/housing, it is currently well above the target ratio. At Project buildout, the Project's addition of 647 units would be expected to beneficially affect the City's jobs-housing balance, by increasing more housing to the City and reducing the jobs-housing ratio from 3.33 to 3.17 at Project buildout (see Table 4.12-5).

The Project would not result in substantial unplanned growth in the area because: 1) the Project is within the growth projections of the City's General Plan, 2) the planned housing is a requirement of State Housing Law and in response to an existing unmet need for housing, 3) the Project is consistent with the existing General Plan land use and zoning designations, and 4) the Project improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, implementation of the Project would not result in substantial unplanned population growth, and impacts would be less than significant. No mitigation is required.

2. Indirect Impacts

Implementation of the Project could result in a substantial and unplanned level of growth if it would result in the extension of new roads or other infrastructure that could induce population growth. As detailed in Section 3.0, *Project Description*, of this EIR, the Project would not require construction of new roadways but would require connection of utility infrastructure to serve the development.

The Project would not result in the alteration of the segment of Lampson Avenue that abuts the Project site except for the replacement of the existing median curb and construction of the two proposed driveways shown in Figure 3-27, *Physical Disturbance Area*. Additionally, it should be noted that a restricted emergency vehicle access point at Lampson Avenue would be provided at the eastern end of the site. Domestic water lanes would be provided as shown in Figure 3-23, *Utility Plan*. The Project would include a 1,200 feet watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension. A lift station and force main is proposed at the southeast corner of the Project site (refer to Figure 3-23). The Project would connect the force main to the existing 8-inch sanitary sewer line at the southeast corner of the site. All connections to existing sanitary sewer lines would be constructed in accordance with City standards. The Project also would involve utility connections to existing facilities to provide electric power and telecommunications services to serve the Project site.

Because all proposed utility infrastructure would connect to existing facilities and would exclusively serve the proposed development and would not increase capacity for other related projects in the area, this Project infrastructure would not indirectly induce substantial unplanned population growth.

C. Summary

Based on the foregoing analysis, the Project is not expected to be a catalyst for any substantial, unplanned population increases. Based on the foregoing analysis, neither the Project nor any Project-

related component would directly or indirectly result in substantial unplanned population growth that would cause a significant impact to the environment. Impacts would be less than significant and no mitigation is required.

Threshold b: ***Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

Under existing conditions, the Project site is developed with a vacant two-story, 88,000 sf commercial office building and parking lot. The Project site does not contain any existing residential structures. Therefore, implementation of the Project would not displace a substantial number of existing people or housing, but, in fact, would provide additional housing opportunities for the community. As such, the implementation of the Project would not necessitate construction of replacement housing elsewhere. No impacts would occur and no mitigation is required.

4.12.6 Cumulative Impact Analysis

The Project would provide 246 dwelling units, of which 77 would be affordable multi-family for rent apartment homes, in the City of Los Alamitos. The related projects (see Section 4.0, *Environmental Analysis*, for the related projects list), would result in an increase of 107 residential units, 2,724 square feet of commercial uses, and 5,200 square feet of office uses. As shown in Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the related projects' residential uses would generate approximately 281 residents[2], which when combined with the Project, results in 928 residents[3].

Table 4.12-6 Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos

	Existing (2022)[1]	Buildout Year (2027) Without Project[2]	Project + Related Projects in City	Buildout Year (2027) Plus Related Projects	City General Plan Projections (2035)
Population	11,873	12,878	928	13,806	14,486
Housing Units	4,429	4,857	353	5,210	5,541
Employment	15,048[2]	16,192	30	16,222	18,022
Job-Housing Ratio	3.38	3.33	-	3.11	3.25

[1]Values are from Section 4.12.1B.
[2]These values are prorated from SCAG's demographic data contained in Table 4.12-1.

As shown, the Project and related projects would be within the growth projections of the City's General Plan and would improve the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Therefore, the Project with related projects contribution to unplanned housing

[2] Assuming an average household size of 2.63, consistent with the City's adopted 2021-2029 Housing Element and the Project's VMT report (*Technical Appendix N2*)
[3] 281 (related projects) + 647 (Project-related) = 928; LA1 Los Alamitos Luxury Apartments includes a total of 107 dwelling units.

and population growth would not be cumulatively considerable. Cumulative impacts would be less than significant.

Under existing conditions, there are no existing people or housing located on-site. As such, the Project has no potential to contribute to a cumulatively significant impact associated with the need to construct unplanned housing units.

4.12.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. Project-generated population exceeds the City's General Plan projections; however, this would not result in substantial unplanned growth in the area. Accordingly, the Project would not induce substantial unplanned population growth and impacts would be less than significant.

Threshold b: No Impact. The Project site does not contain any existing structures relating to residential uses. The implementation of the Project would not displace substantial numbers of existing people or housing necessitating the construction of replacement housing elsewhere. No impacts would occur.

4.12.8 Mitigation

No mitigation is required.

4.12.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.13 PUBLIC SERVICES

The following analysis is based on information obtained from public correspondence letters with public service providers (*Technical Appendix L*), the City's General Plan, and the City of Los Alamitos Municipal Code (LAMC). All references used in this Subsection are listed in EIR Section 8.0, *References.*

4.13.1 EXISTING CONDITIONS

A. Fire Protection Services

Fire protection services for the Project site is currently provided by the Orange County Fire Authority (OCFA). The Project site is located within Operations Division 1, which also serves the cities of Garden Grove, Seal Beach, and Westminster (OCFA, 2022a). As shown in Table 4.13-1, *Orange County Fire Authority Station*, Station 48 is staffed with one fire captain, one fire apparatus engineer, and two firefighters and is equipped with Medic Engine 48 and Patrol 48. Station 84 is staffed with one fire captain, one fire apparatus engineer, and two firefighters and is equipped with Medic Engine 84.

Table 4.13-1 Orange County Fire Authority Station

Location	Apparatus	Daily Staffing	Total Staffing
OCFA Fire Station #48 3131 North Gate Road Seal Beach, CA 90740	Medic Engine 48, Patrol 48	One Fire Captain, One Fire Apparatus Engineer, and Two Firefighters	12
OCFA Fire Station #84 12191 Walley View Street Garden Grove, CA 92845	Medic Engine 84	One Fire Captain, One Fire Apparatus Engineer, and Two Firefighters	12

Source: (OCFA, 2022a); (Rivers, 2024)

OCFA's Standard of Cover for fire services in urban areas, such as the City of Los Alamitos, are listed below. OCFA's current response standards are based on a 90th Percentile:

- A 5:00-minute first-due travel time standard and an 8:00-minute First Alarm travel standard.
- A total response time that includes 1:30 minutes for call processing and 2:00 minutes for turnout.
- A total response time as follows:
    - First-due at 8:30 minutes.
    - Effective Response Force (First Alarm) at 11:30 minutes, with an initial response of three engines, one ladder truck, and one Battalion Chief.

In 2022, OCFA responded to a total of 175,457 incidents, including 2,815 fire incidents, 132,940 emergency medical service (EMS) incidents in its service area. In 2022, the City of Los Alamitos had a total of 1,598 responses including 22 fire incidents and 1,166 EMS incidents, and 410 other (cancelled, ruptures, hazardous conditions, service calls, good intent, false alarms, and miscellaneous call) incidents. (OCFA, 2022b) Currently, OCFA Fire Station 48 houses Paramedic Engine 48 which responds to an average of 2,495 calls per year. In 2023, OCFA responded to 178,370 incidents with a total response time of 9:11 minutes at the 90th percentile in its service area. (Rivers, 2024)

B. Police Protection Services

The Los Alamitos Police Department is located at 3201 Katella Avenue in the City of Los Alamitos. The Los Alamitos Police Department provides police services, including neighborhood patrols, investigations, traffic enforcement, community support, drug education, parking control, and crime prevention. The Los Alamitos Police Department consists of the Operations and Support Services divisions. The Operations Division conducts activities that are directly related to enforcement. It encompasses the Patrol Bureau, Detective Bureau, Traffic Bureau, personnel and training, the reserve officer program, public information, and professional standards. The primary responsibility of the Patrol Bureau is to ensure the safety and security of the community. The Support Services Division is overseen by a civilian manager and encompasses special programs and those police functions that are not directly related to operations. This includes the Records Bureau, court liaison, property and evidence, facilities, emergency preparedness, information technology, administration of the department's grants and budget, animal control, and the community outreach program. The Los Alamitos Police Department's staffing level is determined based on crime rates and adequate response times. (City of Los Alamitos, 2014a) The Los Alamitos Police Department currently has a total of 25 funded sworn police officer positions and 21 professional staff positions (full-time, part-time, and volunteer). Daily staffing at the department includes 1 sergeant, 1 corporal, 2 police officers, 1 school resource officer, and 1 motor officer. Daily staffing for detectives (Monday to Thursday) includes 1 sergeant and 2 detectives. (Claborn, 2024)

Response time to calls for service may vary depending on the officer's location at time of dispatch. Response time requirements are classified by priority; Priority 1, 2, or 3. The Los Alamitos Police Department's performance standard for responding to urgent or Priority 1 calls within its service area is under 5 minutes. Performance standard for Priority 2 and 3 calls are less than 10 minutes and less than 15 minutes, respectively. The current average response time for Priority 1, 2, and 3 are 3 minutes and 50 seconds, 5 minutes and 13 seconds, and 9 minutes and 32 seconds, respectively. (Claborn, 2024)

The Seal Beach Police Department is located at 911 Seal Beach Boulevard in the City of Seal Beach. The Seal Beach Police Department has 40 sworn and 21 non-sworn staff members. The Project site is not served by the Seal Beach Police Department; however, the Seal Beach Police Department monitors Lampson Avenue in Seal Beach, including the Project site access driveway (Ezroj, 2024).

C. School Services

The Project site is within the attendance boundaries of the Los Alamitos Unified School District (LAUSD). LAUSD operates a total of six elementary schools, two middle schools, and one high school. (LAUSD, 2023a) A continuation high school and adult school are also operated at the high school campus. The City also contains one private K-8 school. The following schools, K-12, that service the Project site are as follows:

- Rossmoor Elementary School, located at 3272 Shakespeare Drive
- McAuliffe Middle School, located at 4112 Cerritos Avenue.
- Los Alamitos High School, located at 3591 Cerritos Avenue.

(LAUSD, 2023b)

As shown in Table 4.13-2, *LAUSD Annual Enrollment*, enrollment has been steadily declining since 2016 with the student enrollment for the 2016–2017 schoolyear being approximately 9,904 and the 2023–2022 school year being approximately 8,934 (CDE, 2023).

Table 4.13-2 LAUSD Annual Enrollment

Academic Year	Total Enrollment
2016-17	9,904
2017-18	9,833
2018-19	9,730
2019-20	9,697
2020-21	9,317
2021-22	9,133
2022-23	8,934

Source: (CDE, 2023)

LAUSD confirmed that enrollment has declined nearly 7% (over 600 students) over the past five years and is projected to further decline through academic years 2022-2026 (Pulver, 2022).

As shown in Table 4.13-3, *Existing School Capacity*, there is currently excess capacity at all three schools serving the Project site and other surrounding elementary schools.

Table 4.13-3 Existing School Capacity

School Level	2022/2023 Facility Capacity	2022/2023 Enrollment	Capacity Excess/Shortage
K-5 (Rossmoor)	582	576	6
6-8 (McAuliffe)	1,146	1,004	142
9-12 (Los Alamitos High School)	3,186	3,005	181
Other K-5 Schools within 2.5 mile radius of the Project Site			
K-5 (Lee)	610	609	1
K-5 (Francis Hopkinson)	644	607	37
K-5 (Weaver)	631	630	1
K-5 (Los Alamitos)	694	671	23

Source: (Galicia, 2024)

Per correspondence in March 2024, LAUSD stated that it is near capacity at all schools which fall within the attendance boundary of the Project site. (Galicia, 2024).

D. Parks

The City of Los Alamitos provides parks, school fields, and recreation facilities and programming that directly serve the residents of Los Alamitos, Rossmoor, Seal Beach, and Long Beach. Parks and school fields in Rossmoor serve as a direct resource for Rossmoor residents and offer additional open space resources for Los Alamitos residents. As described in the Section 4.14, *Recreation*, of this EIR, the nearest recreational facilities to the Project site include: Arbor Park and Arbor Dog Park, located directly north of the Project site; and Orville Lewis Park, located approximately 1 mile northwest of the Project site; and Heather Park, located approximately 350 feet southwest of the Project site. Refer to EIR Section 4.14, *Recreation*, for a more detailed discussion regarding parks and recreational facilities in the region.

E. Other Public Facilities

Library services in Los Alamitos are provided by Orange County Public Libraries (OCPL), which is operated by the County of Orange. The Los Alamitos-Rossmoor Library is located at 12700 Montecito Road and the hours of operation are Monday – Thursday 10:00 AM – 7:00 PM and Saturday 9:00 AM – 5:00 PM. The library occupies a 9,856-square foot space and has an annual circulation of 65,000 volumes in its collection with 7 full time staff. In addition, the Los Alamitos-Rossmoor Branch Library provides residents with weekly and monthly programs including toddler time, pre-school story time, teen events, an adult book group, and cultural programs. The branch library holds special events for families on a regular basis and celebrates seasonal events such as National Children's Book Week and National Library Week. Furthermore, the branch library offers a summer reading program each year that helps children retain their reading skills during the summer months. Public access terminals and wi-fi for laptops and tablets are also available in this library. Volunteering opportunities for adults and teens, along with tutoring through OC Read are also offered. (City of Los Alamitos, 2014a) As of April 2023, the library has been closed for renovations. The renovation includes a reconfiguring of space

and the addition of a new approximately 788 square feet community room for an increased total footprint of approximately 10,644 square feet.

4.13.2 Regulatory Framework

The following is a brief description of the federal, state, and local environmental laws and related regulations related to public services.

A. State

1. Fire Protection Services Regulations and Plans

- Public Resources Code Sections 4290-4299

Public Resources Code (PRC) Sections 4290-4299 requires minimum statewide fire safety standards pertaining to: road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fuel breaks and greenbelts. With certain exceptions, all new construction in potential wildland fire areas is required to meet the statewide standards. State requirements, however, do not supersede more restrictive local regulations.

- PRC Sections 4102-4127 - State Responsibility Areas (SRAs)

Public Resources Code Section 4102 specifies that "'State responsibility areas' means areas of the state in which the financial responsibility of preventing and suppressing fires has been determined by the [State Fire] Board pursuant to Section 4125, to be primarily the responsibility of the state." These areas may contain state or privately-owned forest, watershed, and rangeland. PRC Sections 4126-4127 further specify the standards that define what does and does not constitute an SRA. The Project site is not located within a SRA by the California Department of Forestry and Fire Protection (CalFire).

- California Code of Regulations Title 24, Parts 2 and 9 – Fire Codes

Part 2 of Title 24 of the California Code of Regulations (CCR) refers to the California Building Code which contains complete regulations and general construction building standards of State of California adopting agencies, including administrative, fire and life safety and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains other fire safety-related building standards. In particular, Chapter 7A, "Materials and Construction Methods for Exterior Wildfire Exposure," in the 2019 California Building Code addresses fire safety standards for new construction and Section 701A.3.2 addresses "New Buildings Located in Any Fire Hazard Severity Zone." (CBSC, n.d.)

- California Government Code Sections 51178-51179 – Very High Fire Hazard Severity Zones

California Government Code (CGC) Section 51178 specifies that the Director of CalFire, in cooperation with local fire authorities, must identify areas that are Very High Fire Hazard Severity

Zones (VHFHSZs) in Local Responsibility Areas (LRAs), based on consistent statewide criteria and the expected severity of fire hazards. It further specifies that VHFHSZs "shall be based on fuel loading, slope, fire weather and other relevant factors," including areas subject to Santa Ana winds which are a "major cause of wildfire spread." Section 51179 states that a local agency (such as a county) must also designate (and map) the VHFHSZs in its jurisdiction by ordinance (CA Legislative Info, n.d.). The Project site is not located within a VHRHSZ in a LRA.

- ❑ California Health and Safety Code

Sections 13000 et seq. of the California Health and Safety Code include fire regulations for building standards (also found 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.

2. School Services Regulations and Plans

- ❑ Assembly Bill 16

In 2002, Assembly Bill (AB) 16 created the Critically Overcrowded School Facilities program, which supplements the new construction provisions within the School Facilities Program (SFP). The SFP provides State of California funding assistance for new facility construction projects and modernization projects. The Critically Overcrowded School Facilities program allows school districts with critically overcrowded school facilities, as determined by the California Department of Education (CDE), to apply for new construction projects in advance of meeting all SFP new construction program requirements. Districts with SFP new construction eligibility and school sites included on a CDE list of source schools may apply. (CA Legislative Info, n.d.)

- ❑ California State Assembly Bill 2926: School Facilities Act of 1986

To assist in providing school facilities to serve students generated by new development, Assembly Bill (AB) 2926 was enacted in 1986 and authorized a levy of impact fees on new residential and commercial/industrial development. The ability of local governments to collect fees was limited by California Senate Bill 50, the Leroy F. Greene School Facilities Act of 1998.

- ❑ Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50)

Senate Bill (SB) 50 was enacted by the State Legislature in 1998, which amended existing state law governing school fees. In particular, SB 50 amended prior CGC Section 65995(a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with "any legislative or adjudicative act...by any state or local agency involving...the planning, use, or development of real property...." (CA Legislative Info, n.d.)

The legislation also amended CGC Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act [involving] the planning, use or development of real property." Further, SB 50

established the base amount of allowable developer fees: $1.93 per square foot for residential construction and $0.31 per square foot for commercial. These base amounts are commonly called "Level 1 fees" and are the same caps that were in place at the time SB 50 was enacted. Level 1 fees are subject to inflation adjustment every two years. (CA Legislative Info, n.d.)

In certain circumstances, for residential construction, school districts can impose fees that are higher than Level 1 fees. School districts can impose Level 2 fees, which are equal to 50% of land and construction costs if they: (1) prepare and adopt a school needs analysis for facilities; (2) are determined by the State Allocation Board to be eligible to impose these fees; and (3) meet at least two of the following four conditions: (CA Legislative Info, n.d.)

- At least 30% of the district's students are on a multi-track year-round schedule.
- The district has placed on the ballot within the previous four years a local school bond that received at least 50% of the votes cast.
- The district has passed bonds equal to 30% of its bonding capacity.
- Or, at least 20% of the district's teaching stations are relocatable classrooms.

Additionally, if the State of California's bond funds are exhausted, a school district that is eligible to impose Level 2 fees is authorized to impose even higher fees. Commonly referred to as "Level 3 fees," these fees are equal to 100% of land and construction costs of new schools required as a result of new developments. (CA Legislative Info, n.d.)

B. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to public services in its Public Facilities and Safety Element. The Project-applicable goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*.

2. City of Los Alamitos Municipal Code

LAMC identifies policies related to public services. LAMC requirements that are relevant to the Project are as follows:

> **Chapter 15.08 (Fire Code)** The 2019 California Fire Code, including Appendices B, BB, C, and CC, based on the 2018 International Fire Code as published by the International Code Council, is adopted.
>
> **Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees)** implements the provisions of Government Code Section 66477, which authorizes a City to require the dedication of land for park facilities and/or payment of in-lieu fees incident to and

as a condition of the approval of a tentative tract map or parcel map for certain subdivisions. (City of Los Alamitos, 2023a)

4.13.3 Methodology

OCFA, Los Alamitos Police Department, LAUSD, and OCPL were contacted to document the existing and planned facilities and determine whether the Project would require the construction or expansion of new facilities. Responses to the public service correspondences are summarized here and found in full in *Technical Appendix L* to the EIR.

4.13.4 Basis for Determining Significance

According to Section XV of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to public services if the Project or any Project-related component would (OPR, 2022):

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

    - *Fire protection;*
    - *Police protection;*
    - *Schools;*
    - *Parks;*
    - *Other public facilities*

4.13.5 Impact Analysis

Threshold a: ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

i. Fire Protection Services;

ii. Police Protection Services;

iii. School Services;

iv. Parks; or

v. Other Public Facilities

A. Fire Protection Services

Implementation of the Project would increase the overall demand on fire protection and emergency services in the City. Project buildout would result in an increase of 246 dwelling units and approximately 647 residents[1]. This Project related growth is expected to create the typical range of fire and emergency service calls, and would increase call volumes, which may affect response times for emergency and non-emergency services.

However, considering the existing firefighting resources available in the City, implementation of the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Per correspondence with the OCFA, there are currently no deficiencies in fire protection service provided to the Project site. Additionally, response times would not decrease to necessitate the construction of a new fire station. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs. (Rivers, 2024) Project development would occur in an area of the City already served by OCFA; therefore, the Project would not result in an expansion of OCFA's service area. In the event of an emergency within the Project site that requires more resources than the primary fire stations that serve the area could provide, OCFA would direct resources to the site from other OCFA stations nearby.

Further, the Project would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirement based upon the tenant type, building size, and building type. Access to and around structures would meet OCFA and CFC requirements. Figure 4.8-3, *Fire Master Plan*, demonstrates compliance with all codes and other regulations governing water availability for firefighting and emergency access to the Project site and structures. Compliance with OCFA requirements would ensure adequate provision of resources such as access, water mains, fire flows, and fire hydrants.

In order to ensure adequate levels of fire protection service within the City of Alamitos, OCFA typically enters into a Secured Fire Protection Agreement with private developers. As a condition of approval, the Project Applicant is required to enter into a Secured Fire Protection Agreement to provide for fair-share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. (Rivers, 2024) OCFA has not indicated the need for a new fire station or expansion of existing facilities due to the Project. The Secured Fire Protection Agreement would ensure that responses times and service ratios are met due to the implementation of the Project and no new fire station facilities would be required.

Because the Project does not include construction of new fire station facilities and does not generate a need for additional facilities, Project-related impacts to fire protection services would be less than significant and no mitigation is required.

[1] Assuming an average household size of 2.63, consistent with the household size reported in the City's 2021-2029 Housing Element.

B. Police Protection Services

Buildout of the Project would increase demands for police protection services in the City. During the construction and operation of the Project, the need for police services is expected to grow due to the increase in population. Crime and safety issues during Project construction may include theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. After construction, the Project is anticipated to generate a typical range of police service calls as similar developments.

The increase in demands on police services resulting from the implementation of the Project would not adversely impact Los Alamitos Police Department's existing resources. There are currently no staffing or equipment deficiencies in the service area. The increase in potential services needed would not require the construction of a new police station or improvements to the existing station that serves the Project site. Implementation of the Project would result in an increase in calls for service; however, Los Alamitos Police Department has indicated that this increase would not adversely impact Los Alamitos Police Department's existing resources. The existing resources would be adequate to meet the additional demands generated by the Project. The Los Alamitos Police Department has not indicated the need for a new police station or expansion of existing facilities due to the Project. (Claborn, 2024). Responses times and service ratios would be met and would not require the construction of new facilities.

Moreover, Project development would result in increased property and, indirectly, sales tax revenue proportionally increasing the City's General Fund revenue, providing funding for police protection services, equipment, and/or personnel. Because the Project does not include construction of new police facilities and does not generate a need for additional facilities, increases in demands for police protection resulting from implementation of the Project impacts would be less than significant. No mitigation is required.

C. School Services

Project buildout would allow for up to 246 dwelling units, which would result in a population increase of approximately 647 residents[2]. The population would lead to an increase in student population, which in turn may create additional demand for LAUSD service and facilities.

As discussed above, schools serving the Project site include Rossmoor Elementary School, McAuliffe Middle School, and Los Alamitos High School. Student generation rates are used by school districts to estimate the number of students generated by new development in order to determine whether or not existing school facilities would be adequate for future students. As shown in Table 4.13-4, *Projected Student Populations*, the Project would generate a total of 135 students (51 students in K-5, 33 students in grades 6-8, and 51 students in grades 9-12).

[2] Assuming an average household size of 2.63 consistent with the household size reported in the City's 2021-2029 Housing Element..

Table 4.13-4 Projected Student Populations

Home Type[1]	Grade Level			Project Residential Units	Project Generated K-5	Project Generated 6-8	Project Generated 9-12	Total Project Generated Students
	K-5	6-8	9-12					
SF	0.352	0.203	0.178	55	19	11	10	40
MF	0.056	0.019	0.122	144	8	3	18	28
MF below MR	0.308	0.247	0.312	77	24	19	24	67
Total	-	-	-	**246**	**51**	**33**	**51**	**135**

[1] SF = single family residential; MF = multifamily residential; MF below MR = multifamily residential below market rate.
Source: (Galicia, 2024)

As shown in Table 4.13-5, *Projected School Capacity at Project Buildout*, there is adequate capacity to serve the students from the 6-8 and 9-12 grade levels. Based on current enrollment, there is a deficiency of 45 students at the K-5 grade level at Project buildout. However, the District currently has open enrollment which allows students to attend schools other than the school assigned based upon their area of residence. As shown in Table 4.13-5 there are four other K-5 elementary schools within a 2.5 mile radius of the Project site with a total excess capacity of 62 students and enough excess capacity to serve the Project generated 51 K-5 students. It should be noted that the projected student population is conservative because it represents a snapshot in time. It is unlikely that all students generated by the Project would occur at Project buildout but rather would fluctuate over the life of the Project.

Table 4.13-5 Projected School Capacity at Project Buildout

School	Project Generated Students	Current Enrollment (2022/2023)	Current Enrollment + Net New Students	Total Capacity	Remaining Capacity
K-5 (Rossmoor)	51	576	627	582	-45
6-8 (McAuliffe)	33	1,004	1,037	1,146	109
9-12 (Los Alamitos High School)	51	3,005	3,056	3,186	130
Total	**135**	**4,585**	**4,720**	**4,914**	**194**
Other K-5 Schools within 2.5 mile radius of the Project Site					
K-5 (Lee)	-	-	-	610	1
K-5 (Francis Hopkinson)	-	-	-	644	37
K-5 (Weaver)	-	-	-	631	1
K-5 (Los Alamitos)	-	-	-	694	23
Total	-	-	-	2,579	62

Source: (Galicia, 2024)

The Project would be required to pay development impact fees to LAUSD under SB 50 for the construction of new schools, which provides full and complete mitigation to school facilities. Development impact fees currently charged by LAUSD for residential uses are $4.79 per sf. Although project buildout would result in an increase of 135 students, the availability of schools in the area and the payment of impact fees in compliance with SB 50 would address any potential impacts. Therefore,

based on the preceding, impacts from implementation of the Project on school services would be less than significant. No mitigation is required.

D. Parks

As discussed in Section 4.14, *Recreation*, the additional dwelling units would result in an increase in the number of residents in the City, which could lead to an increase in demand for existing City parks and recreational facilities. Using a conservative figure, the City currently has a total of 58.44 acres of parkland.

The Project would provide a variety of common open space amenities, as well as a variety of privately maintained open space and decks. The Project would provide a total of 58,027 square feet (sf) or 1.33 acres of open space on the Project site, including 16,508 sf of usable common open space and 41,519 sf of private open space (homeowner maintained). Additionally, as shown in Table 4.14-1, *Existing Parks and Recreation Facilities*, there are a total of 317.49 acres of parks, recreational facilities, and community centers throughout the City that would serve future Project residents.

Development of the on-site open space and amenities have been evaluated throughout this EIR as part of the Project. The Project would result in an increase in residents; however, the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated. Based on the Project's Parks Impact Analysis (*Technical Appendix M* of this EIR), there is sufficient capacity at existing neighborhood parks to accommodate the Project residents. Moreover, the Project Applicant would be required pay in-lieu fees in accordance with the City's park dedication requirements under LAMC Chapter 16.18, Dedication of Land for Park Facilities and Payment of In Lieu Fees. Therefore, impacts would be less than significant. Refer to Section 4.14, *Recreation*, for further discussion.

E. Other Public Facilities

Project buildout would increase population onsite by an estimated 647 residents, thus increasing demand for other public facilities, such as library services. Increased demands are expected to most affect the library facilities closest to the Project site – that is the Los Alamitos-Rossmoor Library. According to the administrative manager of the OCPL, it is anticipated that the increase in residents may impact service. With the current renovations at the library, however, OCPL does not expect Project buildout to require construction of new or expanded physical library facilities, the construction of which could cause a substantial adverse impact. Although future Project residents would be mainly served by the Los Alamitos-Rossmoor Library, they would have access to all libraries within OCPL's system. Therefore, impacts to library services would be less than significant and no mitigation is required.

4.13.6 Cumulative Impact Analysis

This cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development within the providers respective service areas.

Residential and employment population increases and associated increases in the demand for public services have been taken into account in long-range planning efforts on behalf of the City and the agencies providing public services to the area.

A. Fire Protection Services

Future development projects within OCFA's service area would be required to comply with CFC and OCFA regulations and standards to maintain adequate access within the Project site, which further ensures an adequate level of service for fire protection and emergency services to residents, workers, and visitors in the Project site. Future development projects are reviewed by the City and OCFA to ensure compliance with all applicable building code and other code requirements in effect at the time building permits are issued. Additionally, OCFA requires new development (over 50 units) to enter into a Secured Fire Protection Agreement to provide for fair-share funding of capital improvements, including facilities, equipment, and radio/communications systems. In order to maintain acceptable service ratios, OCFA uses a fair share approach to mitigate fire service response impacts and facility/equipment needs. (Rivers, 2024) Secured Fire Protection Agreements with future development would ensure that responses times and service ratios are met due to the implementation of cumulative development within its service area and facilities are upgraded as needed. Similar to the Project, future cumulative development projects would result in increased property and sales tax revenue, which would provide additional funding for any capital improvements necessary to maintain adequate fire protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion of facility improvements, OCFA would be able to ensure that its performance objectives are consistently met. The Project's increased demand for fire protection services, in conjunction with the increased demand for cumulative development pursuant to the City's General Plan, would not result in significant cumulative impacts.

B. Police Protection Services

Local population growth would result in an increased demand for public services and facilities, including law enforcement. Service providers would continue to evaluate levels of service and potential funding sources to meet demand. The City performs long-range planning for the provisions of public services and facilities based on its growth projections, which are revised over time and includes areas within the City's sphere of influence. Through assessments of the City's capital improvement needs and annual budget review process, police department needs are assessed, and budget allocations are revised accordingly to ensure that adequate levels of police services, including police protection facilities, equipment, and/or personnel, are maintained throughout the City.

The existing resources would be adequate to meet the additional demands generated by any known cumulative developments in addition to the Project (Claborn, 2024). Responses times and service ratios would be met and would not require the construction of new facilities. Increased property and sales tax from future new developments would provide funding for any capital improvements necessary to maintain adequate police protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion or facility improvements, Los Alamitos Police Department would be able to ensure that its performance objectives are consistently met. Furthermore,

individual development projects pursuant to the City's General Plan would be reviewed by the City and would be required to comply with the requirements in effect at the time building permits are issued. Therefore, the demand for police services would not be adversely affected by the Project in conjunction with cumulative development pursuant to the City's General Plan. No significant cumulative impacts related to police services are anticipated.

C. School Services

Cumulative development in the LAUSD service area, would increase the student population in LAUSD schools. As shown in Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the projected population of the City at Project buildout, combined with related projects in the City, would be 12,922 by 2027, an increase of 1,049 residents over existing. Based on an average student generation factor of 0.7 student per dwelling unit, the cumulative development, including the Project, would generate a total of approximately 734 students. (CDE, 2019) Based on student enrollment of LAUSD schools, enrollment has decreased by approximately 970 students from 2016 to 2023 (see Table 4.13-2). Therefore, there is sufficient capacity within LAUSD schools to serve the Project and cumulative development.

The related projects (see Section 4.0, *Environmental Analysis*, for the related projects list), would result in an increase of 107 multifamily residential units. Based on the student rates in Table 4.13-4, the related projects would generate a total of 21 students. When combined with the Project's projected 135 students, a total of 156 students would be generated. As shown in Table 4.13-6, *Projected Cumulative Student Populations*, there is adequate capacity to serve the students at all grade levels. Per discussion with LAUSD, capital improvements, including upgrades or the replacement of existing facilities with new facilities for their continued long-term use, are necessary to adequately serve future enrollment growth at all school levels. With proper planning and appropriate resources, LAUSD will be able to serve all students generated from future cumulative development. (Galicia, 2024)

Table 4.13-6 Projected Cumulative Student Populations

School	Generated Students (Project + Related)	Current Enrollment (2022/2023)	Current Enrollment + Net New Students	Total Capacity	Remaining Capacity
K-5 (Rossmoor, Lee, Francis Hopkinson, Weaver, Los Alamitos)	57	3,093	3,150	3,161	11
6-8 (McAuliffe)	35	1,004	1,039	1,146	107
9-12 (Los Alamitos High School)	64	3,005	3,069	3,186	117
Total	**156**	**6,802**	**4,741**	**4,914**	**535**

While there is currently available capacity at all grade levels, the cumulative effect of additional projects may increase enrollment beyond capacity. However, the capacity would be mitigated by applying SB 50 developer fees to accommodate new growth. (Galicia, 2024)

In accordance with SB 50, the State Legislature provided authority for school districts to assess impact fees for both residential and nonresidential development projects to provide these resources. The fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure, and the payment of these fees constitutes full mitigation for the impacts generated by new development, per Government Code Section 65995. The Project and cumulative development must pay appropriate impact fees. Implementation of the Project in conjunction with other cumulative development would not result in a cumulative impact to school services.

D. Parks

As discussed in Section 4.14, *Recreation*, cumulative development will increase the demand in parks and recreational facilities. Recreational needs of future residents of the Project would add to citywide and regional demand for park and recreational facilities. As discussed in Section 4.14, *Recreation*, Project impacts to recreation would be less than significant. As shown in Table 4.14-1, there is a total of 317.49 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 389.02 acres of park and recreational facilities in the City and its SOI. Pursuant to the City's General Plan Update EIR, buildout of the General Plan (14,204 residents in the City and 10,540 residents in Rossmoor) would be accommodated by the existing parkland in the City and its SOI and no significant impacts would occur related to the physical deterioration of recreational facilities. Therefore, with the increase of projected population in 2027 at Project buildout, there is sufficient parkland and recreational facilities to serve City residents. The Project would not cumulatively contribute to deterioration of recreational facilities or the construction of recreational facilities which might have an adverse physical effect on the environment.

Cumulative development projects would be required to comply with all applicable existing regulations, procedures, and policies that are intended to address impacts to park and recreation facilities. For example, per the City's park dedication requirements under LAMC Chapter 16.18, Dedication of Land for Park Facilities and Payment of In Lieu Fees, all new residential development is required either to dedicate parkland or pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population. Therefore, cumulative impacts related to park and recreational space and facilities would be less than significant.

E. Other Public Facilities

Cumulative population growth within the service area as a result of the cumulative projects will likely increase the demand on other public facilities, such as library services. Similar to the Project, future residents of development projects within the City may visit the Los Alamitos-Rossmoor Library. However, future residents would have access to all 32 OCPL branch libraries, online resources, and interlibrary loans. Therefore, library capacity would not be significantly impacted and cumulative project impacts would be less than significant.

4.13.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. Implementation of the Project would result in an increased requirement for public services. However, considering the existing resources available, the Project is not expected to result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact. Impacts are less than significant.

4.13.8 Mitigation

No mitigation is required.

4.13.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.14 RECREATION

This Subsection provides an overview of the existing parks and recreational facilities that exist within the City of Los Alamitos, Rossmoor, and Seal Beach that could potentially be indirectly physically affected by implementation of the Project. The analysis herein is based on Project's Parks Impact Analysis prepared by RRM Design Group (RRM) and included as *Technical Appendix M*.; the City's Parks Master Plan, General Plan Open Space, Recreation, and Conservation Element and the City of Los Alamitos Municipal Code. Additional references used for this Subsection are listed in Section 8.0, *References*.

4.14.1 EXISTING CONDITIONS

The following information is summarized from the City's General Plan Open Space, Recreation, and Conservation Element.

A. Parks and Recreation Facilities

The City of Los Alamitos provides parks, school fields, and recreation facilities and programming that directly serve the residents of Los Alamitos, Rossmoor, Seal Beach, and Long Beach. Parks and school fields in Rossmoor serve as a direct resource for Rossmoor residents and offer additional open space resources for Los Alamitos residents. As shown in Table 4.14-1, *Existing Parks and Recreation Facilities*, there is a total of 18.03 acres of public parks within the City of Los Alamitos and 18.45 acres in Rossmoor, for a total of 36.48 acres. Figure 4.14-1, *Existing Parks and Recreation Facilities*, identifies the existing park and recreational amenities in the City of Los Alamitos, Rossmoor, and Seal Beach.

Table 4.14-1 Existing Parks and Recreation Facilities

Park/Facility Name	Type	Acres
Public Parks		
City of Los Alamitos		
Coyote Creek Park	Neighborhood Park	3.69
Little Cottonwood Park	Neighborhood Park	6.75
Laurel Park	Neighborhood Park	4.33
Orville Lewis Park	Neighborhood Park	1.65
Labourdette Park	Pocket Park	0.44
Roberts Park	Pocket Park	0.09
Stansbury Park	Pocket Park	0.62
Soroptomist Park	Pocket Park	0.17
Sterns Park	Pocket Park	0.29
City of Los Alamitos Subtotal		**18.03**
Rossmoor		
Rossmoor Park	Neighborhood Park	9.43
Rush Park	Neighborhood Park	8.61
Foster Mini-Park	Pocket Park	0.17
Kempton Mini-Park	Pocket Park	0.24

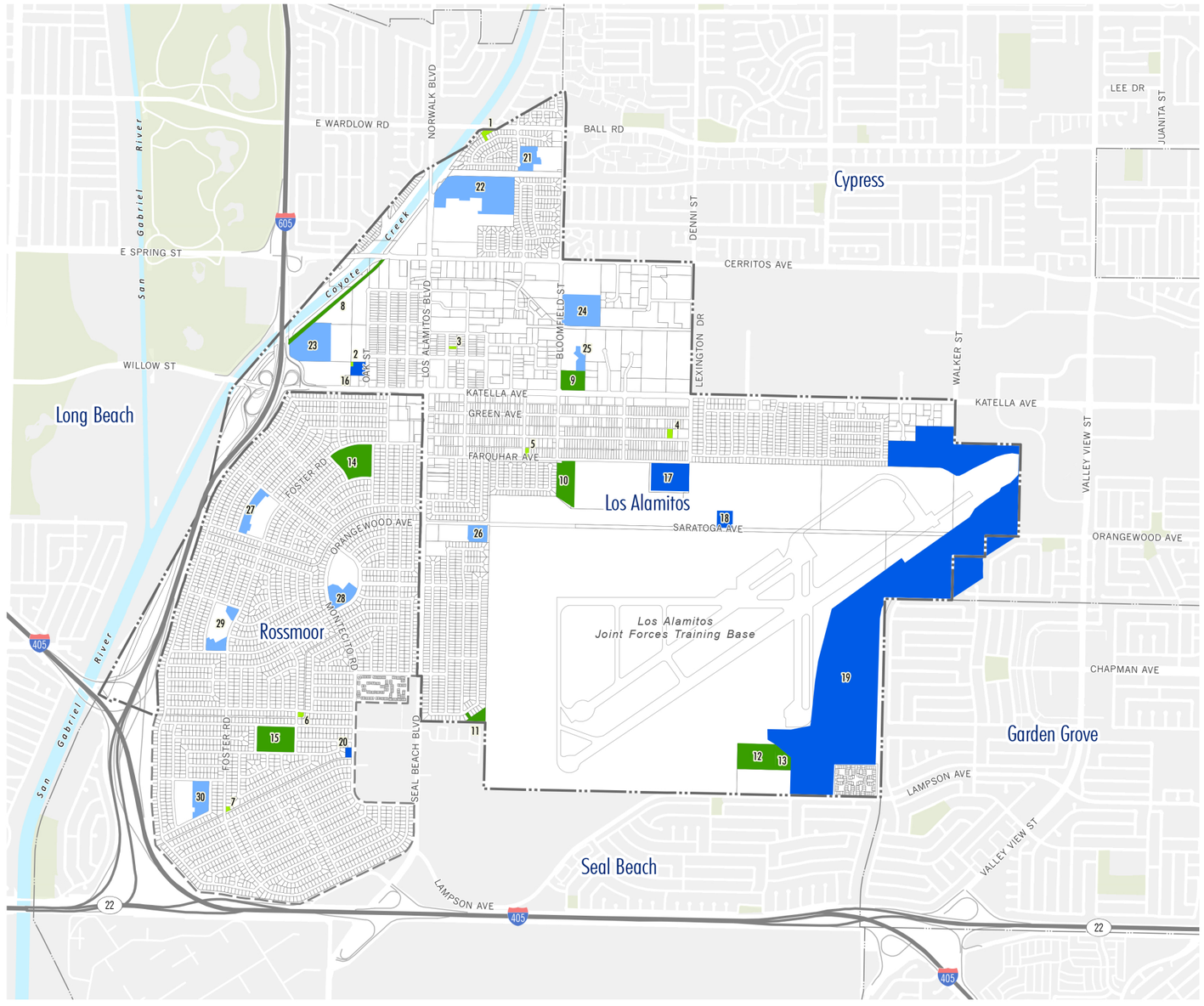
Park/Facility Name	Type	Acres
	Rossmoor Subtotal	**18.45**
	Total Park Acreage	**36.48**
Other Spaces and Facilities		
City of Los Alamitos		
Aquatic Center	Special Use Facility	2.46
Los Alamitos Community Center and Youth Center	Special Use Facility	1.69
McAuliffe Middle School	Track/Fields	10.88
Oak Middle School	Track/Fields	11.90
Arbor Dog Park	Special Use Facility	1.40[1]
Arbor Park Fields	Fields	9.60[1]
Los Alamitos Youth Baseball Fields	Special Use Facility	9.57
Navy Golf Course	Public Golf Course	221.60
Laurel High School	Turf/Fields	3.93
Los Alamitos High School	Turf/Fields/Pool	21.01
Los Alamitos Elementary School	Turf/Fields	1.78
St. Hedwig School	Turf/Fields	2.98
	City of Los Alamitos Subtotal	**298.80**
Rossmoor		
Montecito Center	Special Use Facility	0.54
Hopkinson Elementary School	Turf/Fields	4.89
Lee Elementary School	Turf/Fields	3.64
Rossmoor Elementary School	Turf/Fields	4.44
Weaver Elementary School	Turf/Fields	3.09
	Rossmoor Subtotal	**16.60**
Total Other Recreational Spaces and Facilities		**315.40**
	Subtotal City of Los Alamitos	**316.83**
	Subtotal Rossmoor	**35.05**
Total		**351.88**

[1]Parks Impact Analysis (RRM, 2024)
Source: (City of Los Alamitos, 2014a)

B. Other Recreational Spaces and Facilities

1. Other Spaces and Facilities under City Control or Contract

Four facilities comprise 26.93 acres of park and recreation space through City ownership or joint-use agreements: Aquatic Center, Los Alamitos Community Center, Youth Center, McAuliffe Middle School, and Oak Middle School. Through long-term, facilities/joint-use agreements with Los Alamitos Unified School District (LAUSD), the City is able to use and program field space on McAuliffe and Oak Middle Schools. (City of Los Alamitos, 2015a)



Legend

- Pocket Park
  - 1. Stansbury Park (0.62 ac)
  - 2. Roberts Park (0.09 ac)
  - 3. Soroptomist Park (0.17 ac)
  - 4. Labourdette Park (0.44 ac)
  - 5. Sterns Park (0.29 ac)
  - 6. Kempton Mini-Park (0.24 ac)
  - 7. Foster Mini-Park (0.17 ac)
- Neighborhood Park
  - 8. Coyote Creek Park (3.69 ac)
  - 9. Laurel Park (4.33 ac)
  - 10. Little Cottonwood Park (6.75 ac)
  - 11. Orville Lewis Park (1.65 ac)
  - 12. Arbor Park (8.92 ac)
  - 13. Arbor Dog Park (2.74 ac)
  - 14. Rossmoor Park (9.43 ac)
  - 15. Rush Park (8.61 ac)
- Special Use Facility
  - 16. Los Alamitos Community Center/Youth Center (1.69 ac)
  - 17. Los Alamitos Youth Baseball Fields (9.57 ac)
  - 18. Aquatic Center, (2.46 ac)
  - 19. Navy Golf Course (221.60 ac)
  - 20. Montecito Center (0.54 ac)
- School Fields
  - 21. School District Headquarters (3.93 ac)
  - 22. Los Alamitos High School (21.01 ac)
  - 23. Oak Middle School (11.90 ac)
  - 24. McAuliffe Middle School (10.88 ac)
  - 25. Los Alamitos Elementary School (1.78 ac)
  - 26. St. Hedwig School (Private) (2.98 ac)
  - 27. Lee Elementary School (3.64 ac)
  - 28. Rossmoor Elementary School (4.44 ac)
  - 29. Weaver Elementary School (3.09 ac)
  - 30. Hopkinson Elementary School (4.89 ac)
- City Boundary
- Sphere of Influence

Source(s): City of Los Alamitos (03-23-2015)

Figure 4.14-1

Not to Scale

Existing Parks and Recreational Facilities

2. Other Spaces and Facilities Controlled by Other Agencies

Eight other private or public facilities offer residents recreation space on a limited basis (by fee, athletic organization affiliation, or membership). These facilities are not covered by a current agreement with the City but, except for St. Hedwig, are open to the public.

The JFTB has two parks and two special use facilities. The baseball fields are leased by Los Alamitos Youth Baseball (LAYB), an all-volunteer organization that offers baseball programs to boys and girls ages 4 to 14. LAYB celebrated its 50th anniversary as a youth baseball league in 2012. The Arbor Dog Park and Fields are currently leased by the City of Seal Beach from the JFTB for its residents, although the two parks are within the jurisdiction of Los Alamitos. The Arbor Park Fields are prioritized for use by American Youth Soccer Organization (AYSO) Region 159, serving children in Los Alamitos, Rossmoor, and Seal Beach. The Navy Golf Course is open to the public on a fee/membership basis.

Three public schools maintain playing fields that are available for use on a fee basis, and St. Hedwig's, a private K–8 school, maintains grass ball fields. Private indoor recreation facilities (not shown in the tables or on the map) include gymnasiums at the Church of Jesus Christ of Latter-day Saints and Good Shepherd Presbyterian Church, and commercial recreation facilities that include indoor soccer, archery, gymnastics, and batting cages. (City of Los Alamitos, 2015a)

C. City of Seal Beach Park System

The City of Seal Beach is located south of the Project site across Lampson Avenue. Because of the Project's immediate proximity to certain parks owned or managed by the City of Seal Beach, this analysis discusses parks within the City of Seal Beach park system.

The current Seal Beach park system serves 24,992 residents (2020 population) over 13.1 square miles (11.3 square miles of land and 1.8 square miles of water) and includes the City's operation of the following recreational facilities:

- 18 parks for a total of 75.45 acres
- Four community centers
- One tennis and pickleball center
- One gymnasium (indoor sports facility)
- One aquatics facility

1. Arbor Park

Although Arbor Park is in the jurisdiction of Los Alamitos, as described above, it is owned by JFTB and operated by the City of Seal Beach. Arbor Park is north of the Project site and borders the Project site's north property line. Arbor Park is identified as a Community Park within the City of Seal Beach's Park system, comprising 9.6 acres (not including the Arbor Dog Park) and consisting of four unlit soccer fields, one unlit softball field, and a gravel parking lot. Arbor Park is available for use from dawn until dusk.

Arbor Park is primarily a permitted park, which means groups/organizations/individuals must apply to the City of Seal Beach for approval for requested dates and times to utilize the park. Applicants provide information including, but not limited to, the type of activity and must follow the rules and regulations set forth by the City of Seal Beach. Arbor Park is primarily permitted to AYSO Region 159, serving the Los Alamitos, Rossmoor, and Seal Beach area. AYSO Region 159 was permitted to use Arbor Park for 1,052 hours in each calendar year 2022 and 2023. No other groups received permits. Typically, Arbor Park is permitted on Saturdays and weekday afternoons for AYSO Region 159 games and practices. Arbor Park's permitted use is comparable to other similar active parks in the City of Seal Beach system. Although Arbor Park is primarily a permitted park, the park is available and used by others outside of permitted times. Residents participate in allowable non-permitted/passive uses such as informal/family sports activities (i.e., soccer, ultimate frisbee, playing catch with the football/baseball) and walking.

In accordance with "Recreation Areas, Their Design and Equipment," a carrying capacity (referring to the number of visitors that can be accommodated in a park without unacceptable impacts to the quality of the visitor experience) can be calculated for a park utilizing the amenities, such as playgrounds, baseball fields, and open lawn areas present in the park. In general, a carrying capacity (referring to the number of visitors that can be accommodated in a park without unacceptable impacts to the quality of the visitor experience) is not calculated for a community park that an agency can monitor for usage through a permitting process. However, for the purpose of this analysis, during non-permitted times, it is estimated that 270 visitors can be accommodated at Arbor Park.

2. Arbor Dog Park

Located just north of Lampson Avenue, Arbor Dog Park borders the proposed Project along the north property line. Arbor Dog Park is within the boundary of Arbor Park within the City of Seal Beach Park system, comprising 1.4 acres (not including the 9.6-acre Arbor Park), and consisting of a fenced dog park and gravel parking. Arbor Dog Park is available for use from dawn until dusk.

Arbor Dog Park is maintained within industry standards and similar to Zoeter Greenbelt Dog Park (approximately 0.4 acres) in the City of Seal Beach Park system and other dog parks in the region. To use Arbor Dog Park, all owners are required to have their dogs licensed in the City of Seal Beach. Similar to Arbor Park, Arbor Dog Park is used by members of the community from the greater area, including residents of Seal Beach, Los Alamitos, Garden Grove, Rossmoor, and other nearby communities.

Approximately 70 dog owners, some with multiple dogs, utilize Arbor Dog Park on a daily basis. Arbor Dog Park's use is comparable to Zoeter Greenbelt Dog Park in the City of Seal Beach Park system and other dog parks in the region. Unlike parks, dog parks do not have a calculation for carrying capacity. Recent improvements to Arbor Dog Park include separate small dog and large dog entries and areas, and dog drinking fountains.

3. Heather Park

Located at the southeast corner of Heather Street and Lampson Avenue, Heather Park is located approximately 350 feet southwest of the Project site, across Lampson Avenue. Heather Park is identified as a neighborhood park within the City of Seal Beach Park system, comprising of 1.6 acres, and consisting of two lit tennis courts, one tot lot/play structure, one swing set, and four picnic tables. Heather Park is primarily available for use from dawn until dusk, however, the tennis courts and lighting are available until 10:00pm.

Heather Park is maintained in accordance with the normal standard of care of the City of Seal Beach park system and similar to other parks in the City of Seal Beach Park system. Heather Park is primarily a non-permitted/passive use park. Park users are namely residents of the College Park East neighborhood with limited use from Los Alamitos, Garden Grove, and Rossmoor residents. Residents participate in non-permitted/passive uses such as informal/family sports activities (i.e., drop in tennis court use, soccer, playing catch with the football/baseball), playground use, picnicking, and walking. Although Heather Park is primarily a non-permitted/passive use park, certain permitted uses do occasionally occur, such as classes (i.e., tennis lessons, introduction to soccer programs, pre-school multi-sport camp), as well as the Annual Summer Send-Off Community event administered by the City of Seal Beach. The local neighborhood association reserves the park for a variety of special events/holiday celebrations at Easter, Independence Day, and Christmas. Additionally, reservable picnic areas are available to the public.

The carrying capacity of Heather Park is estimated to be 67 visitors during non-permitted/passive use activities. Future capital improvements/modifications, including new play equipment and surfacing, passive fitness stations, and a picnic area, are planned to be installed.

4.14.2 Regulatory Framework

The following is a brief description of the state and local environmental laws and related regulations related to recreation.

A. State

1. Mitigation Fee Act

The California Mitigation Fee Act, Government Code sections 66000, et seq., allows cities to establish fees imposed on development projects for the purpose of mitigating the impact that the projects have on the city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, a city must follow four primary requirements: 1) Make certain determinations regarding the purpose and use of a fee and stablish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; 2) Segregate fee revenue from the General Fund in or to avoid commingling of capital facilities and general funds; 3) For fees that have been in possession of the city for five years or more and for which the dollars have not been spent or committed to a project, the city must make findings each fiscal year describing the continuing need for

the money; and 4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

2. Quimby Act, California Government Code § 66477

The State of California's Quimby Act was established by the California Legislature for the purpose of preserving open space and providing park facilities for California's growing communities. The Quimby Act allows local agencies to establish ordinances requiring residential subdivisions to provide land or "in-lieu-of" fees for park and recreation purposes. This State Act requires the dedication of land and/or imposes a requirement of fees for park and recreational purposes as a condition of approval of tentative tract map or parcel map (CA Legislative Info, n.d.).

B. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to recreation in its Open Space, Recreation, and Conservation Element. The Project-applicable goals and policies and a discussion of the Project's potential to conflict with applicable General Plan policies with the purpose of avoiding or mitigating an environmental effect related to recreation are discussed in Section 4.10, *Land Use and Planning*, Table 4.10-2, *General Plan Consistency Analysis*, of this EIR.

2. City of Los Alamitos Municipal Code

The City of Los Alamitos Municipal Code identifies policies related to recreation are as follows:

> **Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees)** implements the provisions of Government Code Section 66477, which authorizes a City to require the dedication of land for park facilities and/or payment of in-lieu fees incident to and as a condition of the approval of a tentative tract map or parcel map for certain subdivisions. (City of Los Alamitos, 2023a)

4.14.3 Methodology

The analysis of potential recreation-related impacts is based upon the ability of existing and planned parks and recreational facilities to meet the additional demand for recreational services resulting from development of the potential Project. Impacts are considered significant if implementation of the Project would increase the use of existing parks and recreational facilities within the City that would result in a substantial physical deterioration of the facilities or require the construction or expansion of facilities.

4.14.4 Basis for Determining Significance

According to Section XVI of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to recreation if the Project or any Project-related component would (OPR, 2022):

- *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;*

- *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

4.14.5 IMPACT ANALYSIS

Threshold a:	***Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

The Project includes a 246 unit residential development on an approximately 12.3-acre lot, which would increase housing capacity and increase population growth in the City of Los Alamitos. The increase of 246 dwelling units would result in a population growth of approximately 647 residents[1].

There is a total of 316.83 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 351.8 acres to meet the recreational needs of the City's residents.

As shown in Figure 3-12, *Open Space Plan*, the Project would provide a total of 58,027 square feet[2] (sf) or 1.33 acres of open space in the Project site, including 16,508 sf of usable common open space, 41,519 sf of private open space (homeowner maintained). The usable common open space areas would include amenities such as a tot-lot with rubberized play surface, shade surface with BBQ Island and dining furniture, lawn area with cornhole, ping pong table, and lounge seating with fire-pit. There are also 4,620 sf of multifamily private decks and 5,181 sf of townhomes private decks that would be provided onsite. The Project has been designed with these enhanced recreational amenities to meet the needs of its future residents.

Although the designed neighborhood open space areas are anticipated to meet many of the park and recreation needs of Project residents, Project residents are also anticipated to utilize existing off-site park and recreation facilities in the City of Los Alamitos and nearby Rossmoor and City of Seal Beach Park system. Future residents of the Project site would also have access to (within walking distance) the following public park and recreational facilities, which comprise just over 14 acres of usable parkland and open space:

[1] Assuming an average household size of 2.63 residents per unit, consistent with the City's adopted 2021-2029 Housing Element and the Project's VMT report (*Technical Appendix N2*).
[2] As shown in Figure 3-12, *Open Space Plan*, the Project would provide a total of 67,480 square feet (sf) or 1.55 acres of open space in the Project site, including 16,508 sf of usable common open space, 51,320 sf of private open space (homeowner maintained). The 51,320 sf of private open space includes 4,620 sf of multi-family private deck, 5181 sf of townhomes private deck, and 41,519 sf of private open space (homeowner maintained).

- Arbor Park, located directly north of the Project site, includes baseball fields leased by LAYB within its approximately 9.60-acre site.

- Arbor Dog Park, located directly north of the Project site, includes a dog park that is currently leased by the City of Seal Beach from the JFTB for its residents within its approximately 1.40-acre site.

- Orville Lewis Park, located approximately 1 mile northwest of the Project site, includes a grass area, baseball backstop, basketball court, play area, barbecue, picnic shelter and tables, and drinking fountain within its approximately 1.65-acre site.

- Heather Park, located approximately 350 feet southwest of the Project site, includes two lit tennis courts, one tot lot/play structure, one swing set, and four picnic tables within its approximately 1.6-acre site.

The Project also includes a dedication or easement for the northerly 10 feet strip of land abutting Arbor Park and Arbor Dog Park, which comprises an area of approximately 10,000 sf of the Project site.

If the Project were to generate park visitors that exceed its carrying capacity, it could result in additional maintenance requirements or physical deterioration of existing parks. Based on the Project's Parks Impact Analysis, it is anticipated that a negligible amount of Project residents will regularly visit parks in close proximity to the Project site specifically, Arbor Park, Arbor Dog Park, and Heather Park. Specifically, a total of 178 Project residents would visit the designed neighborhood open spaces within the Project site and 131 Project residents would visit the Arbor Park, Arbor Dog Park, and Heather Park as the parks they visit most often (*Technical Appendix M* of this Draft EIR). Project residents would visit (frequent) Arbor Park and Heather Park as follows: approximately 22 users 2 times per week, 18 users once per week, 27 users once or twice per month, 32 users several times per year, and 20 users once or twice per year. (see Table 2, *Technical Appendix M* of this Draft EIR). Project residents would visit (frequent) Arbor Dog Park at least 147 times at least once per week. (see Table 4, *Technical Appendix M* of this Draft EIR)

As discussed above, the carrying capacity of the Arbor Park and Heather Park would be 337 visitors and there is no calculation for carrying capacity for Arbor Dog Park. Because the projected number of Project visitors to these parks are well within the carrying capacity, there is sufficient capacity at existing nearby neighborhood parks to accommodate the Project residents. With full occupancy of the Project, the designed neighborhood open spaces within the Project site, the capacity and existing maintenance and usage of existing parks, and the estimated visitation of the Project residents to the existing parks; the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated.

It should also be noted that the Project Applicant would be required pay in-lieu fees in accordance with the City's park dedication requirements under Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees) of the City of Los Alamitos Municipal Code. Therefore, implementation

of the Project would not result in significant impacts relating to the physical deterioration of recreational facilities and impacts would be less than significant.

Threshold b:	***Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

As noted above, the Project would include a variety of common open space amenities and private open space areas. The construction of these recreational facilities would occur within the boundaries of the Project site and would be constructed as part of the proposed Project. The Project's construction impacts are analyzed throughout this EIR and mitigation is incorporated where necessary. As concluded in this EIR, the Project's construction impacts would be less than significant, in some cases with the implementation of mitigation. Therefore, impacts associated with the Project's on-site recreational facilities would be less than significant.

Furthermore, per the analysis provided above under Threshold a, development that would be accommodated under the Project would not require the construction of new or the expansion of existing City parks and recreational facilities. Additionally, the Project does not propose to expand any existing recreational facilities Therefore, implementation of the Project would not result in significant impacts relating to new and/or expanded park and recreational facilities. No mitigation is required.

4.14.6 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development in the City.

The recreational needs of future residents of the proposed Project would add to citywide and regional demand for park and recreational facilities, which could contribute to a deterioration of recreational facilities. As shown in Table 4.14-1, there is a total of 316.83 acres of park and recreation facilities in Los Alamitos and 35.05 acres of park and recreational facilities in Rossmoor, for a total of 351.88 acres of park and recreational facilities in the City and its SOI available to meet the needs of City residents. To determine the cumulative public park and recreational impacts, citywide growth forecasts were considered. As shown in Table 4.12-6, *Cumulative Projects Population, Housing, and Employment Growth Trends in Los Alamitos*, the projected population at Project buildout, combined with related projects in the City, would be 13,806 by 2027. Pursuant to the City's General Plan Update EIR, the buildout of the General Plan (14,204 residents in the City and 10,540 residents in Rossmoor) would be accommodated by the existing parkland in the City and its SOI and no significant impacts would occur related to the physical deterioration of recreational facilities. Therefore, with the increase of projected population in at Project buildout, there is sufficient parkland and recreational facilities to service city residents. The Project would not cumulatively contribute to deterioration of recreational facilities or the construction of recreational facilities which might have an adverse physical effect on the environment.

Cumulative development projects would be required to comply with all applicable existing regulations, procedures, and policies that are intended to address impacts to park and recreation facilities. For example, per the City's park dedication requirements under Chapter 16.18 (Dedication of Land for Park Facilities and Payment of In Lieu Fees) of the City of Los Alamitos Municipal Code, all new residential development is required either to dedicate parkland or pay park facilities impact fees to offset the cost to expand or construct new park and recreational space and facilities to adequately serve the City's growing population. Therefore, cumulative impacts related to park and recreational space and facilities would be less than significant.

4.14.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would result in an increase in residents; however, the Project is not anticipated to increase the use of the existing parks such that substantial additional use or physical deterioration of the existing parks would occur or be accelerated. Accordingly, implementation of the Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility could occur or be accelerated. Impacts would be less than significant.

Threshold b: Less-than-Significant Impact. Project construction would include the proposed recreational facilities, the impacts of which are evaluated throughout this EIR and mitigation measures are implemented where necessary to reduce Project impacts to less than significant levels. Additionally, the Project does not propose to expand any existing recreational facilities. Therefore, impacts associated with recreational facilities would be less than significant.

4.14.8 Mitigation

No mitigation is required.

4.14.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

4.15 TRANSPORTATION

The analysis in this Subsection is based on the traffic analysis and vehicle miles traveled (VMT) analysis prepared for the Project by Urban Crossroads and titled "4665 Lampson Avenue Traffic Analysis", dated June 1, 2023 (Urban Crossroads, 2023e), and "4665 Lampson Avenue Vehicle Miles Traveled (VMT) Analysis," dated January 12, 2023 (Urban Crossroads, 2023f), respectively. These reports are included as *Technical Appendix N1* and *Technical Appendix N2* to this EIR. Additional Walker Consultants evaluated parking layout options for Arbor Park; the memorandum is included as *Technical Appendix Q* of this EIR.

Changes to the CEQA Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the measure for identifying transportation impacts for land use projects. This Statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's OPR released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (Technical Advisory). On December 19, 2022, the City adopted VMT thresholds of significance for purposes of analyzing transportation impacts under CEQA, consistent with OPR's Technical Advisory.

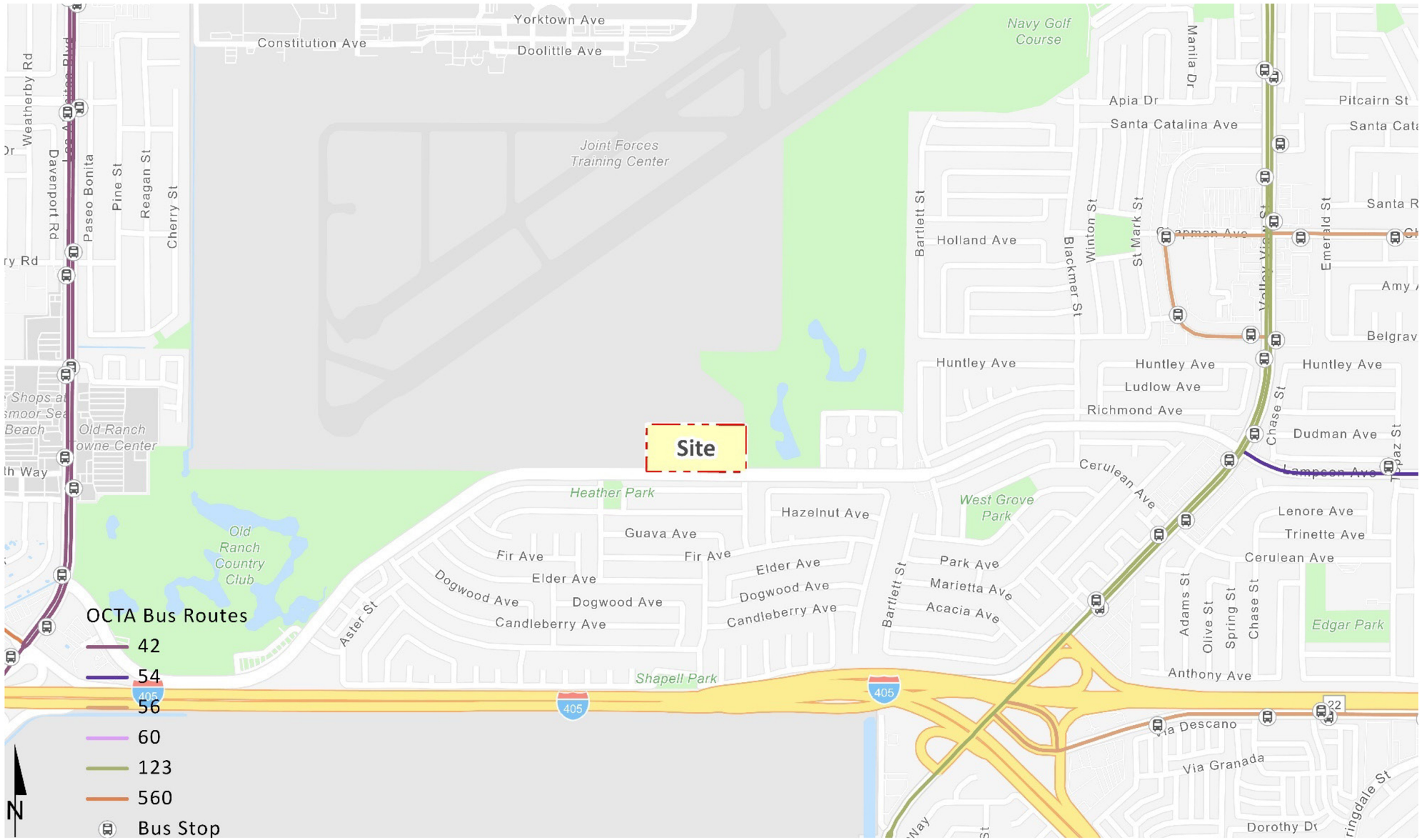
4.15.1 EXISTING CONDITIONS

A. Existing Roadway System

The Project site is located immediately north of Lampson Avenue. The City classifies Lampson Avenue as a Secondary Arterial (right-of-way is 80-feet, typically 4-lane undivided roadway). There is an existing median curb/landscape on Lampson Avenue adjacent to the Project site. Regional vehicular travel routes serving the Project area include the I-405, I-605, and SR-22. The Project site is approximately 2.0 roadway miles from the Seal Beach Boulevard on/off-ramp for the I-405.

B. Existing Transit Services

As shown in Figure 4.15-1, *Existing Transit Routes*, the Project site is currently served by the Orange County Transportation Authority (OCTA) with bus service along Seal Beach Boulevard, Valley View Street, and Lampson Avenue (east of Valley View Street). OCTA route 42 runs along Seal Beach Boulevard and serves Seal Beach to Orange with an existing stop provided at the intersection of Katella Avenue and Los Alamitos Boulevard. The existing stop is approximately 3.5 miles walking distance from the Project site. Bus service frequency is approximately 20-minute intervals during the peak commute hours and 40 minutes during other times of the day during a typical weekday. OCTA Route 123 serves the city of Anaheim to city of Huntington Beach via Malvern Avenue, Valley View Street, and Bolsa Chica. There are existing stops along Valley View Street with an existing stop at Chapman Avenue. The nearest OCTA Route 123 existing stop is located approximately 1.6 miles walking distance from the Project site to the intersection of Chapman Avenue and Valley View Street. Bus service frequency is approximately 60-minute intervals on a typical weekday for OCTA Route 123.



Source(s): Urban Crossroads (02-03-2023)

Figure 4.15-1

Not to Scale

Existing Transit Routes

C. Existing Bicycle and Pedestrian Facilities

The City of Los Alamitos existing and planned bicycle network is shown in Figure 4.15-2, *City of Los Alamitos Existing and Planned Bicycle Network*, and the city of Seal Beach's is shown in Figure 4.15-3, *City of Seal Beach Existing and Planned Bicycle Network*. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east towards Valley View Street. In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue.

In addition, there is a Class I bike/pedestrian path on Seal Beach Boulevard north of Lampson Avenue and a Class II bike lane south of Lampson Avenue.

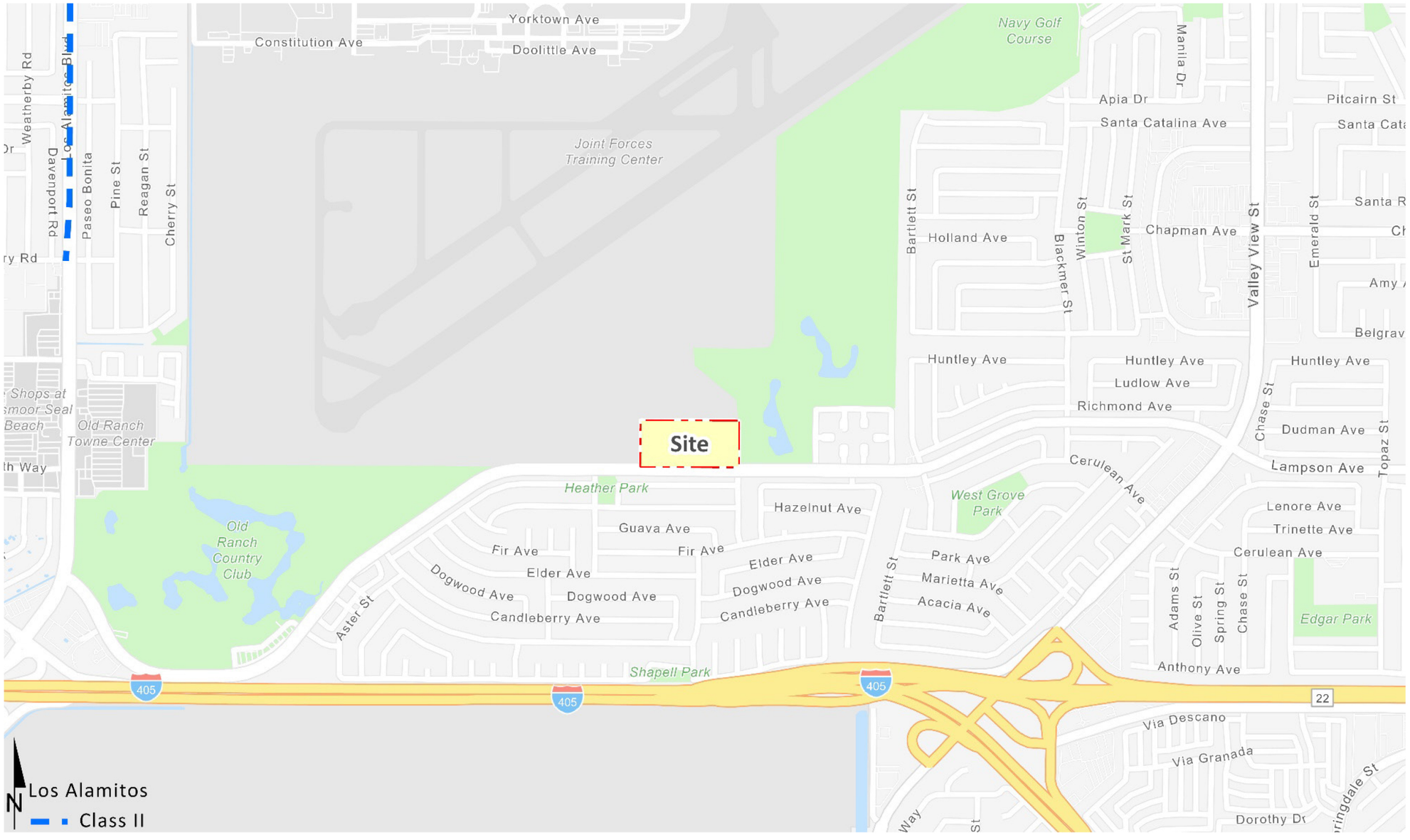
As shown in Figure 4.15-4, *Existing Pedestrian Facilities*, existing sidewalks are present on both the westbound and eastbound side of Lampson Avenue, adjacent to the Project site. Crosswalks are present at the intersection of Lampson Avenue/Heather Street and at the intersection of Lampson Avenue/Rose Street.

4.15.2 Regulatory Framework

A. State

1. Senate Bill 743 and VMT Analyses

Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3,§ 15000 et seq.) regarding the analysis of transportation impacts. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (Id., subd. (b)(1); see generally, CEQA Guidelines, § 15064.3, subd. (b) [Criteria for Analyzing Transportation Impacts].) To that end, in developing the criteria, OPR has proposed, and the California Natural Resources Agency (CNRA) has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, no longer constitute a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3) (OPR, 2018).)

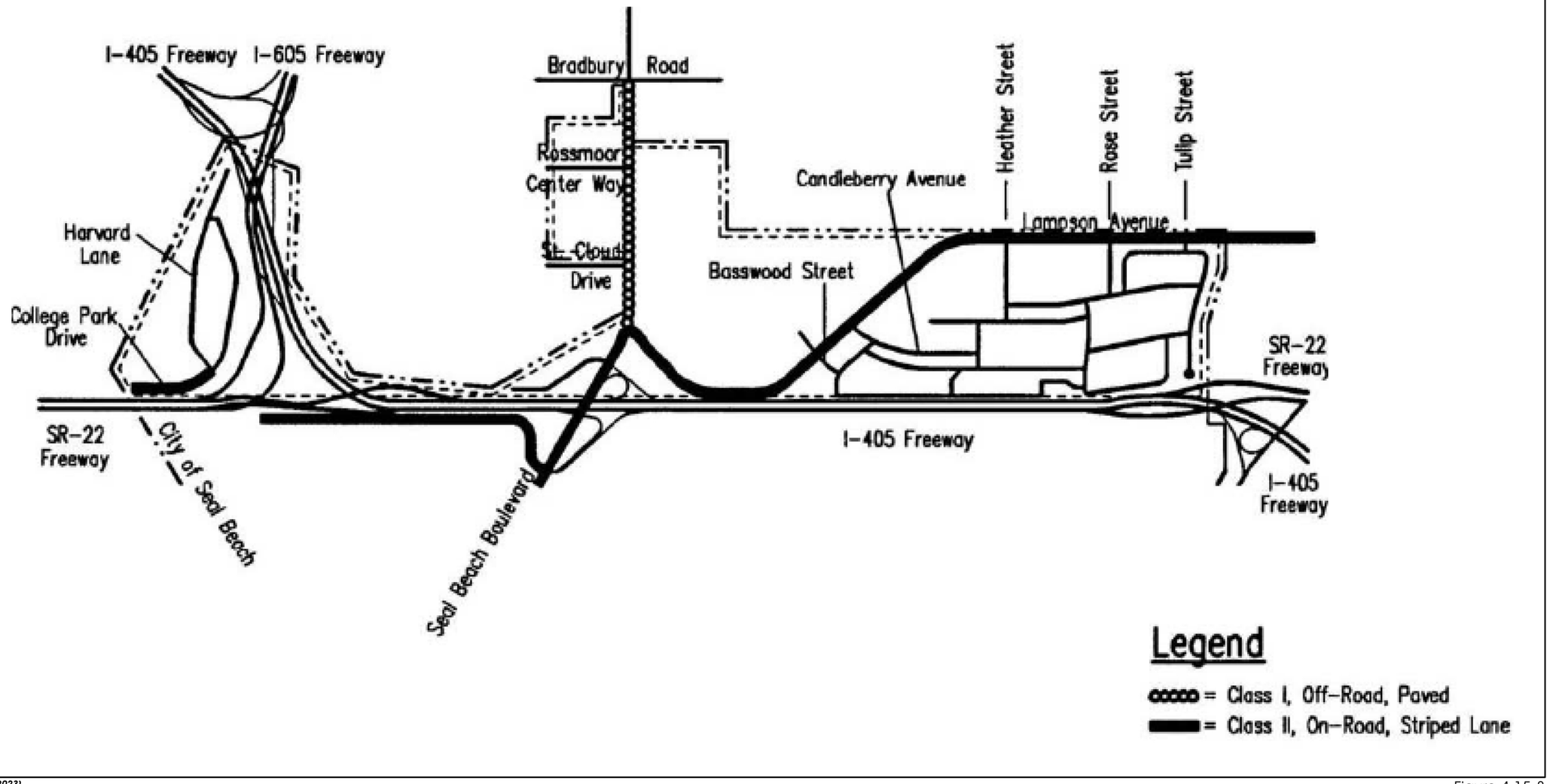


Source(s): Urban Crossroads (02-03-2023)

Figure 4.15-2

Not to Scale

City of Los Alamitos Existing and Planned Bicycle Network

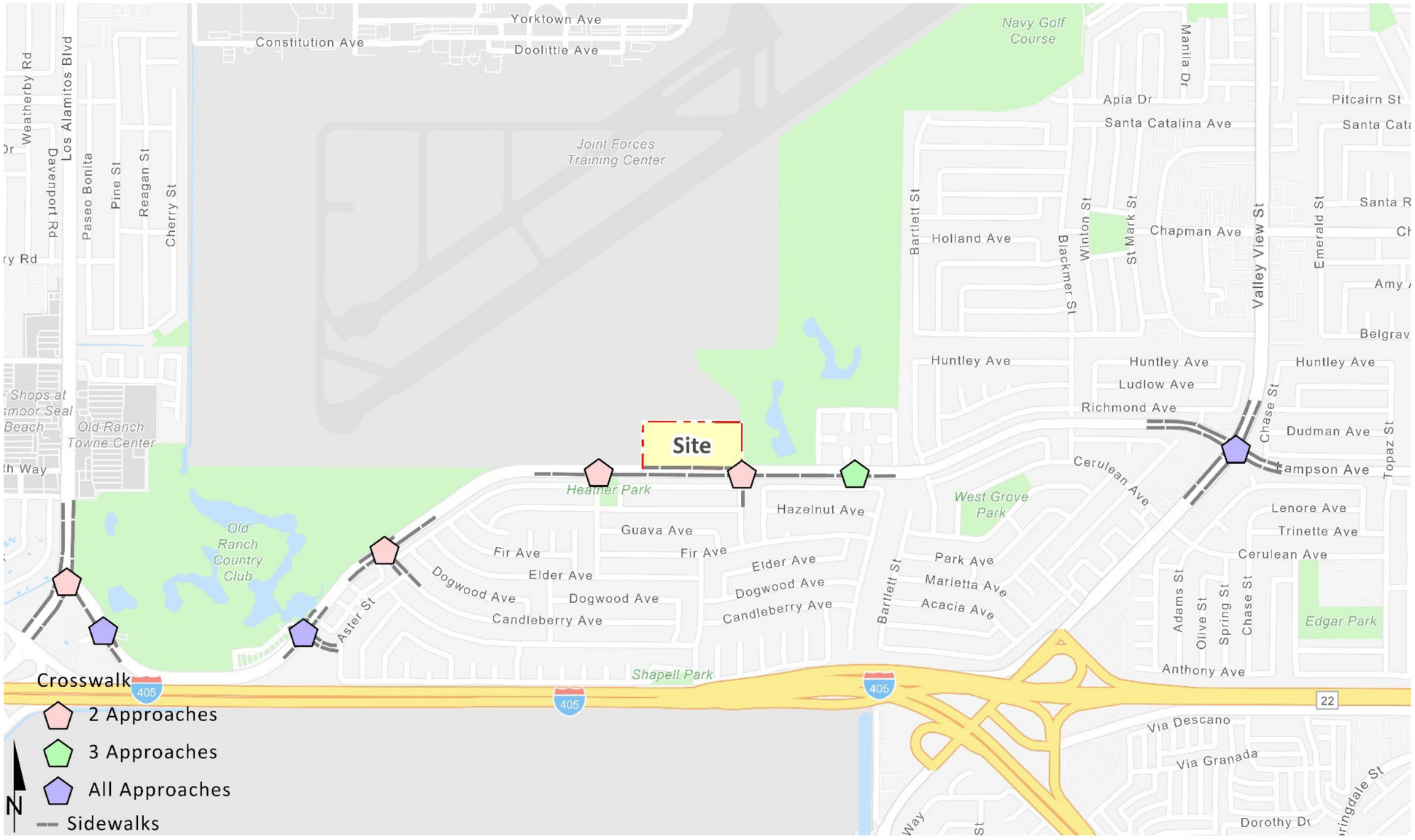


Source(s): Urban Crossroads (02-03-2023)

Figure 4.15-3

Not to Scale

City of Seal Beach Existing and Planned Bicycle Network



Source(s): Urban Crossroads (02-03-2023)

Figure 4.15-4

Not to Scale

Existing Pedestrian Facilities

B. Regional

1. SCAG Regional Transportation Plan/Sustainable Communities Strategy

SCAG is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a COG, a RTPA, and a MPO. The Project site is within SCAG's regional authority. On September 3, 2020, SCAG adopted the 2020-2045 RTP/ SCS (also referred to herein as "Connect SoCal") with the following goals: 1) Encourage regional economic prosperity and global competitiveness; 2) Improve mobility, accessibility, reliability, and travel safety for people and goods; 3) Enhance the preservation, security, and resilience of the regional transportation system; 4) Increase person and goods movement and travel choices within the transportation system; 5) Reduce greenhouse gas emissions and improve air quality; 6) Support healthy and equitable communities; 7) Adapt to a changing climate and support an integrated regional development pattern and transportation network; 8) Leverage new transportation technologies and data-driven solutions that result in more efficient travel; 9) Encourage development of diverse housing types in areas that are supported by multiple transportation options; and 10) Promote conservation of natural and agricultural lands and restoration of habitats. Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP. (SCAG, 2020a)

C. Local

1. City of Los Alamitos General Plan Mobility and Circulation Element

The City's General Plan Mobility and Circulation Element addresses the movement of people and goods throughout the City's transportation network. It evaluates transportation and circulation needs in the City and recommends improvements to accommodate future demand. The Project's consistency with the City's General Plan Mobility and Circulation is discussed below in Table 4.15-1, *Consistency with the General Plan Mobility and Circulation Element*.

2. City of Los Alamitos Active Transportation Plan

The Active Transportation Plan (ATP) provides the City of Los Alamitos the vision and goals to make their streets safer, more comfortable, and more enjoyable for their residents and visitors. The ATP addresses the needs of people that are dependent on walking, bicycling, and/or accessing transit every day throughout the City. The recommendations in the ATP are designed to support multi-model travel infrastructure and programs for existing and future populations.

The ATP includes an inventory of existing bicycle and pedestrian infrastructure, identifies program deficiencies, establishes a list of prioritized improvements, and includes "grant-ready" materials for future grant opportunities. (City of Los Alamitos, 2021)

4.15.3 Methodology

CEQA Appendix G Threshold a requires an analysis of the Project's potential to conflict with plans, programs, ordinances, or policies that address the circulation system, including transit, roadway,

bicycle, and pedestrian facilities. This EIR relies on the analysis in the Traffic Report attached as *Technical Appendix N1* to evaluate the consistency of the Project with adopted City General Plan plans and policies. If a conflict is identified, improvements that prioritize access for and improve walking, bicycling, and riding transit facilities in order to provide safe and convenient streets for all users are identified. As such, a project that generally conforms with and does not obstruct the City's development policies and standards would be considered consistent under Appendix G Threshold a.

The Technical Advisory identifies the correct tool to perform a VMT analysis, which is the tool that was used to generate the jurisdictional averages for which a project resides for an apples-to-apples comparison. The OCTAM sub regional model is the appropriate tool for conducting VMT analysis for land use projects in the County of Orange. It considers interaction between different land uses based on socio-economic data, such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each trip. The vehicle trips and average daily trip length for project-related vehicle trips were derived from the OCTAM model.

4.15.4 Basis for Determining Significance

According to Section XVII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to transportation and traffic if the Project or any Project-related component would (OPR, 2022):

- *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*
- *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*
- *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- *Result in inadequate emergency access.*

The Technical Advisory includes the following threshold recommendations for assessment of residential projects:

> *Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the [Sustainable Communities Strategy] SCS for that city, and should be consistent with the SCS. Residential development that would generate vehicle travel that is 15 or more percent below the existing residential VMT per capita,*

measured against the region or city, may indicate a less-than-significant transportation impact. In MPO areas, development measured against city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the population or number of units specified in the SCS for that city because greater-than-planned amounts of development in areas above the region-based threshold would undermine the VMT containment needed to achieve regional targets under SB 375.

The City's VMT thresholds of significance for purposes of analyzing transportation impacts were based on the State-recommended threshold for residential projects and the existing regional VMT. A VMT impact is considered significant if a residential project generates more than 15% below the existing regional residential VMT per capita. The existing regional average VMT per capita was calculated using the OCTAM model for the regional area, the County of Orange. For the County of Orange, the VMT significance threshold for VMT impacts will be 14.8 VMT per capita, which is 15% below the 17.42 VMT per capita regional average.

A significant cumulative impact would occur if the Project increased the total regional VMT compared to the cumulative no project condition. Furthermore, for all land use and transportation projects a significant impact would occur if the project were inconsistent with the RTP/SCS.

4.15.5 Impact Analysis

Threshold a:	***Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

The Project's consistency with the City's General Plan Mobility and Circulation is discussed below in Table 4.15-1, *Consistency with the General Plan Mobility and Circulation Element*. As presented therein, the Project would not conflict with applicable General Plan goals and policies. In addition, the Project's consistency with the SCAG's Connect SoCal is discussed in Section 4.10, *Land Use and Planning* and no conflicts were identified. The Project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant and no mitigation is required.

Table 4.15-1 Consistency with the General Plan Mobility and Circulation Element

General Plan Policy	Consistency
Goal 1: A context-sensitive network of streets, bikeways, and pedestrian areas that promote the safe and efficient movement of people and goods	
Policy 1.1 **Multimodal network.** The City shall plan, design, operate, and maintain the transportation network to promote safe and convenient travel for all users: pedestrians, bicyclists, transit riders, freight, and motorists.	**No Conflict.** The Project encourages multimodal mobility. An off-site pedestrian circulation system would be available in proximity to the Project site with an interconnected paved sidewalk system with the roadway right-of-way separated from vehicular travel lanes by a landscaped parkway. There are existing Class II (on-street, striped) bike lanes on the north and south sides of Lampson Avenue from Basswood Street to the east. Additionally, there is a Class I bike/pedestrian path along Seal Beach Boulevard, north of Lampson Avenue and a Class II bike lane south of Lampson Avenue. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage. As discussed in Section 3.0, *Project Description*, roadway improvements have been included as part of the Project to maintain City standards for safe and efficient traffic operations. Moreover, bike lane improvements are currently ongoing on Lampson Avenue between Basswood Street ant Seal Beach Boulevard, which will connect to the existing bike lane on Lampson Avenue (City of Seal Beach, 2024). The roadway section of Lampson Avenue along the Project's frontage is entirely within the City of Seal Beach. According to the City of Seal Beach General Plan, Lampson Avenue is a divided roadway with a raised median and designed to accommodate a maximum of 37,500 daily vehicle trips. (City of Seal Beach, 2003) At General Plan Buildout with Project Lampson Avenue would carry 15,750 trips from Rose Street to Tulip (east of the Project) and 15,350 daily trips from Rose Street to Heather Street (adjacent and west of the Project) (see *Technical Appendix N1* of the EIR). Therefore, the Project's anticipated generation of 1,658 daily trips is well within the capacity of Lampson Avenue. The Project would not conflict with the comfort, convenience, and safety of pedestrian, bicyclists, and motorists of all ages and abilities. Under existing conditions, access to the Project site is provided via two driveways along Lampson Avenue. Lampson Avenue is identified as a Secondary Arterial. One driveway is located centrally along the Project site's frontage and near the southeast corner along the
Policy 1.2 **Transportation decisions.** Decisions should balance the comfort, convenience, and safety of pedestrians, bicyclists, and motorists of all ages and abilities.	
Policy 1.6 **Access management.** Minimize access points and curb cuts along arterials and within 200 feet of an intersection to improve traffic flow and safety. Eliminate and/or consolidate driveways when new development occurs or when traffic operation or safety warrants.	

General Plan Policy	Consistency
	Project site's frontage. Under Project conditions, access to the Project site would be provided via two driveways. One is proposed near the southwest corner of the Project site (Driveway 1) and one is proposed centrally along the Project site's frontage with Lampson Avenue (Driveway 2). A gated emergency vehicle access driveway would be provided near the southeast corner of the Project site. Driveway 1 would be restricted to right-in/right-out access only and a median would be constructed to restrict the access and Driveway 2 would allow full access. Refer to threshold (c) for a queuing analysis under General Plan Buildout traffic conditions. These two proposed driveways and curb cuts would be located more than 200 feet from existing intersections. Based on the foregoing, the Project would not conflict with these polices.
Policy 1.7 **Fair share of improvements**. Require new development to pay a fair share of needed transportation improvements based on a project's impacts to the multimodal transportation network.	**No Conflict.** As discussed in the Project's Traffic Analysis (*Technical Appendix N1*), transportation improvements associated with the Project are funded through a combination of improvements constructed by the Project or fair share contributions. Fair share contributions are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increase. The Project will comply with the fair share requirements of this policy. Therefore, the Project would not conflict with this policy.
Goal 2: Neighborhoods that are protected from through traffic.	
Policy 2.1 **Traffic calming**. Discourage cut-through traffic in residential neighborhoods through the application of traffic-calming measures	**No Conflict.** The Project would provide direct and convenient access to the site via a convenient and efficient circulation system. With direct access to Lampson Avenue from regional access routes, the Project would not generate any cut-through traffic resulting in the need for traffic-calming measures. Therefore, the Project would not conflict with this policy.
Goal 3: Safe and convenient access to schools and parks that promote healthy and active living.	
Policy 3.1 **Commuting to school.** Maximize the number of students walking, biking, and riding the bus to and from school.	**No Conflict.** The Project would promote future residents of the Project to walk, bike, or ride the bus to and from schools. Project frontage improvements would include sidewalk improvements, the existing bike lanes on Lampson Avenue adjacent to the Project site, and bike storage would promote residents and students to utilize these facilities. Therefore, the Project would not conflict with this policy.

General Plan Policy	Consistency
Policy 3.2 **Active trips.** Establish, maintain, and improve bicycle and pedestrian systems to promote active trips to schools and parks.	**No Conflict.** The Project proposes pedestrian systems to promote access to Arbor Park and open space amenities within the Project site. The Project would maintain the existing Class II bike lane on Lampson Avenue along the Project site's frontage. As discussed in Section 3.0, Project Description, roadway improvements have been included as part of the Project to maintain City standards for safe and efficient traffic operations. Moreover, bike lane improvements are currently ongoing on Lampson Avenue between Basswood Street and Seal Beach Boulevard, which will connect to the existing bike lane on Lampson Avenue (City of Seal Beach, 2024). Therefore, the Project would not conflict with this policy.
Goal 4: Bicycle, pedestrian, and transit systems that are desirable alternatives to the car.	
Policy 4.2 **Site design.** Require physical designs for new development that provide convenience and security to pedestrians, bicyclists, and transit users.	**No Conflict.** As part of the City's development review and permitting process, the Project's site plans were reviewed to ensure site access is convenient and safe for pedestrians, bicyclists, and transit users. The Project would promote convenience and safe access for alternative modes of transportation by constructing sidewalk, bike lane improvements along Lampson Avenue adjacent to the Project site, and bike storage. Therefore, the Project would not conflict with this policy.
Policy 4.3 **Intersections.** Improve the safety and comfort of pedestrian and bicycle crossings at intersections.	**No Conflict.** The closest intersection to the Project site is at the eastern boundary of the Project at Lampson Avenue and Rose Street, A Traffic Analysis has been prepared for the Project (*Technical Appendix N1*) to evaluate the proposed development and assess any potential traffic deficiencies that would result from implementation of the Project. Frontage improvements would include sidewalk improvements, driveway modifications to accommodate site access, and landscaping improvements as required by City standards, which would improve the safety and comfort of pedestrian and bicycle crossings. Therefore, the Project would not conflict with this policy.
Policy 4.5 **Regional connections**. Connect bicycle and pedestrian trails to local and regional trails in adjacent jurisdictions.	**No Conflict**. The Project proposes to incorporate paseos for pedestrian access to Arbor Park. Therefore, the Project would not conflict with this policy.
Policy 4.6 **Bicycle and pedestrian wayfinding.** Provide bicycle and pedestrian network wayfinding and information through signs, street markings, or other technologies.	**No Conflict.** The Project proposes to incorporate paseos for pedestrian access to Arbor Park. The Project would provide appropriate signage as needed and would not impede the City's efforts with providing bicycle and pedestrian network wayfinding and information.

General Plan Policy	Consistency
Policy 4.7 **Transit stops.** Improve and maintain safe, clean, comfortable, well-lit, and rider friendly transit stops that are well marked and visible to motorists.	**Not Applicable.** The nearest OCTA Route 123 bus stop from the Project site is approximately 1.6 miles walking distance at the intersection of Valley View Street and Champman Avenue. The nearest OCTA Route 42 bus stop from the Project site is approximately 3.5 miles walking distance at the intersection of Katella Avenue and Los Alamitos Boulevard Therefore, this policy is not applicable to the Project.

(City of Los Alamitos, 2015a)

Threshold b: ***Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

A. Vehicle Miles Traveled

Small Project Screening

The Technical Advisory indicates that projects generating fewer than 110 daily vehicle trips may be presumed to have a less than significant impact. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the ITE Trip Generation Manual, 11th Edition, 2021. The proposed Project is anticipated to generate 1,658 vehicle trip-ends per day, which exceeds the 110 vehicle trips per day threshold.

Map Based Screening

As noted in the Technical Advisory, "residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT." The OCTAM was utilized to obtain the Project's TAZ existing VMT information. The Project site is in TAZ 634. TAZ 634 has an existing VMT per capita of 22.71. Per the OCTAM model, the County of Orange regional average VMT per capita is 17.42. The Project is not located in a low VMT area because the existing VMT per capita of 22.71 in TAZ 634 is higher than the regional VMT per capita of 17.42.

TPA Screening

The Technical Advisory states that projects located within a Transit Priority Area (TPA), ½ mile of an existing "major transit stop,"[1] or an existing stop along a "high-quality transit corridor"[2] will have a less than significant impact on VMT.

[1] Pub. Resources Code, § 21064.3 ("'Major transit stop' means 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.").
[2] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

Once a project is determined to be within a TPA, the Technical Advisory also recommends consideration of secondary screening checks. For example, a proposed land use project is not eligible for TPA screening if the project meets any of the following sub-criteria:

1) Has a Floor Area Ratio (FAR) of less than 0.75;

2) Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);

3) Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or

4) Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Utilizing Graphical Information System (GIS) data obtained from SCAG, the Project's location relative to its proximity to TPA area was mapped. The Project is not located within a TPA.

Affordable Residential Development Screening

The Technical Advisory states that "Adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT." The Technical Advisory also identifies projects consisting of 100% affordable housing units as eligible for screening. Furthermore "low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing. Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. The Project is proposing 77 affordable housing units or 31% of the total 246 dwelling units. As previously discussed, the City of Los Alamitos has not formally adopted thresholds to determine the amount of affordable housing applicable to screening within the City, and in the absence of those thresholds, an affordable housing screening qualification cannot be made.

Local Community Serving Retail Screening

The Technical Advisory identifies local serving retail uses are presumed to have a less than significant impact absent substantial evidence to the contrary. By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. The Project does not propose to develop any local serving retail uses, and therefore the Project is not eligible for screening as a local serving retail use.

Model Based Project Generated VMT

Since the Project does not meet any of the screening criteria used to determine that a land use project is presumed to have less than significant VMT impacts, VMT modeling and analysis was performed. Table 4.15-2, *Project-Generated VMT Results* presents the Project's potential VMT. As discussed previously, a VMT impact is considered significant if a residential project generates more than 15%

below the existing regional residential VMT per capita. Consistent with the Technical Advisory, project level VMT analysis should evaluate home-based (HB) VMT divided by a project's population. HB VMT is calculated from OCTAM's Production/Attraction (PA) trip matrices and then divided by a project's population to derive the VMT efficiency metric VMT per capita. Productions are land use types that generate trips (residences) and attractions are land use types that attract trips (employment). Productions and attractions are converted from person trips to vehicle trips for the purposes of calculating VMT.

The Project includes 77 affordable housing units, which generate vehicle trips at a lower rate per unit as compared to market rate housing. As the reduction in trips and associated VMT could not be accurately accounted for by the calculations conducted using the OCTAM model, these adjustments are made through calculations as described in the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021) Specifically, "Land Use – T-4. Integrate Affordable and Below Market Rate Housing"; requires multifamily residential units to be permanently dedicated as affordable for lower income families. The Project's affordable units would reduce its Project generated VMT by 8.87% or 1,226 VMT. This results in a Project generated VMT of 12,598 in the baseline condition and 12,213 in the cumulative condition as shown in Table 4.15-2.

Table 4.15-2 Project-Generated VMT Results

	Baseline (2022)[1]	**Long Range (2045)**[1]
Population[2]	647	647
Home-Based VMT	12,559	12,174
VMT per capita[3]	19.4	18.8
Threshold	14.8	14.8
Percent above Threshold	+30,1%	+27.0%
Potentially Significant	Yes	Yes

[1] The Baseline (2022) condition represents existing plus Project VMT and the Cumulative (2045) condition represents the future year 2045 pursuant to OCTAM and includes cumulative conditions with the Project.
[2] Based on the State of California Department of Finance E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. Assuming an average household size of 2.63.
[3] VMT per capita is calculated by Home-Based VMT divided by Population.
(Urban Crossroads, 2023f, Table 5)

As shown above, the Project would generate VMT per capita exceeding the City's adopted VMT impact threshold by 30.1% in the baseline (2022) conditions and 27.0% for long range (2045) conditions. As a result, the Project would result in a significant VMT impact. Mitigation is required.

B. Special Considerations

Due to comments received during the NOP public review period, Walker Consultants prepared an analysis to evaluate the parking need at Arbor Park and Arbor Dog Park, including American Youth Soccer Organization (AYSO) Region 159 uses at Arbor Park for soccer practices on weeknights and soccer games on weekends (see *Technical Appendix Q* of this EIR). AYSO parking demand is highest

during their Saturday soccer games with a parking demand that fluctuates between 97 to 339 spaces between the hours of 8:00 AM and 2:00PM and a peak parking demand of 339 spaces at noon. AYSO currently uses parking spaces on the Project site for soccer games, many of which would not be available upon Project implementation. Walker evaluated two options for AYSO parking following Project buildout: 1) assuming the Project commitment to provide 10-foot strip of land along the north boundary, and 2) assuming the Project's 10-foot dedication in addition to improvements 2'-10" to 4'-3" in width on the north side of the Arbor Park parking lot (see Figures 1 and 4 of *Technical Appendix Q* of this EIR for the proposed parking layouts). These options would allow for up to 154 or 200 parking spaces for users of Arbor Park, respectively. Following implementation of these options, if there were not adequate parking spaces for an AYSO soccer game event, vehicles would have the option of dropping off players/visitors at the park and/or driving a short distance to available parking off-site and walking to the park. These scenarios would not result in the addition of new vehicle trips attributable to the Project. Additionally, any change in vehicle trip distance would be negligible, as it would only occur on Saturdays during soccer season. Because these vehicles are arriving at certain appointed times to watch or participate in these events, they are not expected to circle the parking lot to wait until a parking space became available. As such, vehicles unable to find adequate parking would not result in any significant traffic impacts related to congestion at the site or air quality impacts related to emissions.

Threshold c:	***Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

During construction, frontage improvements including median improvements, sidewalks, driveway modifications needed to accommodate site access, and landscaping improvements would be constructed in accordance with City standards. Lane closures that may be required for median improvements would be temporary and require a permit and compliance with Los Alamitos Municipal Code (LAMC) 12.08.200, Safety precautions–Obstruction of traffic. This would ensure safe crossing and access for all vehicle and pedestrians at all times. Therefore, the Project would not substantially increase hazards due to a geometric design feature during construction activities.

There are no incompatible uses such as farm equipment existing or proposed on the Project site. Vehicular access to the Project site would be provided via two driveways along the site's southern boundary on Lampson Avenue. One driveway would be located at the west side which would be the primary apartment entry. The second driveway, which would be the primary neighborhood entry, would be located in the central portion of the site along Lampson Avenue. In addition, the Project would include replacement of the existing median curb/landscape on Lampson Avenue with new median and landscape.

A queuing analysis was performed for the Project driveways on Lampson Avenue under General Plan Buildout with Project traffic conditions in order to ensure that there is adequate and available stacking distance at peak hours and the Project would not create a safety hazard. Table 1-4 of the Project's Traffic Analysis (*Technical Appendix N1)* presents the queuing analysis summary for the General Plan

Buildout with Project traffic conditions. The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and finetuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. The SimTraffic simulation has been recorded 5 times, during the weekday AM and PM peak hours, and has been seeded for 15- minute periods with 60-minute recording intervals. As a result, no site adjacent queues are anticipated at both driveways under these traffic conditions. The proposed eastbound left turn lane with a minimum of 150-feet of storage at the second driveway (primary neighborhood entry) would sufficiently accommodate the 95th percentile peak hour queues.

Additionally, there are no sharp curves or dangerous intersections proposed that would increase hazards due to geometric design features. The Project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant and no mitigation is required.

Threshold d: ***Would the Project result in inadequate emergency access?***

As discussed in Section 3.0, *Project Description*, the Project includes a fire master plan to ensure proper installation and maintenance of fire access roadways, proper siting of hydrants, adequate water supply, and access to the structures. The Project would be required to comply with all applicable fire codes and ordinances for construction, access, water mains, fire flows, and fire hydrants. The Project would also provide adequate emergency access for emergency vehicles via Lampson Avenue. A restricted emergency vehicle access point with Lampson Avenue would be provided at the eastern end of the site. The effectiveness of emergency response and firefighting operations is directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. In accordance with OCFA Guideline B-09, Fire Master Plans for Commercial & Residential Development, Firesafe Planning Solutions prepared a Fire Master Plan for the Project (see Figure 4.8-3, *Fire Master Plan*). The Fire Master Plan demonstrates the Project's compliance with the California Fire and Building Codes and other regulations emergency access to the Project site, including but not limited to fire access and roadway design, fire lane identification, and access to structures. Compliance with OCFA Guidelines ensures that the Project is designed and constructed to provide adequate emergency access for emergency vehicles. Furthermore, the Project would be required to comply with all applicable fire code and ordinances for construction, access, water mains, fire flows, and fire hydrants. For example, site plans would be submitted to OCFA to ensure compliance with OCFA standard conditions, including fire flow requirement based upon the tenant type, building size, and building type. Access to and around structures would meet OCFA and CFC requirements. Additionally, pursuant to LAMC Section 12.08, the Project would be required to provide adequate emergency access along abutting roadways during temporary construction activities within the public right-of-way. Specifically, the Project's compliance with LAMC 12.08.200 would ensure adequate access for all vehicles during temporary lane closures.

Therefore, the Project would not result in inadequate emergency access and impacts would be less than significant. No mitigation is required.

4.15.6 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development. The analysis under Threshold a indicates that the Project would not conflict with relevant programs, plans, and policies addressing the circulation system. Each related project would also be required to comply with all applicable relevant programs, plans, and policies. Therefore, no cumulative impact would occur.

Pursuant to the City's cumulative VMT threshold, a significant cumulative impact would occur if the Project increased the total regional VMT compared to the cumulative no project condition. The Project is not proposing a general plan amendment nor a change of zone. Since the Project is consistent with the underlaying land use assumptions of the General Plan and Zoning the cumulative no project would be the same as the cumulative with project. Therefore, the cumulative impact would be less than significant.

However, as discussed under Threshold b, the Project would generate VMT per capita exceeding the regional VMT per capita threshold (15% below the regional average) by 27.0% under long range (2045) conditions. Therefore, although the Project would not exceed the City's adopted cumulative VMT threshold, it would not achieve 15% below the regional VMT per capita threshold under long range (2045) conditions. That said, as noted in the Technical Advisory, "A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa." Nonetheless, to be conservative given that the Project would not achieve 15% below the regional VMT per capita threshold under long range (2045) conditions, this analysis assumes the Project would result in cumulatively considerable VMT impacts.

As discussed under Threshold c and d, implementation of the Project would not result in hazardous conditions or result in inadequate emergency access. Impacts on a cumulative level would also be less than significant.

4.15.7 Significance of Impacts Before Mitigation

Threshold a: Less than Significant Impact. The Project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

Threshold b: Potentially Significant Direct and Cumulatively Considerable Impact. A VMT impact is considered significant if a residential project generates more than 15% below the existing regional residential VMT per capita. As shown in Table 4.15-2, the Project would generate VMT per capita exceeding the City's adopted VMT impact threshold of 14.8 by 31.8% in the baseline condition and

27.7% in the cumulative condition. Impacts would be potentially significant and cumulatively considerable. As such, these impacts will require mitigation, as described below.

Threshold c: Less than Significant Impact. The Project would not create or substantially increase safety hazards due to a design feature or incompatible use. Impacts would be less than significant.

Threshold d: Less than Significant Impact. Adequate emergency access would be provided to the Project site during construction and long-term operation. The Project would not result in inadequate emergency access. Impacts would be less than significant.

4.15.8 Mitigation

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT has been determined based on the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021). In addition to specific tenancy considerations, which may affect the effectiveness of TDM measures, land use context is a major factor relevant to the potential application and effectiveness of TDM measures. More specifically, the land use context of the Project is characteristically suburban. The Project's suburban context acts to reduce the range of feasible TDM measures and moderates their potential effectiveness. According to the 2021 CAPCOA Handbook, the maximum effectiveness for the TDM measures under the neighborhood design features is 10% (CAPCOA, 2021, p. 64).

Consistent with VMT reduction measures described within CAPCOA, reductions to VMT shall include the strategies identified in Mitigation Measure MM 4.15-1. In addition to Mitigation Measure MM 4.15-1, the Project would provide pedestrian improvements within the development connecting to existing off-site facilities.

MM 4.15-1 Prior to the issuance of certificate of occupancy, the Project Applicant shall provide documentation that it has implemented the CAPCOA strategies identified below. Verification that the CAPCOA strategies were completed shall be verified by the City's Public Works Director.

1. Provide pedestrian and bicycle network improvements within the development connecting to existing off-site facilities, as detailed in Section 3.3.2 of this EIR.
2. Confirm with the OCTA whether providing new or re-routing existing transit services to the site would be feasible, as determined by OCTA pursuant to OCTA's standards.
3. Install broadband infrastructure or other communication technologies that encourages telecommuting and working from home, which would reduce mobile source emission.

4.15.9 Significance of Impacts After Mitigation

Threshold b: Significant and Unavoidable Direct and Cumulatively Considerable Impact. Project components and mitigation measures available to reduce VMT include developing pedestrian network improvements and implementing TDM measures such as those listed in Mitigation Measure MM 4.15-1. Even where the TDM measures are implemented to their maximum effectiveness of 10%, the Project would still not be able to reduce its VMT impact to a level of less than significant which requires a 31.8% reduction for baseline (2022) conditions and 27.7% for buildout (2045) conditions. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively considerable basis.

To ensure that all feasible mitigation measures were incorporated to reduce VMT impacts, measures identified in the 2021 CAPCOA Handbook were considered. As discussed above, the 2021 CAPCOA Handbook describes methods to reduce VMT. As discussed in Attachment C, VMT Reduction Matrix, of the VMT Report (*Technical Appendix N2*), all applicable transportation mitigation measures were evaluated to reduce VMT impacts. Even with incorporation of all feasible mitigation measures, impacts would remain significant and unavoidable.

As discussed in Section 4.12, *Population and Housing*, of this EIR, the Project would place housing within a job-rich area. Although there would be a significant and unavoidable impact related to vehicle miles traveled (VMT), this is due to the fact that the Project site does not currently have transit or alternative transportation opportunities and has a higher VMT per capita compared to the County's regional average. Nevertheless, co-locating housing near jobs reduces vehicle travel lengths and associated greenhouse gas emissions caused by long commute distances.

4.16 TRIBAL CULTURAL RESOURCES

The analysis in this Subsection relies on information from a cultural resources assessment report titled "Cultural Resources Study for the 4665 Lampson Avenue Project," dated September 23, 2022. The report was prepared by BFSA and is included as *Technical Appendix D1* to this EIR. The analyis in this Subsection also contains information obtained by the City during consultation with local Native American tribal representatives. All references used in this Subsection are listed in EIR Section 8.0, *References*.

Confidential information has been redacted from *Technical Appendix D1* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the City, and BFSA is considered confidential in respect to places that may have traditional cultural significance (Government Code Section 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communicationsare treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archaeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (California Code Regulations Secion 15120(d)).

4.16.1 EXISTING CONDITIONS

The information provided below is a summary of the Existing Conditions information provided in Subsection 4.4, *Cultural Resources*, and *Technical Appendix D1*, of this EIR. Please refer to Subsection 4.4, *Cultural Resources,* for a detailed description of the prehistoric, ethnohistoric, and historic setting as it applies to Native Americans.

A. Prehistoric

In northern San Diego, Orange, and Riverside counties, most researchers organize prehistory into the Paleo Indian, Archaic, and Late Prehistoric Periods and history into the Mission, Rancho, and American Settlement periods. The San Dieguito Complex, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex are the archaeological manifestations that have been used to describe the Archaic and Late Prehistoric periods in the region. These cultural periods are described in Subsection 4.4, *Cultural Resources*.

B. Ethnohistoric Setting

Archaeological evidence suggests that the Native American inhabitation of the Alamitos Mesa dates back 3,000 years. This period begins with the Hispanic intrusion into southern California and the founding of the Mission San Juan Capistrano near what is currently the Lake Forest area in 1776. Ethnohistorical and ethnographic evidence indicates that three Shoshonean-speaking groups that occupied the southern and eastern portions of Orange County were the Luiseño, Gabrielino, and Acjachemen (Juaneño), each of which is culturally similar but that possess slight dialectic differences. Along the coast, the groups made use of the available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for these groups. The elaborate kinship and clan systems between these groups

facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian, resources from the eastern deserts, and steatite from the Channel Islands. All three groups also shared a distinct world view that stemmed from use of the hallucinogen datura and an elaborate religion that included ritualized sand paintings of the sacred being Chingichngish. Some notable differences, however, can be seen in the material culture between the three groups. For example, the Gabrielino used containers made from steatite, which is a soapstone material from the Santa Catalina Islands, instead of pottery, which was the preferred material for the Juaneño and the Luiseño.

The Luiseño, Gabrielino, and Juaneño occupied villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. The Aliso Creek watershed has been reported to be the ethnohistoric boundary between the Luiseño, Gabrielino, and Juaneño. The Gabrielino occupied territory northwest of Aliso Creek, the Juaneño occupied territory to the south, and the Luiseño occupied territory to the southeast and east. However, there is evidence indicating that the Juaneño territory actually extended farther north, possibly past the Santa Ana River into modern-day Huntington Beach.

4.16.2 Regulatory Framework

A. Federal

1. Native American Graves Protection and Repatriation Act (NAGPRA)

The NAGPRA (Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation. (NPS, 2023c)

One major purpose of this statute is to require that federal agencies and museums receiving Federal funds inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies and museums must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. Once lineal descent or cultural affiliation has been established, and in some cases the right of possession also has been demonstrated, lineal descendants, affiliated Indian Tribes, or affiliated Native Hawaiian organizations normally make the final determination about the disposition of cultural items. Disposition may take many forms from reburial to long term curation, according to the wishes of the lineal descendent(s) or culturally affiliated Tribe(s). (NPS, 2023c)

The second major purpose of the statute is to provide greater protection for Native American burial sites and more careful control over the removal of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on Federal and tribal lands. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archaeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are

unexpectedly discovered on Federal or tribal lands. Excavation or removal of any such items also must be done under procedures required by the Archaeological Resources Protection Act. This NAGPRA requirement is likely to encourage the in-situ preservation of archaeological sites, or at least the portions of them that contain burials or other kinds of cultural items. (NPS, 2023c)

Other provisions of NAGPRA: (1) prohibits trafficking in human remains and cultural items; (2) authorizes the Secretary of the Interior to administer a grants program to assist museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; (4) authorizes the Secretary of the Interior to penalize museums that fail to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with this Review Committee. (NPS, 2023c)

2. Federal Antiquities Act

The Antiquities Act is the first law to establish that archaeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. (NPS, 2023d)

B. State

1. California Administrative Code, Title 14, Section 4308

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value." (NPS, n.d.)

2. California Code of Regulations Title 14, Section 1427

California Code of Regulations Title 14, Section 1427 provides that: "No person shall collect or remove any object or thing of archaeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archaeological or historical interest or value is found." (NAHC, n.d.)

3. Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to Native Americans. AB 52 was approved on September 25, 2014. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse

impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017a)

§ 21074 of the Public Resources Code defines "tribal cultural resources." In brief, in order to be considered a "tribal cultural resource," a resource must be either:

(1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or

(2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)

4. Senaite Bill 18 (SB 18)

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries, religious, ceremonial sites, shrines, burial grounds, prehistoric ruins, archaeological or historic sites, Native American rock art inscriptions, or features of Native American historic, cultural, and sacred sites.

Senate Bill 18 on Traditional Tribal Cultural Places was signed into law in September 2004 and went into effect on March 1, 2005. It places requirements upon local governments for developments within or near traditional tribal cultural places (TTCP). SB 18 requires local jurisdictions to provide opportunities for involvement of California Native American tribes in the land planning process for

the purpose of preserving TTCP. The Final Tribal Guidelines recommend that the California NAHC provide written information as soon as possible but no later than 30 days after receiving notice of the project to inform the lead agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation, or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, they would be included in the project's EIR.

SB 18 requires a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCP prior to the adoption, revision, amendment, or update of a city's or county's general plan. In addition, SB 18 provides a new definition of TTCP, requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law also amended Civil Code Section 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting cultural places.

5. State Health and Safety Code

California HSC § 7050.5(b) requires that excavation and disturbance activities must cease "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery…" until the coroner can determine the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from "internment or a place of storage while awaiting internment" with the intent to sell them or to dissect them with "malice or wantonness" is a public offense punishable by imprisonment in a state prison. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that "all California Indian human remains and cultural items are to be treated with dignity and respect." It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims. (CA Legislative Information, n.d.)

6. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State CEQA Guidelines) establishes the procedure for determining the significance of impacts to archaeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows: (OPR, 2022)

- *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).*
- *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
- *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:*
    - *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
    - *Is associated with the 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.*
- *The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.*

4.16.3 Methodology

The analysis of tribal cultural resources is based on a cultural resources records search through SCCIC at CSU Fullerton, historic background research, a review of historic aerial photographs, and a survey of the Project site. In addition, this analysis is based on consultation between the City and interested Native American tribes pursuant to AB 52.

4.16.4 Basis for Determining Significance

According to Section XVIII of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to tribal cultural resources if the Project or any Project-related component would (OPR, 2022):

- *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:*

  a) 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

  b) 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.16.5 Impact Analysis

Threshold a:	***Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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: 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 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

As discussed in Section 4.4, *Cultural Resources*, of this EIR, there are no historical resources identified within the Project site. Additionally, there are no known tribal cultural resources on the Project site. Because the site is currently developed, due to past grading activities and historic agricultural uses, the potential for the Project's construction activities to affect an unidentified tribal cultural resource is considered low. However, while unlikely, the presence of previously undiscovered subsurface tribal cultural resources on the Project site remains possible during grading activities in native soils (e.g., previously undisturbed soils due to deeper excavation).

As part of the mandatory AB 52 consultation process required by State law, the City sent notification of the Project to Native American tribes with possible traditional or cultural affiliation to the Project area. The City sent notification letters of the proposed Project to the following 14 Native American tribes:

- Gabrielino-Tongva Tribe;
- Juaneno Band of Mission Indians Acjachemen Nation;

- Gabrielino Tongva Indians of California Tribal Council;
- Ewiiaapaayp Band of Kumeyaay;
- Pala Band of Mission Indians;
- Gabrielino/Tongva Nation;
- Campo Band of Diegueno;
- Mesa Grande Band of Diegueno;
- La Posta Band of Diegueno Mission Indians;
- Gabrieleno/Tongva San Gabriel Band of Mission Indians;
- Santa Rosa Band of Cahuilla Indians;
- Gabrieleno Band of Mission Indians – Kizh Nation;
- Manzanita Band of Kumeyaay Nation; and
- Soboba Band of Luiseno Indians.

During the course of the tribal consultation process, the Gabrieleno Band of Mission Indians – Kizh Nation responded to the City's invitation for consultation and provided the City with tribal archive information indicating that tribal cultural resources, as defined in Public Resources Code § 21074, have the potential to exist in the Project area have explained their concerns with specific subsurface ground disturbance activities that have impacted and destroyed their tribal cultural resources in the past. Accordingly, there is potential for significant impacts to occur if tribal cultural resources are inadvertently discovered during grading activities in native soils and mitigation is required. Conservatively, this impact would be potentially significant before implementation of mitigation.

4.16.6 Cumulative Impact Analysis

The potential for Project construction to result in cumulatively-considerable impacts to tribal, religious, and cultural resources were analyzed in conjunction with other projects other projects located in the immediate vicinity of the Project site. Impacts to previously undiscovered subsurface tribal cultural resources are typically site specific from ground disturbing activities and generally do not combine to result in cumulative impacts unless resources are identified immediately adjacent to the Project site. Nonetheless, the potential exists that a significant tribal cultural resource could be discovered during grading into native soils. However, there are no related projects in the vicinity that would affect tribal cultural resources in combination with Project implementation. Therefore, cumulative impacts to archaeological resources would be less than significant.

4.16.7 Significance of Impacts Before Mitigation

Threshold a: Significant Direct Impact. There is evidence indicating that tribal cultural resources are present on the Project site or have been found previously on the Project site. Project construction activities have the potential to unearth and adversely impact tribal cultural resources that may be buried in native soils at the Project site. Impacts would be potentially significant and mitigation is required.

4.16.8 MITIGATION

MM 4.16-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

1. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

2. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

3. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

4. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

5. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in

the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

MM 4.16-2 Unanticipated Discovery of Human Remains and Associated Funerary Object.

1. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
2. If Native American human remains and/or grave goods discovered or recognized on the project site, then all construction activities shall immediately cease. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and all ground-disturbing activities shall immediately halt and shall remain halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed.
3. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).
4. Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Kizh monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5(f).)
5. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.
6. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

MM 4.16-3 Procedures for Burials and Funerary Remains.

1. As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
2. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
3. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
4. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed.
5. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.
6. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

7. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

4.16.9 Significance of Impacts After Mitigation

Threshold a: Less-than-Significant with Mitigation Incorporated. Implementation of Mitigation Measures MM 4.16-1 through 4.16-3 would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project development. With implementation of the required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less than significant.

4.17 UTILITIES AND SERVICE SYSTEMS

The following analysis is based on information obtained from the Sanitary Sewer Analysis prepared for the Project by C&V Consulting, Inc. (hereinafter, "C&V") (refer to *Technical Appendix O*) (C&V, 2022); Golden State Water Company (GSWC) West Orange Service Area 2020 Urban Water Management Plan (GSWC, 2021); the City's General Plan; and the Project application materials.

4.17.1 EXISTING CONDITIONS

A. Water Service

The GSWC provides potable water to the Project site. GSWC obtains water supplies from two sources: groundwater from the Main Orange County Groundwater Basin and treated surface water purchased from the Metropolitan Water District of Southern California (MWD). Groundwater is projected to make up about 62 percent of GSWC's supplies, and imported water 38 percent, from 2015 to 2035. Recycled water is currently not used in GWSC's service area, due to the economic infeasibility of installing a recycled water distribution system; no recycled water use is projected in Los Alamitos through 2035. (City of Los Alamitos, 2014a)

B. Water Supply

1. Groundwater

GSWC owns and operates fourteen active wells with a combined capacity of 11,850 gallons per minute which pump local groundwater from the Coastal Plain of Orange County Groundwater Basin. This groundwater is injected with 12.5 percent liquid sodium hypochlorite at each wellhead to provide a disinfectant residual in the distribution system, then groundwater supplies are blended with water purchased from MWDOC.

The Basin is managed through financial incentives, based on uniformly establishing the Basin Production Percentage (BPP) for all pumpers in the Basin. The BPP is the ratio of groundwater production to total water demand, expressed as a percentage. Each year, OCWD assesses groundwater conditions in the Basin and sets the BPP for the following year. The considerations in setting the BPP include Santa Ana River stormflow, natural recharge, Santa Ana River baseflow, Groundwater Replenishment System supplies, and other imported and recycled water supplies. The BPP generally ranges from 60 to 80 percent – with an historical average hovering around 70 percent but a targeted supply of 75 percent. (GSWC, 2021)

2. Purchased Water

The GSWC West Orange service area purchases water from the Metropolitan Water District of Orange County (MWDOC). MWDOC was formed by Orange County voters in 1951 under the Municipal Water District Act of 1911 to provide imported water to inland areas of Orange County. MWDOC is governed by a seven-member board of Directors and is MWD's third largest member agency. MWDOC is a regional water wholesale agency that manages the vast majority of Orange County's

imported water supplies for regional uses. MWDOC covers an area supplying water to nearly 2.5 million people in a 600 mile service area.

MWDOC obtains its water from the imported water supplies secured by MWD. MWD's supplies consist of imported Colorado River Supplies, State Water Project supplies, as well as locally developed water supplies derived from surface water, groundwater, and recycled water assets. All of these supplies are collectively managed by MWD and then delivered to MWDOC for eventual delivery to retail agencies throughout MWDOC's service area. (GSWC, 2021)

3. Recycled Water

GSWC West Orange receives recycled water supplies from the City of Cerritos through its agreement with the County Sanitation District No. 2 of Los Angeles. The recycled water distribution system serves a limited number of recycled water connections in the GSWC West Orange service area. As such, GSWC West Orange has a reliable recycled water supply that can be used within its Service Area. (GSWC, 2021)

C. Wastewater Service

Although the Project site is in the City of Los Alamitos, the City of Seal Beach currently provides sewer service to the Project site. Per the City of Seal Beach Sewer Master Plan 2018, the City provides sewer service throughout the City in a service area that collects and conveys wastewater from the service area for treatment by the Orange County Sanitation District (OCSD). (C&V, 2022)

OCSD owns and operates two wastewater treatment plants, Reclamation Plant No. 1 in Fountain Valley and Treatment Plant No. 2 in Huntington Beach. Reclamation Plant No. 2 treats wastewater from the City and its sphere of influence and is adjacent to the Santa Ana River, approximately 1,500 feet from the Pacific Ocean in Huntington Beach. This plant provides a mix of advanced primary and secondary treatment. Primary treatment is the removal of solids using settling tanks, and secondary treatment is the reduction of organic matter using bacteria and oxygen, followed by further removal of solids. The plant receives raw wastewater through five major sewers, and discharges treated effluent into the ocean disposal system through a 120-inch outfall at 200 feet below sea level and nearly five miles offshore. Current capacity for Reclamation Plant No. 2 is 168 mgd of primary treated wastewater and 150 mgd of secondary treated wastewater. The current average flow is 63 mgd, so the remaining capacity at this plant is approximately 105 mgd. (OCSD, 2022)

D. Stormwater Drainage

Drainage facilities in Los Alamitos and Rossmoor consist of storm drains owned by the City—and in Rossmoor by the County of Orange—and drainage channels and storm drains owned by the Orange County Flood Control District and maintained by OC Public Works. These agencies maintain flood control facilities to prevent or minimize loss of life and property caused by flooding. (City of Los Alamitos, 2015a)

The existing site generally flows in a north to south direction into an existing westerly flowing concrete channel along the site's southerly property line. The westerly flowing channel is collected via an offsite 18-inch CMP that flows under the offsite driveway to Arbor Park and discharges into an offsite earthen channel on the west side of the driveway. Runoff flows within this earthen channel are then collected by an existing 24-inch CMP that flows westerly, discharges into a westerly flowing earthen channel within the Joint Forces Training Base, and then drains to the Old Ranch Country Club to the south. Runoff is ultimately conveyed downstream into the San Gabriel River under existing conditions, the combined total 100-year peak flow rate for the Project Site is approximately 40.28 cubic feet per second (cfs). (C&V , 2023)

E. Solid Waste

Universal Waste Systems, Inc (UWS) collects solid waste in Los Alamitos as of January 1, 2022. UWS provides waste hauling services to customers in California, Arizona and New Mexico, with six operating facilities, transfer stations and over 500 employees that service Orange County, Los Angeles County, and Riverside County. (City of Los Alamitos, n.d.)

Solid waste from the City is transported to Frank R. Bowerman Sanitary Landfill in the City of Irvine and the Olinda Alpha Sanitary Landfill near the City of Brea. Both facilities are operated by Orange County Waste and Recycling. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Frank R. Bowerman Sanitary Landfill has a permitted disposal capacity of 11,500 tons per day with a remaining capacity of 205,000,000 cubic yards (CalRecycle, 2022a). The Olinda Alpha Landfill has a permitted disposal capacity of 8,000 tons per day with a remaining capacity of 17,500,000 cubic yards (CalRecycle, 2022b).

F. Dry Utilities

1. Electricity

The City of Los Alamitos and Rossmoor receives electrical service from the Southern California Edison Company (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. (Urban Crossroads, 2023c)

2. Telecommunications

Several companies provide telecommunications services, including fiber optic and broadband internet, to residences and businesses throughout the City. Currently, the two largest providers in the City include Frontier Communications and Spectrum (Charter Communications).

4.17.2 Regulatory Framework

The following is a brief description of the federal, state, and local environmental laws and related regulations related to utilities and service systems.

A. Federal

1. Water Supply Regulations

❑ Clean Water Act

The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the EPA has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's NPDES permit program controls discharges. Point sources are discrete conveyances such as pipes or man- made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. (EPA, 2022d)

❑ Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorizes EPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary (health-related) standards. The 1996 amendments to SDWA require that EPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for EPA, also encourage attainment of secondary standards (nuisance-related). Under the Act, EPA also establishes minimum standards for state programs to protect underground sources of drinking water from endangerment by underground injection of fluids. (EPA, 2022f)

B. State

1. Water Supply Regulations

❑ Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance had not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the “model” ordinance drafted by the State of California shall apply within the affected jurisdiction. (CA Legislative Info, n.d.)

❑ Water Recycling in Landscaping Act

In 2000, Senate Bill 2095 (Water Recycling in Landscaping Act) was approved by Governor Davis requiring any local public or private entity that produces recycled water and determines that within 10 years it will provide recycled water within the boundaries of a local agency, to notify the local agency of that fact. In turn, local agencies are required to adopt and enforce within 180 days a specified recycled water ordinance, unless the local agency adopted a recycled water ordinance or other regulation requiring the use of recycled water in its jurisdiction prior to January 1, 2001. (CA Legislative Info, n.d.)

❑ Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) was proposed and adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to develop Urban Water Management Plans (UWMPs) over a 20-year planning horizon, and further required UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA.

The UWMPs provide a framework for long term water planning and inform the public of a supplier's plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and
- Water shortage contingency planning.

The UWMP Act has been modified over the years in response to the State's water shortages, droughts, and other factors. A significant amendment was made in 2009, after the drought of 2007-2009 and as a result of the governor's call for a statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as SB X7-7. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020. Beginning in 2016, retail water suppliers were required to comply with the water conservation requirements in SB X7-7 in order to be eligible for State water grants or loans. Retail water agencies are required to set targets and track progress toward decreasing daily per capita urban water use in their service area, which will assist the State in meeting its 20 percent reduction goal by 2020. (DWR, 2016, p. 1-2)

In 2018, new landmark water conservation legislation was signed into law. The 2018 Legislation (Senate Bill 606 and Assembly Bill 1668) establishes a new framework for long-term improvements in urban water use efficiency and drought planning as California adapts to climate change impacts. The

legislation requires that long-term urban water use efficiency standards be set so that urban retail water suppliers' urban water use objectives, together with other water uses excluded from the long-term standards, would exceed the statewide 2020 water conservation targets required pursuant to SB X7-7. (DWR, 2020)

❑ Government Code § 66473.7(b)(2) (Senate Bill 221)

Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. SB 221 is intended as a 'fail safe' mechanism to ensure that collaboration on the needed water supplies to serve a new large subdivision occurs before construction begins. SB 221 requires the legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove a tentative map, must include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply must be requested by the subdivision applicant or local agency, at the discretion of the local agency, and id based on written verification from the applicable public water system within 90 days of a request. SB 221 does not apply to any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households. (DWR, 2003; CA Legislative Info, n.d.)

❑ California Senate Bill 610

CWC (Water Code) sections 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. (DWR, 2003; CA Legislative Info, n.d.) For the purposes of SB 610, "project" means any of the following:

(1) A proposed residential development of more than 500 dwelling units.

(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

(4) A proposed hotel or motel, or both, having more than 500 rooms.

(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

(6) A mixed-use project that includes one or more of the projects specified in this subdivision.

(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project. (DWR, 2003; CA Legislative Info, n.d.)

Because the Project proposes a residential development of 246 dwelling units, a water supply assessment was not required.

❑ CA. Water Code § 10610 et seq. (Senate Bill 901)

Signed into law on October 16, 1995, SB 901 required every urban water supplier to identify as part of its urban water management plan, the existing and planned sources of water available to the supplier over a prescribed 5-year period. The code requires the water service purveyor to assess the projected water demand associated with a proposed project under environmental review. Later provisions of SB 901 required compliance in the event that the proposed Project involved the adoption of a specific plan, amendment to, or revision of the land use element of a general plan or specific plan that would result in a net increase in the state population density. Upon completion of the water assessment, cities and counties may agree or disagree with the conclusions of the water service purveyors but cannot approve projects in the face of documented water shortfalls without first making certain findings. (CA Legislative Info, n.d.)

❑ Executive Order B-29-15

EO B-29-15 ordered the SWRCB to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016; directed the California Department of Water Resources (DWR) to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes; and directed the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. (SWRCB, 2023)

❑ Executive Order B-37-16

Signed on May 9, 2016, EO B-37-16 established a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans. (SWRCB, 2023)

❑ Executive Order B-40-17

Signed on April 7, 2017, EO B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including the DWR, released a plan to continue making water conservation a way of life. (SWRCB, 2023)

❑ Sustainable Groundwater Management Act (SGMA)

The Sustainable Groundwater Management Act (SGMA) established a new structure for managing California's groundwater resources at a local level by local agencies. SGMA required, by June 30, 2017, the formation of locally-controlled groundwater sustainability agencies (GSAs) in the State's high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016. (DWR, n.d.)

2. Solid Waste Regulations

❑ California Solid Waste Integrated Waste Management Act (AB 939, 1989)

The Integrated Waste Management Act (IWMA) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (CIWMB) and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal (it should be noted that the CIWMB no longer exists, and its duties have been assumed by CalRecycle). As part of the IWMA, the CIWMB was given a purpose to mandate the reduction of disposed solid waste. (CalRecycle, n.d.) The IWMA also required:

- the establishment of a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element.

- each city, by July 1, 1991, to prepare, adopt and submit a SRRE to the county which includes the following components: waste characterization; source reduction; recycling; composting; solid waste facility capacity; education and public information; funding; special waste (asbestos, sewage sludge, etc.); and household hazardous waste.

- each county, by January 1, 1991, to prepare a SRRE for its unincorporated area, with the same components described above, and a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction which cannot be reduced or recycled for a 15-year period.

- each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP), which includes all of the elements described above.

- each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities.

- the CIWMB to review the implementation of each SRRE at least once every two years.

- The IWMA required the CIWMB, in conjunction with an inspection conducted by a Lead Enforcement Agency (LEA), to conduct at least one inspection per year of each solid waste facility in the state.

Additionally, the IWMA established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities. (CalRecycle, n.d.)

❑ Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued. (CalRecycle, n.d.)

❑ Mandatory Commercial Recycling Program (AB 341)

AB 341 (Chapter 476, Statutes of 2011 [Chesbro, AB 341]) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB-341 was designed to help meet California's recycling goal of 75% by the year 2020. AB 341 requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, n.d.)

❑ 2022 California Green Building Standards Code (CAL Green; Part 11 of Title 24, California Code of Regulations)

The most recent edition of CalGreen became effective January 1, 2023, and is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including residential structures and elementary schools). CalGreen Section 5.408.3 requires that 100 percent of trees, stumps, rocks, and associated vegetation

and soils resulting from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed. (CBSC, 2020)

3. Energy Conservation Regulations

- ❑ California Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CA. Code Regs. 6)

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. In 1975 the Department of Housing and Community Development adopted rudimentary energy conservation standards under their State Housing Law authority that were a precursor to the first generation of the Standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the Energy Commission (formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement the Standards. The Energy Commission's statute created separate authority and specific direction regarding what the Standards are to address, what criteria are to be met in developing the Standards, and what implementation tools, aids, and technical assistance are to be provided.

The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Standards that contain data and other information that helps builders comply with the Standards.

The 2022 update to the Building Energy Efficiency Standards focuses on four key areas in new construction of homes and businesses: 1) encouraging electric heat pump technology and use, 2) establishing electric-ready requirements when natural gas is installed, 3) expanding solar photovoltaic (PV) system and battery storage standards, and 4) strengthening ventilation standards to improve indoor air quality. The 2022 Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language.

Public Resources Code Section 25402.1 also requires the Energy Commission to support the performance standards with compliance tools for builders and building designers. The Alternative Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Standards establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance with the Standards. From this, the Energy Commission develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes

provisions for private firms seeking to develop compliance software for approval by the Energy Commission, which further encourages flexibility and innovation.

❑ California Solar Rights and Solar Shade Control Acts

The Solar Rights Act sets parameters for establishing solar easements, prohibits ordinances and private covenants which restrict solar systems, and requires communities to consider passive solar and natural heating and cooling opportunities in new construction. This Act is applicable to all California cities and counties. California's solar access laws appear in the state's Civil, Government, Health and Safety, and Public Resources Codes. California Pub Res Code § 25980 sets forth the Solar Shade Control Act, which encourages the use of trees and other natural shading except in cases where the shading may interfere with the use of active and passive solar systems. (EPIC, 2014; EPIC, 2010)

C. Local

1. City of Los Alamitos General Plan

The General Plan identifies goals related to utilities and service systems through its elements. These goals and policies and a discussion of the Project's consistency are discussed in Table 4.10-2, *General Plan Consistency Analysis*, in EIR Subsection 4.10, *Land Use and Planning*.

2. City of Los Alamitos Municipal Code

The City of Los Alamitos Municipal Code (LAMC) identifies requirements related to utilities and service systems. LAMC that are applicable to the Project are as follows.

- **Chapter 8.12 - Integrated Waste Management.** The purpose of this chapter is to regulate solid waste handling in order to protect the public health, safety, and welfare and to meet the City's obligations under the California Integrated Waste Management Act 1989 (AB 939).

- **Chapter 8.13 – Construction and Demolition Waste.** The purpose of this chapter is to reduce the amount of waste generated within the city of Los Alamitos which is ultimately disposed of in landfills by requiring the project applicant for every project covered by this chapter to divert a minimum of fifty (50) percent of the construction and demolition debris resulting from that project, in compliance with state and local statutory goals and policies, and to create a mechanism to secure compliance with the stated diversion requirements.

- **Chapter 13.04 – Water Conservation.** This chapter provides water conservation provisions for all water users, water users being those persons, customers, and property served within the incorporated boundaries of the City.

4.17.3 METHODOLOGY

The Project's water demand was calculated using GSWC's 2020 UWMP, the 2016-2020 average unit demand factors for single family and multi-family residential uses.

For the sewer monitoring analysis, flow monitoring was conducted under the existing conditions of the three manholes: 1) Basswood and Aster Street (Manhole A-16); 2) Candleberry Avenue and Aster Street (Manhole A-21); and 3) Elder Avenue (Manhole A-25). The existing Project site peak flow was subtracted from the projected Project site flow. The delta flow was then added to the existing monitored peak flows to obtain the proposed development conditions. (C&V, 2022)

To calculate Project energy demands, information from the CalEEMod Version 2022.1 outputs for the Project's Air Quality Impact Analysis (*Technical Appendix B1* to this EIR) was utilized to provide Project-related construction equipment, transportation energy demands, and operational energy demands. Outputs from the annual model runs are provided in Appendices 4.1 through 4.2 of the Project's Energy Analysis (see *Technical Appendix E* to this EIR). No natural gas would be used as a result of the Project (Section 4.7, GHG, PDF GHG-2), and as such, use of natural gas is not considered in the EIR analysis.

The analysis of potential hydrology impacts is based upon the preliminary hydrology study and prepared specifically for the Project site. The hydrology calculations were prepared using the Rational Method per the County of Orange Hydrology Manual.

The Project's construction waste generation was calculated using the United States Environmental Protection Agency's (EPA) estimated construction generation rate for residential development. The rate combines national statistical data on industry activity with point source waste assessment data (i.e., waste sampling at construction, renovation, and demolition sites) to estimate the amount of Construction & Demolition materials produced nationally. (EPA, 2009)

The Project's solid waste generation was calculated using the CalRecycle estimated solid waste generation rates. Solid waste generation rates estimate the amount of waste created by residences or businesses over a certain amount of time (day, year, etc.). Waste generation includes all materials discarded, whether or not they are later recycled or disposed in a landfill. (CalRecycle, 2019)

4.17.4 Basis for Determining Significance

According to Section XIX of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would (OPR, 2022):

- *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;*

- *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;*

- *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;*

- *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;*

- *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

4.17.5 IMPACT ANALYSIS

Threshold a: ***Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

A. Water Facilities

Water service to the Project site would be provided by GSWC. Water demand associated with the Project would consist of interior plumbing devices (i.e., showers, sinks, toilets, faucets), outdoor landscape irrigation, washers, and other uses similar to that of a residential development. Water supply is discussed in detail under Threshold b, below. Based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. The Project would not require the construction of new or expanded water facilities. The Project would not require the relocation of water facilities. The Project would include the installation of new water lines within the Project site, connecting to existing facilities within Lampson Avenue. The Project would include a 1,200-foot watermain extension between the eastern driveway and the existing GSWC watermain at the intersection of Lunar and Lampson. The Project would include, at a minimum, an 8" watermain size for the extension. These connections would be part of the Project's construction phase, the impacts of which are evaluated throughout this EIR. As that evaluation demonstrates, the construction of the Project's water lines necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less-than-significant and no mitigation is required.

B. Wastewater and Wastewater Treatment Facilities

Although the Project site is located in the City of Los Alamitos, wastewater service would be served by the City of Seal Beach. Discussion of the sewer system and its capacity is discussed under Threshold c, below. The Project generated wastewater would be well within the capacity of Reclamation Plant No. 2. and would not require OCSD to build new or expanded wastewater treatment facilities.

The Project would include the installation of an on-site lift station and force main at the southeast corner of the Project site. The Project would include sewer lines within the Project site, connecting to

existing facilities within Lampson Avenue. These connections would be part of the Project's construction phase, the impacts of which are evaluated throughout this EIR. As that evaluation demonstrates, the construction of the Project's sewer lines necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less than significant and no mitigation is required.

C. Stormwater Drainage Facilities

As discussed in Section 4.9, *Hydrology and Water Quality*, the Project would increase the amount of impervious surface within the Project site. Two stormwater drainage facility plans have been proposed to accommodate stormwater runoff associated with the increase in this amount of impervious surface: an on-site storm drain facilities and an alternate off-site storm drain facilities.

1. On-Site Storm Drain Facilities

The preferred treatment of stormwater runoff for the Project would be conveyance by roof downspouts or street surface flow to proposed gutters and collected by thru-curb inlet bio-filtration devices or catch basin inlets on-site for water quality treatment. The bio-filtration devices direct flows via onsite underground storm drain system to an underground detention system located under parking areas at the southwest portion of the site. From the detention system, a stormwater sump pump located in the southwest corner of the site would convey flows into the existing storm drain pipe at the southwest corner of the site to match the existing flow pattern. The combined, total 100-year peak flow rate for the Project Site is approximately 44.31 cfs under the proposed conditions, which would be a higher peak runoff flowrate than the existing condition of the site of 40.28 cfs. Figure 4.9-4, *Proposed Conditions Hydrology Map* illustrates the post-development drainage conditions of the Project site. The proposed drainage design would follow the existing drainage pattern with surface flows to on-site drainage facilities that would ultimately outlet into the existing headwall on the southwest corner of the Project site.

2. Alternate Off-Site Storm Drain Facilities

In the event the proposed route described above is not available, an alternate treatment of stormwater runoff for the Project would be conveyance to offsite storm drain facilities. Figure 4.9-5, *Proposed Alternate Conditions Hydrology Map* illustrates the post-development drainage conditions for this drainage and detention alternate. From the detention system, a stormwater sump pump located in the southwest corner of the site will convey flows onto Lampson Avenue through a parkway culvert. Due to existing flooding concerns on Lampson Avenue, the onsite pump system would allow for low flows to enter Lampson Avenue up until the time that the flows begin to exceed the allowed 25-year storm event in Lampson Avenue. At that point, peak flows would be detained onsite. Once the flows are no longer above the allowed 25-year storm event in Lampson Avenue, onsite flows would continue pumping to Lampson Avenue normally.

With respect to both of these facility designs, no new or expanded off-site storm drain facilities beyond those proposed as part of the Project are required to accommodate stormwater runoff from the Project

site. The impacts of these designs are evaluated throughout this EIR. As that evaluation demonstrates, the construction of the Project's storm drain facilities necessary to serve the Project would not result in any significant physical effects on the environment. Impacts would be less-than-significant and no mitigation is required.

D. Dry Utilities (Electrical Power, Natural Gas, and Telecommunications)

The Project also would involve utility connections to provide electric power and telecommunications services to the Project site., No natural gas would be used as a result of the Project (PDF GHG-2), and as such, use of natural gas is not considered in the EIR analysis. The Project would be served in accordance with the CPUC and Federal Energy Regulatory Commission tariffs. As discussed in Section 4.5, *Energy*, Project operational energy demands are estimated to be 98,388 kWh/year of electricity which would be supplied by SCE. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other residential uses of similar scale and configuration. No new or expanded off-site dry utilities are required to serve the Project, and therefore there would be no impact associated with any such facilities that could cause significant environmental effects.

The installation of the proposed on-site infrastructure improvements would result in physical environmental impacts; however, these impacts have been included in the analyses of construction-related effects presented throughout this EIR, (e.g., air quality impacts, impacts to biological and cultural resources, water quality impacts, and noise and vibration impacts, etc.). Any applicable Project-specific mitigation measures for construction identified for each topical issue would address potential significant impacts associated with construction and installation of utilities. Therefore, through consistent implementation of a variety of measures related to construction impacts, no additional impacts related to construction and operation of utility systems would occur. No mitigation is required.

Threshold b:	***Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

As previously discussed, GSWC would provide potable water service to the Project site[1]. According to GSWC's 2020 UWMP, the 2016-2020 average unit demand factors for single family and multi-family are 0.26 and 2.23 acre-feet of water per year (AFY)/Connection, respectively (GSWC, 2021). The Project includes 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes within three 3-story structures. The total water demand for the Project would be 50.63 AFY, which is comprised of 43.94 AFY for single family and 6.69 AFY for multi-family.

[1] Because the Project proposes a residential development of 246 dwelling units, a water supply assessment under SB 610 is not required to evaluate the Project's water demand.

Table 4.17-1, *Total Supplies Available to GSWC West Orange through 2045 (AFY)*, presents the supplies available to the West Orange service area through 2045 according to the most recent UWMP from GSWC (adopted July 15, 2021). Table 4.17-2, *GSWC West Orange Projected Water Demands through 2045*, presents the projected water use through 2045 for the West Orange service area. Table 4.17-3, *GSWC West Orange Projected Water Supply and Demand through 2024*, presents the projected water supply and demand through 2045 for the West Orange service area. GSWC West Orange service area will only access enough water to meet its needs in any given year. Accordingly, although some of the supplies available to GSWC West Orange service area are shared among three GSWC service areas, GSWC West Orange will not acquire the additional supplies unless they are needed as part of GSWC's regional water management among the three service areas. As such, GSWC West Orange will acquire the total projected supplies as shown in Table 4.17-2.

Table 4.17-1 Total Supplies Available to GSWC West Orange through 2045 (AFY)

Total		2025	2030	2035	2040	2045
Normal		21,940	22,350	22,770	23,202	23,645
Single Dry Year		21,940	22,350	22,770	23,202	23,645
Multi-Year Drought	Year 1	21,940	22,350	22,770	23,202	23,645
	Year 2	21,940	22,350	22,770	23,202	23,645
	Year 3	21,940	22,350	22,770	23,202	23,645
	Year 4	21,940	22,350	22,770	23,202	23,645
	Year 5	21,940	22,350	22,770	23,202	23,645

(GSWC, 2021, Table 3-15, p. 3-14)

Table 4.17-2 GSWC West Orange Projected Water Demands through 2045

Category	Annual Demands, acre-feet				
	2025	2030	2035	2040	2045
Single Family	6,493	6,671	6,855	7,044	7,237
Multi Family	2,667	2,740	2,816	2,893	2,973
Commercial/Institutional	3,283	3,374	3,467	3,562	3,660
Industrial	59	61	62	64	66
Landscape	810	833	856	879	903
Other	0	0	0	0	0
Water Loss	825	848	871	895	920
Total	**14,137**	**14,527**	**14,926**	**15,337**	**15,759**

(GSWC, 2021, Table 4-5, p. 4-6)

Table 4.17-3 GSWC West Orange Projected Water Supply and Demand through 2045

	Annual Demands, acre-feet				
	2025	2030	2035	2040	2045
Supply	21,940	22,350	22,770	23,202	23,645
Demand	14,137	14,527	14,926	15,337	15,759
Difference	7,803	7,823	7,844	7,865	7,886

(GSWC, 2021)

Given the difference between GSWC's projected water demand through 2045 and the total water supplies available through 2045, GSWC West Orange's waters supplies would be sufficient for the Project's estimated water demand of 50.63 AFY in normal, single dry years, and five consecutive dry year conditions through 2045. GSWC West Orange service area will only access enough water to meet its needs in any given year. The GSWC 2020 UWMP concluded that it has reliable supplies to meet its retail customer demands in normal, single dry years, and five consecutive dry year conditions through 2045. Groundwater, imported water from MWDOC, and the small amount of recycled water delivered within the service area by the City of Cerritos are all resilient during dry conditions and GSWC West Orange is therefore not faced with shortages during normal or dry years. (GSWC, 2021)

Based on the water supplies available and the estimated water demand, there are sufficient water supplies available to serve the Project during average, single dry, and multiple dry years. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, there would be sufficient water supplies available to serve the Project and impacts would be less than significant. No mitigation is required.

Threshold c: ***Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

A. Wastewater Facilities

Although the Project site is in the City of Los Alamitos, sanitary sewer services will be provided by the City of Seal Beach. Per the City of Seal Beach Sewer Master Plan 2018, the City provides sewer service throughout the City in a service area that collects and conveys wastewater from the service area for treatment by the OCSD.

A Sanitary Sewer Analysis was prepared for the Project and investigates the sewer discharge route for the proposed development to the existing sewer mains of three manholes: 1) Basswood and Aster Street (Manhole A-16); 2) Candleberry Avenue and Aster Street (Manhole A-21); and 3) Elder Avenue (Manhole A-25). (C&V, 2022)

1. Basswood and Aster Street (Manhole A-16)

The existing sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1 for a maximum design depth at half-full for pipe sized at 15" or under. Based on the monitoring data collected, existing peak flow for Manhole A-16 at the northern inlet was measured at 0.391 million gallons per day (MGD) (0.6050 cfs), with a max peak depth flow of 4.52 inches (Flow depth to pipe diameter ratio (d/D) = 0.3013). The data shows that the 15" sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. According to the City of Seal Beach Sewer Master Plan 2018, the design and analysis of collection system pipes is typically based upon the depth of flow to diameter ratio. All new pipe should be designed with a flow depth to pipe diameter ratio less than or equal to 0.5 for 15"

and smaller pipes and 0.64 for 18" and larger pipes. The remaining pipeline capacity is reserved for wet weather related inflow and infiltration into the system. Additionally, the area above the water surface helps to keep the sewage aerated, preventing septic conditions, and resulting odors. The peak wet weather depth of flow to pipe diameter ratio should not exceed 0.80. (City of Seal Beach, 2018)

Based on the proposed development, the Project is estimated to result in a total peak flow output of 49,468 gallons per day (GPD) (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent generated by the Project. The Project site would contribute an additional 0.0824 cfs to the trunk main. This would increase the flow depth-to-pipe diameter ratio to become 0.3216, an approximately 6.30 percent increase, which remains below the flow depth to pipe diameter ratio criteria and indicates that the proposed development would not have a significant impact on wastewater capacity. (C&V, 2022)

2. Candleberry Avenue and Aster Street (Manhole A-21)

The existing sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1, for a maximum design depth at half-full for pipe sized at 15" or under and pipes measured 18" or over with a d/D of 0.64. Since this is an elliptical sewer main sized at 17.88" x 17" (H x W), it was treated with the flow depth to pipe diameter ratio design criteria of 0.5 (half full). Based on the monitoring data collected, existing peak flow for Manhole A-21 at the northern inlet was measured at 0.377 MGD (0.5833 cfs), with a max peak depth flow of 5.84 inches (flow depth to pipe diameter ratio (d/D) = 0.3266). The data shows that the sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. The Project is estimated to be a total peak flow output of 49,468 GPD (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent from the Project site. The Project is estimated to be a total peak flow output of 49,468 GPD (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent from the Project site. The Project site would contribute an additional 0.0824 cfs to the trunk main. This would increase the d/D to become 0.3684, approximately 11.34 percent increase, which remains below the flow depth to pipe diameter ratio criteria and indicates that the proposed development would not have a significant impact on capacity. (C&V, 2022)

3. Elder Avenue (Manhole A-25)

The existing sewer pipes were analyzed per City of Seal Beach Sewer Master Plan 2018 Table ES-1, for a maximum design depth at half-full for pipe sized at 15" or under. Based on the monitoring data collected, existing peak flow for Manhole A-25 at the northern inlet was measured at 0.249 MGD (0.3853 cfs), with a max peak depth flow of 4.75 inches (flow depth to pipe diameter ratio (d/D) = 0.3958). The data shows that the 12" sewer pipe system capacity is capable of maintaining an adequate flow well below 50% of its flow depth capacity with the additional flow from the proposed development. The Project is estimated to be a total peak flow output of 49,468 GPD (0.0765 cfs) of effluent. After applying peak dry and wet weather factors, it was determined there would be 0.2348 cfs of effluent from the project site. The Project site would contribute an additional 0.0824 cfs to the trunk main. This would increase the d/D to become 0.441, approximately 10.24 increase, which remains

below the flow depth to pipe diameter ratio criteria and indicates that the proposed development would not have a significant impact on capacity (C&V, 2022).

In summary, the results from the Sanitary Sewer Analysis (refer to *Technical Appendix O*) demonstrate that the proposed flows, in addition to the observed flows, create a proposed depth of flow that would not impact the existing surrounding sanitary sewer systems. Based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in all three locations indicated good flow, along with hydraulics and relatively low depths. Wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and that the existing sewer system has adequate capacity for the proposed development. Accordingly, impacts would be less than significant and no mitigation is required.

B. Wastewater Treatment

The existing residual capacity at OCSD Reclamation Plant No. 2, is approximately 105 mgd. Conservatively assuming that Project generated wastewater would be 100 percent of total water demand, the Project would generate 45,200 gallons per day, which is well within the capacity of Reclamation Plant No. 2. Therefore, the Project would not require OCSD to build new or expanded wastewater treatment facilities, and impacts would be less than significant. No mitigation is required. Moreover, Project generated wastewater would ultimately be treated at one or more of the OCSD wastewater treatment plants. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). This would result in a less than significant impact.

Threshold d:	***Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

As stated previously, solid waste from the City is transported to Frank R. Bowerman Sanitary Landfill in the City of Irvine and the Olinda Alpha Sanitary Landfill near the City of Brea. Both facilities are operated by Orange County Waste and Recycling. The Frank R. Bowerman Sanitary Landfill has a permitted disposal capacity of 11,500 tons per day with a remaining capacity of 205,000,000 cubic yards (CalRecycle, 2022a). The Olinda Alpha Landfill has a permitted disposal capacity of 8,000 tons per day with a remaining capacity of 17,500,000 cubic yards (CalRecycle, 2022b).

1. Construction-Related Impacts

Waste generated during the construction phase of the Project would primarily consist of discarded materials from the construction of structures, common areas, infrastructure installation, and other Project-related construction activities. Based on the anticipated building square footage of 397,381 s.f.[2] and the US EPA's construction waste generation factor of 4.39 pounds (lbs) per sf for residential-

[2] 132,951 sf (SFD) + 197,610 sf (Townhomes) + 66,820 sf (Affordable Apartments – based on the largest sf for each type)

uses, approximately 872[3] tons of waste would be generated during the building construction phase (EPA, 2009, p. 8). The Project's building construction is reasonably expected to occur over a period of approximately 1,031 days (see Table 3-4, *Estimated Construction Schedule*), which corresponds to approximately 0.85[4] tons of construction waste generated per day during the building construction phase. Additional waste would be expected from infrastructure installation and other Project-related construction activities.

The two landfills that serve the Project site have a total remaining capacity of 222,500,000 cubic yards and a combined permitted disposal capacity of 19,500 tons per day. The estimated closing date of operation for the Frank R. Bowerman Landfill and the Olinda Alpha Landfill are 2053 and 2036, respectively. Based on the approximate construction waste generated per day, demolition and construction waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Furthermore, none of these regional landfill facilities are expected to reach their total maximum permitted disposal capacities during the Project's construction period. In addition, the Project would be required to comply with LAMC Chapter 8.13, Construction and Demolition Waste, which requires the Project Applicant to divert a minimum of 50 percent of the construction and demolition debris resulting from the proposed development in compliance with State and local statutory goals and policies.

2. Operational-Related Impacts

The Project includes 55 single family detached homes, 114 townhomes, and 77 for rent affordable multi-family apartment homes. Based on the single family generation rate of 11.4 pounds per dwelling unit per day, the single family and townhome portion of the Project would generate approximately 1,926.6[5] pounds of solid waste per day (~0.96 tons per day). Based on the multifamily generation rate of 8.6 pounds per dwelling units per day, the multifamily portion of the Project would generate approximately 662.2[6] pounds of solid waste per day (~0.33 tons per day). (CalRecycle, 2019) The total solid waste generation of the Project is approximately 1.29 tons per day.

As previously stated, the two landfills have a combined permitted disposal capacity of 19,500 tons per day. The Project's estimated solid waste generation represents approximately 0.007[7]% of the two landfill's capacity and therefore, would not contribute significantly to both of the landfill's daily capacity. Additionally, the Project is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). Accordingly, impacts would be less than significant and no mitigation is required.

[3] (397,381 sf x 4.39 lbs/sf) x (1 ton/2,000 lbs) = approximately 872 tons
[4] 872 tons/1,031 days = approximately 0.85 tons/day
[5] 169 dwelling units x 11.4 lbs/dwelling unit/day = 1,926.6 lbs per day
[6] 77 dwelling units x 8.6 lbs/dwelling unit/day = 662.2 lbs per day
[7] 1.29 tons per day/19,500 tons per day = ~0.007%

Threshold e: ***Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

Federal, State, and local statues and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste. The Project would be required to coordinate with the City's solid waste service provider, Universal Waste Systems Inc., to develop a collection program for recyclables, such as paper, plastics, glass, and aluminum, in accordance with local and State programs, including AB 341, *Mandatory Commercial Recycling, and the California Solid Waste Reuse and Recycling Act of 1991*.

The California Integrated Waste Management Act (AB 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. LAMC Chapter 8.12, Integrated Waste Management, regulates solid waste handling and meets the City's obligations under AB 939. The Project would be required to comply with Chapter 8.12 – Integrated Waste Management and other federal, State, or local regulations related to solid waste management. Therefore, the Project would not conflict with federal, State, or local regulations related to solid waste management. The Project would not have a significant impact related to compliance with regulations addressing the reduction of solid waste generation and disposal. Impacts would be less than significant and no mitigation is required.

4.17.6 Cumulative Impact Analysis

This cumulative impact analysis considers development of the proposed Project in conjunction with other development projects and planned development within the service area for the respective utility providers or the service area for specific facilities.

As with the Project, individual development projects would require the construction of necessary infrastructure (water and wastewater lines, storm drain facilities, dry utilities, and others) to serve the projects. Each individual development project is subject to review for utility capacity to avoid unanticipated interruption of service or inadequate supplies. Coordination with the utility providers would allow for the provision of utility services to the Project and other developments. The Project and cumulative development is subject to connection and service fees to offset increased demand and assist in facility expansion and service (at the time of need). The infrastructure needed for the Project would be to the identified construction impact area, and no new or expanded off-site infrastructure is required for the Project. The environmental impacts associated with the construction of these facilities are addressed throughout this EIR and would be less than significant. Therefore, the Project would not have a cumulatively considerable contribution to a significant cumulative impact associated with construction of utility infrastructure.

The cumulative area considered for water supply is the GSWC West Orange service area. The 2020 UWMP details current and future water supply in the service area. GSWC West Orange has reliable

supplies to meet its retail customer demands in normal, single dry years, and five consecutive dry year conditions through 2045. Its contract water from the Municipal Water District of Orange County coupled with groundwater supplies derived from the Orange County Groundwater Basin are resilient during dry conditions. As such, GSWC West Orange is not faced with shortages during normal or dry years through 2045. Because GSWC West Orange extracts only as much groundwater as is necessary to meet customer demands and has a reliable water purchase agreement with Municipal Water District of Orange County, it is anticipated that supplies and demands are congruent across all the scenarios examined. (GSWC, 2021, ES-4) Because the demand for water services can be met through 2045 with anticipated growth in its service area, cumulative impacts to water supply would be less than significant.

As discussed, based on sewer monitoring data collected in preparation of the Sanitary Sewer Analysis, the sewer systems in all three locations indicated good flow, along with hydraulics and relatively low depths. Wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and that the existing sewer system has adequate capacity for the proposed development. As such, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact on wastewater facilities.

The existing residual capacity at OCSD Reclamation Plant No. 2, is approximately 105 mgd. The City of Los Alamitos General Plan Update EIR forecasted that General Plan Buildout would generate approximately 2.4 mgd, well within Reclamation Plant No. 2 treatment capacity. Wastewater generation by the General Plan Update buildout would not require OCSD to build new or expanded wastewater treatment facilities, and cumulative impacts would be less than significant (City of Los Alamitos, 2014a).

AB 341 mandates the reduction of solid waste disposal in landfills (Public Resources Code Section 42649). The solid waste generated by construction and operation of the Project would represent nominal portion of daily disposal capacities at existing landfill facilities. The existing landfill facilities have sufficient daily capacity to handle solid waste during the Project's construction and operation and would not directly result in the need for expanded solid waste disposal facilities. Other cumulative development would be required to comply with applicable local, State, and federal regulations during both construction and long-term operation to reduce solid waste generation. Cumulative impacts associated with solid waste disposal would be considered less than significant.

Other individual development projects would be required to comply with local and State regulations during both construction and long-term operation to reduce solid waste generation. Therefore, the Project would not have a significant cumulative impact related to compliance with regulations addressing the reduction of solid waste generation and disposal.

4.17.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The installation of the utility and service system infrastructure improvements proposed by the Project Applicant would result in physical environmental

impacts on the Project site inherent in the Project's construction process; however, these impacts have already been included in the analyses of construction-related effects presented throughout this EIR. Instances where the Project's construction phase would result in specific, significant impacts, feasible mitigation measures are provided to reduce the impacts to a level of less than significant. The construction of infrastructure necessary to serve the Project would not result in any significant physical effects on the environment that are not already identified and disclosed elsewhere in this EIR. Accordingly, impacts would be less than significant.

Threshold b: Less-than-Significant Impact. Sufficient water supplies are available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry year. Implementation of the Project would result in a less than significant impact.
Threshold c: Less-than-Significant Impact. Wastewater volumes produced by the proposed development would not significantly impact or exceed the existing sewer capacity in the public system, and the existing sewer system has adequate capacity for the proposed development. Accordingly, impacts would be less than significant.

Threshold d: Less-than-Significant Impact. Development of the proposed Project would not significantly affect current operations or the expected lifetime of the two landfills serving the Project area. Therefore, the proposed Project would not cause a significant impact related to solid waste disposal.

Threshold e: Less-than-Significant Impact. The Project would be required to comply with all applicable local, State, and federal solid waste disposal standards. This would ensure that the solid waste stream to regional landfills are reduced in accordance with existing regulations. Accordingly, impacts would be less than significant.

4.17.8 Mitigation

No mitigation is required.

4.17.9 Significance of Impacts After Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

5.0 OTHER CEQA CONSIDERATIONS

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires that all phases of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. It also sets forth general content requirements for environmental impact reports (EIRs). Potential significant effects of the proposed Project; mitigation measures to address these effects and potential cumulative impacts have been identified throughout the analysis presented in Sections 4.1 through 4.17 of this EIR. An analysis of alternatives is included in Section 6.0, Alternatives.

This section provides: (1) identification of significant environmental effects that cannot be avoided if the Project is implemented, (2) identification of significant irreversible environmental changes that would result from implementing the Project, and (3) growth-inducing impacts of the Project.

5.1 SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines Section 15126(b)). As described in detail in Section 4.0, *Environmental Analysis*, of this EIR, the Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after compliance with applicable federal, State and local regulations; and the application of the feasible mitigation measures identified in this EIR. The impacts that cannot be mitigated to a level of less than significant are as follows:

- Transportation (VMT): The Project would result in a significant VMT impact. Project components and mitigation measures available to reduce VMT include developing pedestrian network improvements and implementing TDM measures such as those listed in Mitigation Measure MM 4.15-1. If the Project was to implement limited feasible TDM measures to their maximum effectiveness, the Project would still not be able to reduce its VMT impact to a level of less than significant. Therefore, the Project would have a significant and unavoidable VMT impact on a direct and cumulatively-considerable basis.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved with the proposed action should it be implemented (CEQA Guidelines § 15126.2[c]). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environment accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

Determining whether the Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them.

Natural resources, in the form of construction materials and energy resources would be used in the construction of the Project. The consumption of these natural resources would represent an irreversible change to the environment. However, the development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be nonrenewable (e.g., fossil fuels). Additionally, the Project is required by law to comply with the California Building Standards Code (CALGreen), which would minimize the Project's demand for energy, including energy produced from non-renewable sources. A detailed discussion of energy consumption is provided in EIR Subsection 4.5, *Energy*, which determined impacts to be less than significant.

Implementation of the Project would commit the Project site to residential uses for the lifespan of the Project. As demonstrated in the analysis presented throughout EIR Section 4.0, *Environmental Analysis*, construction and long-term operation of the Project would be compatible with the existing and planned land uses that surround the Project site and would not result in significant physical environmental effects to nearby properties. Although the Project would cause unavoidable impacts to the environment associated with VMT, these effects would not commit surrounding properties to land uses other than those that are present under existing conditions.

EIR Subsection 4.8, *Hazards and Hazardous Materials*, provides an analysis of the Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage to the environment. As concluded in the analysis, compliance with federal, State, and local regulations related to hazardous materials would be required of all contractors working on the property during the Project's construction and of all users that occupy the Project's buildings. As such, construction and long-term operation of the Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

As discussed under Subsection 4.5, *Energy*, the Project would not result in a wasteful consumption of energy or the consumption of resources that is not justified. The Project's energy requirements during construction and operation were analyzed in Section 4.5, *Energy*. As discussed, construction energy use would be typical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards. Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. The Project is located on an infill site that is surrounded by existing urban uses; the existing transportation facilities and infrastructure would provide future residents, visitors, and employees associated with the Project access to a mix of land uses near the Project, thus further reducing fuel consumption and energy demand. Additionally, the

Project will be providing a community electric vehicle for use by residents of the affordable housing component (PDF-GHG-3) as well as providing parking and EV infrastructure (PDF-GHG-4) that would further promote fuel efficient vehicles. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative means of transportation by providing short-term and/or long-term bicycle parking accommodations.

Because no significant natural resources occur within the Project site, the Project would also not reduce the availability of any natural resources associated with long-term operational activities. Accordingly, the Project would not result in a significant, irreversible change to the environment related to energy use.

5.3 GROWTH INDUCING IMPACTS

CEQA requires a discussion of the ways in which the Project could be growth-inducing. The State CEQA Guidelines identify a project as growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines § 15126.2 [d]). New employees and new residential populations represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area, placing additional demands on public services and infrastructure systems, and in the generation of a variety of environmental impacts, which are addressed throughout Section 4.0, *Environmental Analysis*.

To address this issue, potential growth-inducing effects are examined through analysis of the following questions (CEQA Guidelines § 15126.2 [e]):

1. Would this project remove obstacles to population 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)?

2. Would this project result in the need to expand one or more public services to maintain desired levels of service?

3. Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

4. Would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environs where population growth results in increased demand for service and commodity markets responding to the new population of residents or employees.

Typically, growth-inducing potential of a project would be considered significant if the Project fosters growth or a concentration of population in excess of what is assumed in local and regional land use plans and population projections. Significant growth impacts also could occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. Further, growth inducement by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

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)?

Due to the developed nature of the Project site, the existing structures are currently connected to the existing utility infrastructure beneath Lampson Avenue and generate a demand for utility services. The Project involves the redevelopment of the Project site with residential uses, consistent with the existing land use designation and zone classification for the Project site. The proposed residential uses would be developed in accordance with the City's development standards. Furthermore, the Project accommodates the growth and development anticipated in the City's 2021-2029 Housing Element and would not change existing regulations pertaining to land development.

The Project does not require the construction or extension of roadways; however, the Project would include the installation of new on-site utility connections to existing utility infrastructure and the construction of approximately 1,200 linear feet of water line off-site within Lampson Avenue to serve the development. The Project would not create major new infrastructure that could result in substantial, unplanned growth because the Project's proposed utility infrastructure, on- and off-site, are designed to accommodate only the proposed development as opposed to widespread, new development.

Therefore, the Project is not considered to be growth inducing with respect to the removal of obstacles to growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As discussed in EIR Subsection 4.13, *Public Services*, and 4.14, *Recreation*, the Project would increase the demand for public services (police, fire, schools, libraries, and parks and recreational facilities). The proposed residential use would create the typical range of service calls for police and fire services that occur with this type of use. However, per correspondence with Orange County Fire Authority, Los Alamitos Police Department, Los Alamitos Unified School District, and Orange County Public Libraries (*Technical Appendix L*), the Project would not necessitate the unplanned construction of new, or the expansion of existing, public service facilities in order to maintain desired levels of service. Secured Fire Protection Agreements would ensure that responses times and service ratios are met

within its service area and facilities are upgraded as needed. The existing police services and resources would be adequate to meet the additional demands generated by the Project. Additionally, funding mechanisms such as a Secured Fire Agreement, the City's General Fund revenue, development impact fees, and in-lieu fees are in place through existing regulations and standard practices to accommodate growth in the City, including the Project. This Project would not, therefore, have significant growth-inducing consequences with respect to public services.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with the increase in project population and thus reducing or removing barriers to growth. This occurs in suburban or rural areas where population growth results in increased demand for service and commodity markets responding to the new population. This type of growth is, however, a regional phenomenon resulting from the introduction of a major employment center or regionally significant housing project. For example, additional commercial uses may be drawn to the area by the increased number of residents in the area.

Construction jobs from Project implementation would result in economic growth. During Project construction, a number of design, engineering, and construction-related jobs would be created. However, this would be temporary in nature and would only last until Project construction is completed. Construction impacts including construction worker commute trips and associated impacts were analyzed throughout this EIR, specifically in Subsections 4.2, *Air Quality*, 4.7, *Greenhouse Gas Emissions*, and 4.11, *Noise*; the Project's impacts analyzed under these environmental topics were determined to be less than significant.

As further described in EIR Section 3.0, *Project Description*, the Project is proposing the development of up to 246 new residential units. The Project's proposed 246 households and 647 residents were anticipated by the City's General Plan projections. The City's Housing Element projected an increase of 2,023 people in the next eight years based on the RHNA allocation. The Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units (169 units as above moderate income, 39 units as low income, and 38 units as very low income). Development of the Project with a total of 246 units of which 77 are affordable would be consistent with the City's 2021–2029 Housing Element. Additionally, the City's General Plan designates the Project site for "Multi-Family Residential-25" land use and the Project site is zoned as "Multi-Family Residential (R-3)." The maximum permitted density is 25 dwelling units per net acre and Project's proposed overall density is 20 dwelling units per acre. Therefore, the Project would be consistent with the General Plan land use and zoning designations and anticipated growth. Therefore, implementation of the Project's proposed residential use would support existing uses in the area and would facilitate the growth envisioned in the City's 2021-2029 Housing Element.

As development occurs onsite, Project residents would seek shopping, entertainment, employment, home improvement, auto maintenance, and other economic opportunities in the surrounding area. Additional commercial uses may be drawn to the area by the increased number of residents in the area. The Project is located near existing employment centers and retail areas, which would help serve the employment and shopping needs of the future residents. According to the General Plan Housing Element, the City is an employment hub and its principal employers, as of 2021 (most current data available) include hospitals, aerospace manufacturers, business services, and restaurant/wholesale trade. Table 5-1, *City of Los Alamitos Top Employers*, lists the top employers in the City in 2021 and their distances from the Project site.

Table 5-1 City of Los Alamitos Top Employers

Company	Industry	Distance from Project Site (miles)
Los Alamitos Medical Center, Inc.	Healthcare	1.8
Arrowhead Products	Aerospace	1.5
Trend Offset Printing Services	Service/Printing	1.9
Epson America, Inc.	Media	2.1
Discovery Practice Management, Inc.	Service	1.5
Bar Bakers LLC	Wholesale Trade	1.8
Resare Marketing, Inc.	Service	1.8
Alamitos West Health & Rehabilitation	Healthcare	1.6
Katella Delicatessen Restaurant Bakery, Inc.	Restaurant	1.4
Alliance Space Systems, LLC	Aerospace	1.8
Bering Inspection, Inc.	Business Service	1.8
Ganahl Lumber Co.	Business Service	2.0

Source: (City of Los Alamitos, 2021, Table 2-5)

There are several existing retail areas near the Project site within the City and surrounding cities (Cypress, Seal Beach, and Garden Grove). The nearest retail areas to the Project site include Old Ranch Town Center located at 12320-12430 Seal Beach Boulevard in the city of Seal Beach approximately 1.04 miles west and The Shops at Rossmoor located at 12501 Seal Beach Boulevard in the city of Seal Beach approximately 1.3 miles west. The Project site is already served by nearby commercial uses. Therefore, the Project's introduction of residents on the Project site would not induce substantial growth in the area.

Would approval of this project involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment?

As identified above, there are no proposed changes to the type or location of uses allowed by the General Plan and zoning ordinance. Further, no changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, fire codes) are proposed or required to implement this Project. As identified in EIR Sections 4.1 through 4.17, the Project would be implemented in accordance with applicable regulations and identified mitigation measures, which

would ensure there are no conflicts with adopted land development regulations and environmental impacts are minimized to the extent feasible. The Project does not propose any precedent-setting actions that, if approved, would specifically allow, or encourage other projects and resultant growth to occur. Furthermore, the Project is not extending any infrastructure that would facilitate further development. In the event that another property owner were to propose development or redevelopment of a property in the Project vicinity or in any part of the City, that project would require evaluation under CEQA based on its own merits, including an analysis of direct and cumulatively considerable effects. Therefore, approval of the Project would not involve some precedent setting action that could encourage and facilitate other activities that could significantly affect the environment.

5.4 IMPACTS CONSIDERED LESS THAN SIGNIFICANT

Section 15128 of the State CEQA Guidelines states that "an EIR shall 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 EIR." Based on a review of the Project and supporting technical studies, it was determined that the following topical issues would result in less than significant or no impacts after mandatory compliance with regulatory requirements: Agriculture and Forestry Resources, Mineral Resources, and Wildfire.

5.4.1 AGRICULTURE AND FORESTRY RESOURCES

Threshold a:	***Would the Project 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?***

According to mapping information available from the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP), the Project site is designated as Urban and Built-Up land and does not contain any Prime Farmland, Unique Farmland or Farmland (CDC, 2022).The nearest area of any FMMP significance is adjacent to the Project site, within the Los Alamitos JFTB. Given that the Project would not convert Prime Farmland, Unique Farmland, or Farmland, as shown on maps prepared pursuant to the FMMP, to non-agricultural use, no impact would occur.

Threshold b:	***Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

The Project site is currently zoned as "Multi-Family Residential (R-3)." The Project's implementation will not result in a loss of land zoned for agriculture. There are no farming activities occurring at the Project site. As discussed above, the Project site is designated as Urban and Built-Up land. As a result, the Project will not conflict with existing agricultural zoning or Williamson Act contracts. No impact would occur.

Threshold c:	***Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?***

The Project site is located within the City of Los Alamitos and has a zoning designation of R-3. The Project site does not contain forest land. Therefore, the Project would not conflict with existing zoning for forest land or timberland. Accordingly, no impact would occur.

Threshold d:	***Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

The Project site and surrounding areas do not consist of forest land. Therefore, the Project would not result in the loss of forest land or result in the conversion of forest land to non-forest use. Accordingly, no impact would occur.

Threshold e:	***Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

The Project would not result in changes in the environment which, due to their location and nature, could result in conversion of forest land to non-forest use. Accordingly, no impact would occur.

5.4.2 Mineral Resources

Threshold a:	***Would the Project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?***

The Project does not conflict with California Legislature's 1975 Surface Mining and Reclamation Act (SMARA), which provides guidelines of the classification and designation of mineral lands. The City of Los Alamitos and its sphere of influence fall within the Mineral Resource Zone-1 (MRZ) and MRZ-4. MRZ-1 represents areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. MRZ-4 indicates areas where available information is inadequate for assignment to any other MRZ zone. (City of Los Alamitos, 2014b) Specifically, the Project is within MRZ-1 (CDC, 1994). Accordingly, no impact would occur.

Threshold b:	***Would the Project 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?***

There are no locally important mineral resource recovery sites in the City of Los Alamitos or its sphere of influence (City of Los Alamitos, 2014b). As discussed above, no known valuable mineral resources exist on or near the Project site and no mineral resource extraction activities occur on the site. Thus,

the proposed Project would not result in the loss of availability of locally-important mineral resources. Accordingly, no impact would occur.

5.4.3 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

Threshold a: ***Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?***

Threshold b: ***Would the Project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

Threshold c: ***Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

Threshold d: ***Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?***

According to the California Department of Forestry and Fire Protection's (Cal Fire) Fire and Resources Assessment Program (FRAP), the Project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) and is not within proximity to lands classified as VHFHSZ (CalFire, 2022). There are no lands classified as VHFHSZ within the City. The nearest VHFHSZ is located in the City of Fullerton, approximately 8.8 miles to the northeast. The Project site is located within the limits of the City of Los Alamitos, and is therefore not within a State Responsibility Area (SRA), which is the land where the State of California is financially responsible for the prevention and suppression of wildfires. Accordingly, no impact would occur.

6.0 ALTERNATIVES

6.1 INTRODUCTION

California Environmental Quality Act (CEQA) Guidelines Section 15126.6(a) describes the scope of analysis that is required when evaluating alternatives to proposed projects, as follows:

> *"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which 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, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."*

As discussed in Draft EIR Section 4.0, *Environmental Analysis*, the Project would result in significant adverse environmental effects associated with transportation (VMT) that cannot be mitigated to below levels of significance after the implementation of feasible mitigation measures. The Project's significant and unavoidable impacts are summarized below in Section 6.1.2.

6.1.1 PROJECT OBJECTIVES

The underlying purpose of the Project is to redevelop the site with a residential community that will serve the City of Los Alamitos. The following is a list of specific objectives that the proposed Project is intended to achieve.

A. Provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement.

B. Provide a variety of housing types and affordability (for lower income, moderate, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing.

C. Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.

D. Improve the City's jobs housing balance to support reduced commute distances consistent with the Southern California Association of Governments' Connect SoCal.

E. Create a residential character that provides for a high quality architectural design.

6.1.2 Summary of the Proposed Project's Significant Impacts

As discussed in Draft EIR Section 4.0, *Environmental Analysis*, the proposed Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impacts are as follows:

- Transportation (VMT): The Project would result in a significant VMT impact. Project components and mitigation measures available to reduce VMT include developing pedestrian network improvements and implementing TDM measures such as those listed in Mitigation Measure MM 4.15-1. If the Project was to implement limited feasible TDM measures to their maximum effectiveness, the Project would still not be able to reduce its VMT impact to a level of less than significant. Therefore, the Project is found to have a significant and unavoidable VMT impact on a direct and cumulatively-considerable basis.

6.2 Alternatives Under Consideration

CEQA Guidelines Section 15126.6(e) requires that an alternative be included that describes what would reasonably be expected to occur on the property in the foreseeable future if the proposed Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., "no project" alternative). For the alternatives analysis in this Draft EIR, a "No Project/No Development Alternative" was evaluated. The No Project/No Development Alternative assumes that the site remains vacant since it is unlikely that the existing office building would resume operation as such a use would be inconsistent with the GP designation and zoning. However, it is reasonable to assume that if the project were not approved, another residential development of similar intensity would be proposed for this site consistent with the underlying zoning designation, but whether any such project would be proposed is speculative and not reasonably foreseeable at this time. Additionally, two other alternatives were selected, the Maximum Density Allowed Alternative and the Senior Housing Alternative.

6.2.1 No Project/No Development Alternative

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the existing vacant two-story, 88,000 sf commercial office building would remain on the 12.3-acre site. No vehicle trips would be associated with this alternative. Under this Alternative, no improvements would be made to the Project site. This alternative is required by CEQA Guidelines Section 15126.6(e)(3)(B) to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition (as described in EIR Section 2.0).

6.2.2 Maximum Density Allowed Alternative

The Maximum Density Allowed Alternative considers the development of the Project site consistent with the maximum density allowed under the Multi-Family Residential (R-3) zoning designation, which allows for a maximum permitted density of 25 dwelling units per net acre. Under this alternative, a total of 307 dwelling units would be constructed on the 12.3-acre Project site, resulting in an increase of 61 units. Additionally, no single family detached homes would be constructed under this alternative and the Project would consist, instead, of townhomes and multi-family units. The development area and access to the Project site would be the same, with a proportional increase in the number of parking spaces. The Maximum Density Allowed Alternative would generate 1,921 daily trips, including 120 AM peak hour, and 153 PM peak hour trips[1], resulting in an increase of 263 daily, 8 AM peak hour, and 7 PM peak hour trips compared to the Project.

6.2.3 Senior Housing Alternative

The Senior Housing Alternative considers the development of the Project site with 55 single family detached homes, 114 townhomes, and 77 age-restricted multi-family apartment homes. In other words, this alternative would replace the Project's affordable multi-family units with senior housing. Access to the site would be the same as the Project. The Senior Housing Alternative would provide a total of 594 parking spaces, an increase of 20 spaces compared to the Project. Assuming all senior housing for the multi-family component of the Project, the Senior Housing Alternative would generate 1,538 daily trips, including 99 AM peak hour, and 130 PM peak hour trips, resulting in a decrease of 120 daily, 13 AM peak hour, and 10 PM peak hour trips compared to the Project.

6.3 Alternatives Considered and Rejected

An EIR is required to identify any alternatives that were considered by the City but were rejected as infeasible. Factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR include: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the proposed Project, CEQA Guidelines Section 15126.6(f)(1) notes:

> *"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…"*

In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Pursuant to Section

[1] Based on ITE Trip Generation Manual 11th Edition for Multifamily (Low-Rise) and Affordable Housing, specifically ITE Code 220 (230 multi-family units) and ITE Code 223 (77 affordable units).

15126.6(c) of the CEQA guidelines, alternatives were rejected because: 1) they failed to meet most of the basic objectives of the Project, 2) they would not avoid significant environmental impacts, or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected are described below.

6.3.1 Alternative Sites

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 developing 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 Section 15126[5][B][1]). In addition, an alternative site need not be considered when implementation is "remote and speculative," such as when the alternative site is beyond the control of a project applicant.

The Project proposes to redevelop an approximately 12.3-acre site with 246 residential units. Given the size and type of the proposed development, a similarly sized project and land use elsewhere would likely result in the same or similar transportation impacts. However, if the Project was located in a Transit Priority Area (TPA), significant and unavoidable VMT impacts could be eliminated. Currently, there is only one TPA in the City of Los Alamitos that is located at the intersection of Los Alamitos Boulevard and Katella Avenue. This area is currently developed with commercial uses and is not planned for residential uses. This area has a General Plan designation of Commercial and a zoning designation of General Commercial (C-G). A General Plan Amendment and Zone Change would be required to develop residential uses in this area. Implementing the Project on a different parcel within the TPA would require acquisition of developed property, demolition of existing operational structures, and discontinuing existing land uses, which would likely be disruptive to existing businesses and operations.

The Project site currently has a General Plan land use designation of "Multi-Family Residential-25" and a zoning designation of R-3 (Multi-Family Residential). The Project is consistent with the General Plan land use and zoning designations, and therefore the Project does not require a general plan amendment or zone change to implement the development. Furthermore, the Project Applicant does not control any other parcels of land in or near the Project site that could be used as an alternative location for the proposed Project.

Therefore, because an alternative location is not available that would avoid or substantially lessen the significant environmental effects of the Project, and because the Project Applicant does not have control over, and cannot reasonably obtain control over, any other parcels of land in the jurisdiction of the City that could accommodate the Project, an alternative location alternative is not feasible. Accordingly, this alternative is not further considered in the Draft EIR.

6.3.2 Alternatives to Eliminate or Lessen VMT Impacts

As discussed above, the Project would only result in one significant and unavoidable impact, *i.e.*, impacts related to VMT generated by the Project. All other impacts of the Project would be mitigated to less than significant with incorporation of mitigation measures. With the exception of VMT impacts, all environmental impacts of the Project are related to the physical disturbance of the Project site during construction activities and are not specific to the Project itself but are a result of redevelopment of the Project site. In other words, construction-related impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources would occur with any type of redevelopment of the Project site and would result in the need for the same or similar mitigation measures. The only alternative that would eliminate the construction-related impacts is the No Project/ No Development Alternative (see Section 6.4.1, below).

A variety of alternatives were considered that would eliminate or lessen the Project's significant and unavoidable VMT impacts. Pursuant to the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018, projects that meet one of the screening criteria below, would not have a VMT impact.

- Small Project Screening
- Map Based Screening
- Transit Priority Area (TPA) Screening
- Local Community Serving Project Type Screening

An alternative that meets the Small Project screening criteria would require the Project to generate fewer than 110 daily vehicle trips. In order to meet this criterion, the Project would need to be significantly reduced to approximately 10 dwelling units, which would not be consistent with the City's General Plan or its Housing Element. As discussed in Section 4.12, *Population and Housing*, the City adopted its General Plan Housing Element to reflect the 2021-2029 cycle on February 21, 2023. The Project site is located within the Multiple-Family Residential-25 General Plan designation, which specifies a density range of 20 to 25 dwelling units per acre. Moreover, the Project site is identified within the City's Housing Element as a housing element site with an estimate of 246 units (169 units as above moderate income, 39 units as low income, and 38 units as very low income), which is required to meet the Regional Housing Needs Allocation (RHNA) target of 769 units citywide. Therefore, this alternative was rejected from further consideration.

In order to meet the Map Based screening criteria, the Project would need to be relocated into a transportation analysis zone (TAZ) with a low VMT. As discussed in detail above, an alternative location is not feasible. Therefore, this alternative was rejected from further consideration.

In order to meet the TPA screening criteria, the Project would need to be relocated to a TPA. As discussed in detail above, an alternative location is not feasible. Therefore, similarly, this alternative was rejected from further consideration.

In order to meet the Local Community Serving Project Type screening criteria, the proposed land use would need to change from residential to commercial uses. Commercial uses would result in a substantial increase in vehicle trips in comparison to the Project, which would increase air quality, energy, greenhouse gas, and noise impacts. Additionally, this alternative would not meet any of the Project objectives and therefore was rejected from further consideration.

Based on the preceding, alternatives to eliminate VMT impacts were rejected from further consideration.

6.3.3 Reduced Density Alternative

The Reduced Density Alternative, which assumes the Project Site is proposed for a 25% reduction in residential units, was considered to analyze an alternative that could potentially accomplish most of the project objectives of the Project and could avoid or substantially lessen one or more of the Project's significant effects.

Although a Reduced Density Alternative would have the ability to partially meet most of the Project objectives, it was rejected from further consideration because it would not avoid or substantially lessen the Project's significant impacts. More specifically, this alternative would not avoid the Project's significant and unavoidable VMT impacts. VMT impacts are evaluated based on VMT per capita (population). Although the Reduced Density Alternative would reduce vehicle trips and VMT, it would also result in a proportional reduction in population, resulting in substantially the same VMT per capita and VMT impact as compared to the Project. In other words, because both the numerator and the denominator would be proportionally reduced, the ultimate VMT calculation would be the same as the Project.

Furthermore, the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021) has been utilized to determine trip reduction measures that may be applicable to the Project (see Attachment C of *Technical Appendix N2* of this EIR). CAPCOA Land Use Measure T-1 states that VMT reductions can be achieved by a project that is designed with a higher density of dwelling units compared to the average residential density in the U.S. Therefore, pursuant to CAPCOA, a Reduced Density Alternative would not result in a reduction in VMT impacts.

In addition, as evaluated in this EIR, the Project's significant impacts related to Biological resources, cultural resources, geology and soils, and tribal cultural resources, would be less than significant with implementation of mitigation measures. The Reduced Density Alternative would have similar impacts to the Project related to biological resources, cultural resources, geology and soils, and tribal cultural resource because the development area under the Reduced Density Alternative would be the same. Because the Reduced Density Alternative would not avoid or substantially lessen the Project's significant and unavoidable VMT impacts, it was rejected from further consideration.

6.3.4 MIXED USE ALTERATIVE

The Mixed Use Alternative, which assumes the Project site is proposed for mixed use development (75% residential and 25% commercial), was considered to analyze an alternative that could potentially accomplish most of the project objectives of the Project and that could avoid or substantially lessen one or more of the Project's significant effects. The Mixed Use Alternative would have the ability to partially meet most of the Project objectives (Objectives B, C, and D). However, this alternative would not meet Objective A which is to provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement due to the reduction in residential units. This is because the Mixed Use Alternative would reduce the ultimate number of housing units constructed.

Additionally, the Mixed Use Alternative would not be consistent with the existing zoning or General Plan designations. The Project site is zoned as "Multi-Family Residential (R-3)." The R-3 zone applies to lots intended to provide multi-family housing. The City's General Plan designates the Project site for "Multi-Family Residential-25" land use. The "Multi-Family Residential-25" land use designation is defined as "single family detached and attached residences, including all development permitted in other residential categories as well as stacked flats and other building types with 4 or more units. Mixed use or commercial uses are not permitted in these designations. Therefore, a zone change and General Plan Amendment would be required for the Mixed Use Alternative. The City is not required to evaluate alternatives that would not be allowed by the existing zoning because it is remote and speculative.

In addition, this alternative would not avoid or substantially lessen the Project's significant and unavoidable VMT impacts. VMT impacts are evaluated based on VMT per capita (population). The Mixed Use Alternative would result in a 25% reduction in residential uses to allow for the commercial component. As discussed above under the Reduced Density Alternative, the reduction in residential units would result in a proportional reduction in VMT and population, resulting in substantially the same VMT per capita and VMT impact as compared to the Project. The commercial component of the Mixed Use Alternative could potentially screen out from VMT impacts, meaning that it would be presumed to have less than significant VMT impacts, by adding local serving retail opportunities in an urban area. However, because the residential component would result in the same VMT impact as the Project and the Project site is within an area with higher VMT per capita compared to the County's regional average, this alternative would not avoid or substantially lessen VMT impacts.

Furthermore, as evaluated in this EIR, the Project's significant impacts related to biological resources, cultural resources, geology and soils, and tribal cultural resources, would be less than significant with implementation of mitigation measures. The Mixed Use Alternative would have similar impacts to the Project related to biological resources, cultural resources, geology and soils, and tribal cultural resource because the development area under the Mixed Use Alternative would be the same. Therefore, this alternative was rejected from further consideration.

6.4 ANALYSIS OF ALTERNATIVES

The City has identified the following alternatives as a range of reasonable alternatives to the Project in accordance with CEQA Guidelines Section 15126.6. These alternatives are described in more detail and their respective potential level of environmental effects has been compared to the Project's environmental effects.

The following discussion compares the impacts of each alternative considered by the City with the impacts of the Project, as detailed in Section 4.0, *Environmental Analysis*, of this EIR. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), CEQA Guidelines Section 15126.6(c) requires that the discussion of alternatives focus on alternatives which are capable of avoiding or substantially lessening the significant effects of the Project. Therefore, the analysis provided herein focuses on a comparison of the Project's significant impacts to the level of impact that would occur under each evaluated alternative. The Project's significant and unavoidable impacts fall under the topic of transportation. Although the Project's less-than-significant impacts also are compared to the alternatives evaluated herein, the emphasis of the comparative discussion in this analysis relates to the significant impacts of the Project that require mitigation as required by CEQA. A conclusion is provided for each significant impact of the Project as to whether the alternative results in one of the following: (1) reduction or elimination of the Project's impact, (2) a greater impact than would occur under the Project, (3) the same impact as the proposed Project, or (4) a new impact in addition to the Project's impacts.

Table 6-1, *Comparison of Alternatives and Project-related Environmental Impacts*, at the end of this Section compares the significant impacts of the Project with the level of impact that would be caused by each of the alternatives evaluated herein. Table 6-2, *Alternatives Attainment of Project Objectives*, identifies the ability of each alternative to meet the fundamental purpose and basic objectives of the Project, listed above under 6.1.1, Project Objectives.

6.4.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative assumes that no development or improvements would occur on the Project site and the existing vacant two-story, 88,000 sf commercial office building would remain on the 12.3-acre site. No vehicle trips would be associated with this alternative. Under this Alternative, no improvements would be made to the Project site. This alternative is required by CEQA Guidelines Section 15126.6(e)(3)(B) to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition (as described in EIR Section 2.0).

A. Aesthetics

Under existing conditions, the Project site is currently occupied by a vacant two-story, 88,000 sf commercial office building and surface parking lot. The remainder of the Project site consists of open space. The Project site elevations range from approximately 21 feet to 26 feet above mean sea level.

Sources of artificial lighting on-site are associated with the existing office building and parking lot include building-mounted fixtures and pole-mounted flood light fixtures within the Project site.

The City's General Plan does not designate any other scenic resources within the City and does not identify the Project site as a scenic resource nor Lampson Avenue as a scenic corridor. Under the No Project/No Development Alternative, the visual character and quality of the site would be maintained in its existing condition. No landform modifications would occur on the Project site under this alternative, and implementation of the Project to allow for residential uses, lighting, or landscaping would not occur. Accordingly, although the Project would result in less than significant impacts associated with aesthetics, the No Project/No Development Alternative would result in no impacts.

B. Air Quality

The No Project/No Development Alternative would avoid the introduction of new potential sources of short-term (construction) and long-term (operational) air pollutant emissions that would occur during the implementation of the Project. As such, all of the Project's short- and long-term air quality impacts would be avoided under this alternative, because no construction and operational activities would occur at the Project site. Accordingly, although the Project would result in less than significant impacts associated with air quality, no impacts would occur under this alternative.

C. Biological Resources

The No Project/No Development Alternative would leave the property in its existing condition. Under this alternative, impacts would be less than the Project because the Project site would not be disturbed compared to the permanent disturbance that would occur as a result of the Project's proposed development. Overall, although the Project would result in less than significant biological resources impacts with incorporation of mitigation measures, the No Project/No Development Alternative would eliminate the Project's potential biological resource impacts that could occur during construction activities to nesting birds, nesting raptors, and bat roosts, and no mitigation would be required; therefore, there would be no impact to biological resources.

D. Cultural Resources

Based on a records search conducted as part of the Phase I Cultural Resources Assessment (*Technical Appendix D1* of this EIR), 12 cultural resources have been recorded within a one-mile radius of the Project site. Additionally, the existing building onsite was constructed in 1972, and the historical resources evaluation Assessment (*Technical Appendix D2* of this EIR) concluded that the existing building is ineligible for listing on the California Register of Historical Resources or the National Register of Historic Places. Therefore, there are no known significant historic resources, archaeological resources, or human remains identified on the Project site under existing conditions.

Given the highly disturbed condition of the Project site and its surroundings, the potential for the Project's construction activities to affect an unidentified archaeological resource is considered low. However, while unlikely, there is a potential to impact buried prehistoric archaeological resources

during ground disturbance activities (i.e., grading and excavation activities) in native soils. Accordingly, although the Project would result in less than significant cultural resources impacts with mitigation measures incorporated, the No Project/No Development Alternative would eliminate the Project's potential impacts to cultural resources, and no mitigation would be required; therefore, there would be no impact to cultural resources.

E. Energy

Under the No Project/No Development Alternative, the existing vacant commercial office building would remain on the site and no new development would occur; therefore, the site would not require any additional near-term or long-term energy resources. Accordingly, although the Project would result in less than significant impacts associated with energy, the No Project/No Development Alternative would have no impact related to energy use.

F. Geology and Soils

The No Project/No Development Alternative would result in no grading of the Project site; therefore, no impacts to geology or soils would occur. No known paleontological resources were identified as occurring within the Project site under existing conditions. However, the Pleistocene alluvial deposits underlying the Project site are considered to have moderate/undetermined paleontological sensitivity, and the Project would result in less than significant impacts with mitigation incorporated. The No Project/No Development Alternative would avoid potential impacts associated with unearthing previously undiscovered paleontological resources during grading activities; therefore, this alternative has no potential to impact subsurface resources that may exist in undisturbed soils beneath the ground surface. Accordingly, this alternative would eliminate the Project's potential paleontological resource impacts and no mitigation would be required; therefore; there would be no impact to geology and soil resources.

G. Greenhouse Gas Emissions

Under the No Project/No Development Alternative, no development would occur on the Project site; therefore, there would be no potential sources of near-term or long-term GHG emissions. Accordingly, although the Project would result in less than significant impacts associated with GHG emissions, the No Project/No Development Alternative would have no impact related to GHG emissions.

H. Hazards and Hazardous Materials

Because no development would occur under the No Project/No Development Alternative, no impacts related to hazards or hazardous materials would occur. Project impacts were determined to be less than significant related to hazards and hazardous materials, including those associated with the routine transportation, storage, and use of hazardous materials during the operation of the Project. Similarly, this alternative would have no hazardous materials impacts and no mitigation would be required; therefore, there would be no impact to hazards and hazardous materials.

I. Hydrology and Water Quality

The No Project/No Development Alternative would result in no grading or development of the property; therefore, the existing drainage pattern would remain the same and no impacts to hydrology or water quality would occur. Moreover, under the No Project/No Development Alternative, drainage improvements or water quality features would not be installed and runoff would continue to flow in a north to south direction into an existing westerly flowing concrete channel along the site's southerly property line, as it does under existing conditions. The bio-filtration devices or catch basin inlets proposed under both the Project's preferred and alternate storm drain facilities, which remove pollutants from runoff and filter the water to meet water quality standards, would not occur. Therefore, water quality impacts, including erosion and sedimentation, would be greater under this alternative because the Project site would not receive the benefits from the stormwater drainage and water quality filtration features that would be constructed by the Project. Therefore, this alternative would result in increased impacts associated with hydrology and water quality when compared to the Project, which were determined to be less than significant.

J. Land Use and Planning

The No Project/No Development Alternative would not result in any new development that would directly or indirectly result in environmental impacts due to a conflict with an existing land use plan. In addition, the No Project/No Development Alternative would not result in any new development that would cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Accordingly, although the Project would result in less than significant impacts associated with land use and planning, no impacts associated with land use and planning would occur under this alternative.

K. Noise

Because no development would occur on the Project site under this alternative, no new sources of on-site stationary noise or off-site traffic-related noise generated would occur; therefore, the No Project/No Development Alternative would not contribute to the less than significant incremental increase in area-wide noise levels that would occur under the Project. The No Project/No Development Alternative also would not result in any development that would generate any excessive groundborne vibration or groundborne noise levels, and it would not result in any development exposing people residing or working in the project area to excessive noise levels. Accordingly, although the Project would result in less than significant impacts associated with noise, no impacts associated with noise would occur under this alternative.

L. Population and Housing

Population growth would not occur under the No Project/No Development Alternative because no new residences would be constructed. Accordingly, although the Project would result in less than significant impacts associated with population and housing, the No Project/No Development Alternative would have no impact related to population and housing.

M. Public Services

Under the No Project/No Development Alternative, the Project site would remain a vacant commercial office building. There would be no increase in demand for fire protection, police protection, schools, or libraries. Accordingly, although the Project would result in less than significant impacts associated with public services, the No Project/No Development Alternative would have no impact related to public services.

N. Recreation

Under the No Project/No Development Alternative, no new residents would be introduced to the Project, which would reduce potential impacts resulting from additional demand on parks and recreational facilities. Accordingly, although the Project would result in less than significant impacts associated with recreation, the No Project/No Development Alternative would have no impact related to recreation.

O. Transportation

Under the No Project/No Development Alternative, no new development would occur on the Project site and no traffic would be generated at the Project site. Therefore, this alternative would have no impacts related to conflict with a program, plan, ordinance, or policy addressing the circulation system; vehicle miles traveled; hazards due to a design feature; or emergency access. The No Project/No Development Alternative would eliminate the Project's significant and unavoidable transportation impacts and no impacts would occur.

P. Tribal Cultural Resources

Based on Native American consultation, there is a potential to encounter tribal cultural resources within the Project site during ground-disturbing construction activities on the site. Project impacts to tribal cultural resources were determined to be less than significant with mitigation. The No Project/No Development Alternative would leave the Project site in its existing condition; no additional grading or disturbance of soil would occur. As such, this alternative would not result in impacts to undiscovered tribal cultural resources. Accordingly, this alternative would have no impacts related to tribal cultural resources and mitigation would not be required; therefore, there would be no impact to tribal cultural resources.

Q. Utilities and Service Systems

Under the No Project/No Development Alternative, the Project site would not generate any need for additional utilities and service systems, including domestic water, wastewater treatment, or solid waste disposal; therefore, the implementation of this alternative would avoid the increases in the demand for utility services that would be generated by the Project. Although the Project would have less than significant impacts, implementation of this alternative would result in no impacts associated with utilities and service systems.

R. Conclusion

1. Avoid or Substantially Lessen the Significant Impacts of the Project

The No Project/No Development Alternative would result in no physical environmental impacts to the Project site. All significant impacts of the Project related to construction activities would be eliminated by the selection of the No Project/No Development Alternative. Additionally, this alternative would eliminate the Project's significant and unavoidable impact related to VMT. However, this alternative would not receive the environmental benefits from the implementation of stormwater drainage and water quality filtration features that would be constructed by the Project.

2. Attainment of Project Objectives

The No Project/No Development Alternative would fail to meet all the Project Objectives, as described in Section 6.1.1.

6.4.2 MAXIMUM DENSITY ALLOWED ALTERNATIVE

The Maximum Density Allowed Alternative considers the development of the Project site consistent with the maximum density allowed under the Multi-Family Residential (R-3) zoning designation, which allows for a maximum permitted density of 25 dwelling units per net acre. Under this alternative, a total of 307 dwelling units would be constructed on the 12.3-acre Project site, resulting in an increase of 61 units. Additionally, no single family detached homes would be constructed under this alternative and the Project would consist, instead, of townhomes and multi-family units. The development area and access to the Project site would be the same, with a proportional increase in the number of parking spaces. The Maximum Density Allowed Alternative would generate 1,921 daily trips, including 120 AM peak hour, and 153 PM peak hour trips[2], resulting in an increase of 263 daily, 8 AM peak hour, and 7 PM peak hour trips compared to the Project.

A. Aesthetics

The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. The Maximum Density Allowed Alternative would have the same development area as the Project. The existing vacant commercial office building site would be replaced with 307 dwelling units. This alternative would result in higher density housing; however, the maximum height would be the same as the Project. This alternative would also include design features similar to the Project to create aesthetically pleasing buildings and site design. Accordingly, implementation of the Maximum Density Allowed Alternative would result in similar impacts as compared to the Project and would be less than significant.

[2] Based on ITE Trip Generation Manual 11th Edition for Multifamily (Low-Rise) and Affordable Housing. Specifically ITE Code 220 (230 multi-family units) and ITE Code 223 (77 affordable units).

B. Air Quality

The Maximum Density Allowed Alternative would have the same development impact area as the Project. Therefore, implementation of this alternative would result in similar air quality impacts due to construction activities. Although construction activities may be extended with this alternative, maximum day emissions are expected to the similar to the Project because it would utilize the same construction equipment. Similar to the Project, this alternative would result in less than significant air quality impacts due to construction.

The Maximum Density Allowed Alternative would result in an increase of 61 units, leading to an increase in the number of vehicle trips. Therefore, this alternative would result in slightly higher air quality emissions during operation; however, impacts would be less than significant.

C. Biological Resources

The Maximum Density Allowed Alternative would result in the same development impact area as the Project site. Impacts to nesting birds, nesting raptors, and bat roosts would similarly occur and mitigation measures would be implemented to reduce impacts to such resources to a less than significant level. Therefore, impacts would be similar compared to the Project.

D. Cultural Resources

The Maximum Density Allowed Alternative would result in the same development impact area as the Project and no known historic resources, archaeological resources, cultural resources, or human remains were identified as occurring within the Project site under existing conditions. Given the highly disturbed condition of the Project site and its surroundings, the potential for the Project's construction activities to affect an unidentified archaeological resource is considered low. However, there is a potential to encounter buried prehistoric archaeological resources during grading activities. Therefore, impacts to cultural resources from the Maximum Density Allowed Alternative would be similar to those associated with the Project and mitigation measures would be implemented to reduce impacts to such resources to a less than significant level.

E. Energy

Under the Maximum Density Allowed Alternative, the total residential units would be increased. Construction would occur over a slightly longer period of time resulting in increased fuel consumption during construction. Therefore, building energy demand would be increased compared to the Project. Additionally, the Maximum Density Allowed Alternative would result in an increase in vehicle trips. The increase in vehicle trips associated with this alternative would increase fuel consumption. Therefore, operational activities associated with this alternative would have increased energy demand compared to the Project. However, impacts would be less than significant.

F. Geology and Soils

Grading and development of the Project site would still occur under the Maximum Density Allowed Alternative, and therefore, impacts to geology and soils would be similar to those that would be generated from the Project. This alternative would result in similar geotechnical impacts and the similar potential to impact undiscovered paleontological resources during grading, as the Project. However, like the Project, mitigation measures would be required to reduce potential geology and soils impacts to less than significant. Therefore, impacts to geology and soils from the Maximum Density Allowed Alternative would be similar to those associated with the Project.

G. Greenhouse Gas Emissions

The Maximum Density Allowed Alternative would have the same development impact area as the Project. Since there would be an increase in residential units, implementation of the Maximum Density Allowed Alternative would result in slightly greater construction related GHG emissions compared to the Project. The Maximum Density Allowed Alternative would have an increase in residential units and would result in an increase in vehicle trips. This alternative would result in an approximate 15% increase in vehicle trips compared to the Project.[3] The 15% increase in vehicle trips would result in an approximate 15% increase in mobile source emissions, increasing the emissions from 2,505 $MTCO_2e/yr$[4] under the Project to 2,881 $MTCO_2e/yr$ under this alternative. The increase in mobile source emissions would increase the total GHG emissions to approximately 3,133 $MTCO_2e/yr$ and would exceed the screening threshold of 3,000 $MTCO_2e/yr$. Therefore, this alternative would result in greater GHG impacts compared to the Project, and impacts would be significant and unavoidable compared to the Project's less than significant GHG emissions impacts.

H. Hazards and Hazardous Materials

The Maximum Density Allowed Alternative would develop the Project site for the same uses, and therefore the same type of hazardous materials typically used for construction and operation of the Project would be used under the Maximum Density Allowed Alternative. Similarly, the use and storage of hazardous materials would be regulated by the same federal, state, and local laws and permitting requirements as would occur with the Project. There were no identified contaminated soils on the Project site, therefore construction activities would not involve the transport of contaminated soils, similar to the Project. Similar to the Project, this alternative would result in less than significant impacts related to hazards and hazardous materials.

I. Hydrology and Water Quality

The Maximum Density Allowed Alternative would increase the total number of residential units; however, the area of impervious surfaces and stormwater impacts would be similar compared to the Project due to mandatory compliance with the WQMP. Therefore, this alternative would result in

[3] 263 increase in vehicle trips (Existing Zoning Alternative)/1,658 vehicle trips (Project) = 0.159 or approximately 15%.
[4] See Table 4.7-4 of this EIR.

similar runoff and potential for impacts to drainage, erosion, and water quality. Like the Project, this alternative would introduce new sources of water pollutants from construction and operation activities. Additionally, this alternative would be required to include storm drain facilities. The Maximum Density Allowed Alternative would result in similar impacts to hydrology and water quality as the Project and would be less than significant.

J. Land Use and Planning

Similar to the Project, the Maximum Density Allowed Alternative would not require a general plan amendment or zone change to implement the development. Therefore, this alternative is consistent with SCAG's RTP/SCS (Connect SoCal) policies, the City's General Plan, including the Housing Element. Therefore, the Maximum Density Allowed Alternative would result in a less than significant impact related to land use and planning and similar impacts compared to the Project.

K. Noise

Although the Maximum Density Allowed Alternative would result in an increase in residential units, construction noise impacts would be similar since this alternative would have the same development impact area as the Project and maximum daily noise levels would be the same. Although the construction time and duration would be different, construction of this alternative would generate similar peak noise volumes and similar type and volume of construction noise as the Project.

Stationary operational noise and traffic-generated noise sources would increase slightly due to the increase of units and vehicle trips generated by the Project. Overall, noise impacts from the Maximum Density Allowed Alternative would be greater than the Project due to the increase in traffic-generated and stationary noise sources.

L. Population and Housing

Under the Maximum Density Allowed Alternative, buildout would result in a total of 807 new residents,[5] which would result in 160 more residents than the Project's generated 647 residents. The additional residents and residential units under this alternative would still be within the City's growth projections as identified in the Housing Element (see Tables 4.12-5 and 4.12-6 of this EIR). Under this alternative and similar to the Project, the population, housing, and employment at buildout would not result in substantial unplanned growth in the area because the planned housing is within the growth projections of the City's General Plan Housing Element. Additionally, this alternative is consistent with the existing General Plan land use and zoning designations and improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Overall, impacts related to population and housing would be less than significant with this alternative and similar to the Project.

[5] Based on an average household size of 2.63 consistent with the household size reported in the City's 2021-2029 Housing Element.

M. Public Services

Under the Maximum Density Allowed Alternative, buildout would result in an increase of 160 residents. This would result in overall increased demands placed on public services, including fire protection and law enforcement. However, as with the Project, impacts would be less than significant since this alternative is consistent with the City's General Plan and underlying zoning and an increase of 160 residents would not trigger the need for construction of new or expanded public facilities. Overall, impacts associated with public services under the Maximum Density Allowed Alternative would be less than significant but reduced when compared to the Project.

N. Recreation

Under the Maximum Density Allowed Alternative, more residents would be introduced to the Project, which would increase potential impacts resulting from additional demand on parks and recreational facilities in the City. Similar to the Project, usable common open space and private open space would be provided under this alternative. Overall, impacts associated with recreation under the Maximum Density Allowed Alternative would be less than significant but slightly increased compared to the Project due to the slight increase in demand on parks and recreational facilities.

O. Transportation

Construction and operation-related vehicle trips would be increased under the Maximum Density Allowed Alternative. VMT impacts are determined based on VMT per Service Population, which is a function of trip generation, trip length, and service population (residents). As discussed above, the Project would result in an increase in vehicle trips compared to the Project; however, this alternative would also result in an increase in residents. As a result, the Maximum Density Allowed Alternative would result in similar VMT impacts (VMT per capita) compared to the Project and would exceed the City's baseline VMT threshold and impacts would be significant and unavoidable. However, it should be noted that CAPCOA recognizes increased density as one of the factors that benefits VMT.

P. Tribal Cultural Resources

The Maximum Density Allowed Alternative would result in a similar potential to adversely affect any tribal cultural resources on the Project site as the Project. However, like the Project, mitigation measures would be required to reduce potential impacts to less than significant. Therefore, impacts that could occur under the Maximum Density Allowed Alternative would be similar to those associated with the Project.

Q. Utilities and Service Systems

The Maximum Density Allowed Alternative would result in an increase of 61 residential units and 160 residents. Water demand and wastewater generation rates are based on the applicable residential density ranges and land uses. Therefore, the demand for regional water supplies and generation of wastewater would be greater than the Project. Similarly, solid waste generation would be slightly greater than the Project and require slightly more landfill capacity. Therefore, impacts to utilities and

service system would be greater under this alternative than the Project; however, impacts would be less than significant.

R. Conclusion

1. Avoid or Substantially Lessen the Significant Impacts of the Project

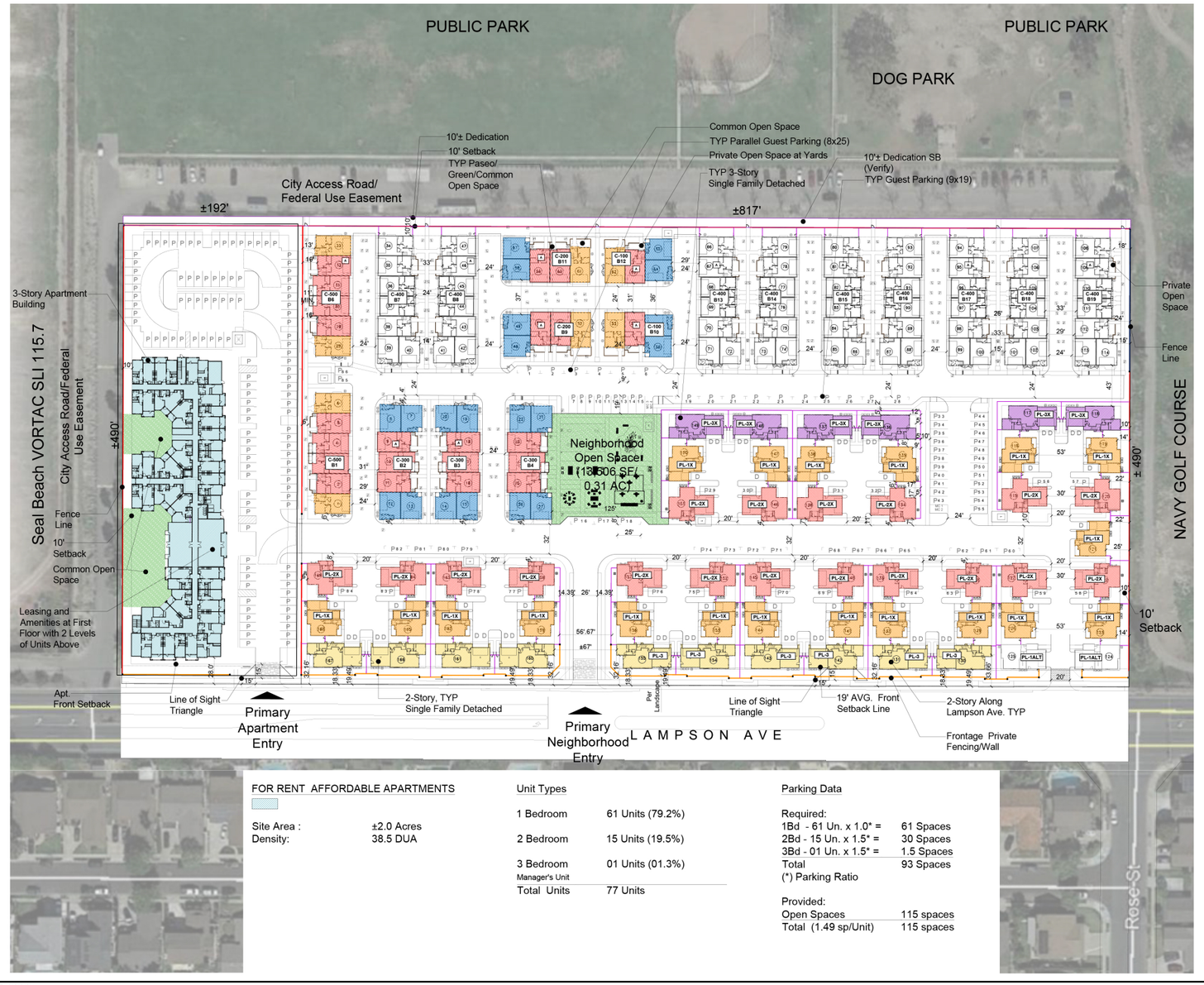
The Maximum Density Allowed Alternative would result in greater impacts related to air quality, energy, GHG emissions, noise (operation), public services, recreation, and utilities and service systems due to the increased residential units and associated vehicular trips. This alternative would result in a new significant and unavoidable impact related to GHG emissions, primarily due to the increased number of mobile sources as compared to the Project. Impacts related to aesthetics, biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, population and housing, transportation, and tribal cultural resources would be similar to the Project. Impacts related to transportation (VMT) would be similar to the Project and significant and unavoidable under this alternative.

2. Attainment of Project Objectives

The Maximum Density Allowed Alternative would meet most of the Project's objectives, as described in Subsection 6.1.1. However, as compared to the Project this alternative would to a lesser extent meet Objective B–provide a variety of housing types and affordability (for lower income, moderate, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing, primarily because the Maximum Density Allowed would eliminate the development of single family homes.

6.4.3 Senior Housing Alternative

As shown in Figure 6-1, *Conceptual Site Plan - Senior Housing Alternative*, the Senior Housing Alternative considers the development of the Project site with 55 single family detached homes, 114 townhomes, and 77 age-restricted multi-family apartment homes. In other words, this alternative would replace the Project's affordable multi-family units with senior housing. Access to the site would be the same as the Project. The Senior Housing Alternative would provide a total of 594 parking spaces, an increase of 20 spaces compared to the Project. Assuming all senior housing for the multi-family component of the Project, the Senior Housing Alternative would generate 1,538 daily trips, including 99 AM peak hour, and 130 PM peak hour trips, resulting in a decrease of 120 daily, 13 AM peak hour, and 10 PM peak hour trips compared to the Project (see *Technical Appendix R* of this EIR).



SITE INFORMATION
See Sheet A1.0

SITE SUMMARY COMBINED DATA

	Net Site	Gross Site
Site Area:	±12.1 Acres^	±12.3 Acres
Total Units for SITE:	246 Units	246 Units
Mixed Density:	20.33 DUA	20.0 DUA
Combined Parking Required:	440 Spaces	
Combined Provided Parking:	594 Spaces	
Surplus Parking:	154 Spaces	

Open Space	Required	Provided

See Sheet A1.0

FOR SALE PRODUCT - Single Family Detached/Townhomes
See Sheet A1.0

Parking Data
See Sheet A1.0

Open Space Provided
See Sheet A1.0

FOR RENT AFFORDABLE APARTMENTS

Site Area :	±2.0 Acres
Density:	38.5 DUA

Unit Types

1 Bedroom	61 Units (79.2%)
2 Bedroom	15 Units (19.5%)
3 Bedroom	01 Units (01.3%)
Manager's Unit	
Total Units	77 Units

Parking Data

Required:

1Bd - 61 Un. x 1.0* =	61 Spaces
2Bd - 15 Un. x 1.5* =	30 Spaces
3Bd - 01 Un. x 1.5* =	1.5 Spaces
Total	93 Spaces

(*) Parking Ratio

Provided:

Open Spaces	115 spaces
Total (1.49 sp/Unit)	115 spaces

Source(s): KTGY Architecture (02-17-2023)

Figure 6-1

Not to Scale

Conceptual Site Plan - Senior Housing Alternative

B. Aesthetics

The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. The existing vacant commercial office building site would be replaced by residential uses. The Senior Housing Alternative would have the same development area and maximum height limitations as the Project. This alternative would also include design features similar to the Project to create aesthetically pleasing buildings and site design. Accordingly, implementation of the Senior Housing Alternative would result in similar impacts as compared to the Project and would be less than significant.

C. Air Quality

The Senior Housing Alternative would have the same development impact area as the Project. Therefore, implementation of the Senior Housing Alternative would result in similar impacts from construction-related air quality that would occur from implementation of the Project and construction impacts would be less than significant.

The Senior Housing Alternative would result in a decrease in vehicle trips, which would reduce operational air quality emissions from mobile sources compared to the Project. Therefore, although the Project would result in less than significant air quality impacts, the Senior Housing Alternative would reduce operational air quality impacts, and impacts would be less than significant.

D. Biological Resources

The Senior Housing Alternative would result in the same development impact area as the Project site. The potential impacts to nesting birds, nesting raptors, and bat roosts would be the same as the proposed Project and mitigation measures would be implemented to reduce impacts to such resources to a less than significant level. Therefore, impacts would be similar compared to the Project.

E. Cultural Resources

The Senior Housing Alternative would result in the same development impact area and no known historic resources, archaeological resources, cultural resources, or human remains were identified as occurring within the Project site under existing conditions. Given the highly disturbed condition of the Project site and its surroundings, the potential for this alternative's construction activities to affect an unidentified archaeological resource is considered low. However, there is a potential to encounter buried prehistoric archaeological resources during grading activities in native soils. Therefore, impacts to cultural resources from the Senior Housing Alternative would be similar to those associated with the Project and mitigation measures would be implemented to reduce impacts to such resources to a less than significant level.

F. Energy

Under the Senior Housing Alternative, the total number of residential units would be the same as the Project. Therefore, construction activities/equipment/schedule and building energy demand would be

similar compared to the Project. However, the reduction in vehicle trips associated with this alternative would reduce fuel consumption as compared to the Project. Construction and operational activities associated with this alternative would have reduced energy demand compared to the Project. Impacts would be less than significant.

G. Geology and Soils

Grading and development of the Project site would still occur under the Senior Housing Alternative, and therefore, impacts to geology and soils would be similar to those of the Project. This alternative would result in a similar potential to impact undiscovered paleontological resources during grading as the Project. However, like the Project, mitigation measures would be required to reduce potential impacts to less than significant. Therefore, impacts to paleontological resources from the Senior Housing Alternative would be similar to those associated with the Project.

H. Greenhouse Gas Emissions

The Senior Housing Alternative would have the same development impact area. Since the type of construction would be the same under this alternative, implementation of the Senior Housing Alternative would result in similar impacts from construction-related GHG emissions as the Project.

The Senior Alternative would decrease vehicle trips and would result in a net decrease of GHG emissions. This alternative would result in an approximate 7.2% decrease in vehicle trips compared to the Project[6]. The 7.2% decrease in vehicle trips would result in an approximate 7.2% increase in mobile source emissions, decreasing the emissions from 2,505 $MTCO_2e/yr$[7] under the Project to 2,324.64 $MTCO_2e/yr$ under this alternative. The decrease in mobile source emissions would decrease the total GHG emissions to approximately 2,576.84 $MTCO_2e/yr$. Similar to the Project, this alternative would not exceed the threshold of 3,000 $MTCO_2e$ per year. Therefore, GHG emissions impacts would be less than significant but reduced compared to the Project.

I. Hazards and Hazardous Materials

The Senior Housing Alternative would develop the Project site for the same uses, and therefore the same type of hazardous materials typically used for construction and operation of the Project would be used under the Senior Housing Alternative. Similarly, the use and storage of hazardous materials would be regulated by the same federal, state, and local laws and permitting requirements as would occur with the Project. There were no identified contaminated soils on the Project site, therefore construction activities would not involve the transport of contaminated soils, similar to the Project. Similar to the Project, this alternative would result in less than significant impacts related to hazards and hazardous materials.

[6] 120 decrease in vehicle trips (Existing Zoning Alternative)/1,658 vehicle trips (Project) = 0.072 or approximately 7.2%.
[7] See Table 4.7-4 of this EIR.

J. Hydrology and Water Quality

The Senior Housing Alternative would result in the same number of residential units and have the same development impact area; therefore, the area of impervious surfaces and stormwater impacts would be similar compared to the Project due to mandatory compliance with the WQMP. This alternative would result in similar runoff and potential for impacts to drainage, erosion, and water quality. Like the Project, this alternative could introduce new sources of water pollutants from construction and operation activities. Additionally, this alternative would be required to include storm drain facilities. The Senior Housing Alternative would result in similar impacts to hydrology and water quality as the Project and would be less than significant.

K. Land Use and Planning

Similar to the Project, the Senior Housing Alternative would not require a general plan amendment or zone change to implement the development. Therefore, this alternative is consistent with SCAG's RTP/SCS (Connect SoCal) policies and the City's General Plan, including the Housing Element. Therefore, the Senior Housing Alternative would result in a less than significant impact related to land use and planning and similar impacts compared to the Project.

L. Noise

Construction and operational stationary noise impacts would be similar under the Senior Housing Alternative because this alternative would result in the same number of residential units. Construction of this alternative would generate the same peak noise volumes and similar type and volume of construction noise as the Project. Operational noise would be slightly reduced under this alternative as traffic generated noise sources would decrease in relation to the reduction in vehicle trips. Noise impacts from the Senior Housing Alternative would be less than significant and reduced compared to the Project.

M. Population and Housing

Under the Senior Housing Alternative, the total number of residential units and residents would be the same as the Project. Under this alternative and similar to the Project, the population, housing, and employment at buildout would not result in substantial unplanned growth in the area because the planned housing is within the growth projections of the City's General Plan Housing Element. Additionally, this alternative is consistent with the existing General Plan land use and zoning designations and improves the City's job-housing balance by developing housing in a currently jobs-rich and housing-poor area. Overall, impacts related to population and housing would be less than significant with this alternative and similar to the Project.

N. Public Services

Under the Senior Housing Alternative, buildout would result in the same number of residents. This would result in similar demands placed on public services, including fire protection and law

enforcement. As with the Project, impacts associated with public services under the Senior Housing Alternative would be less than significant.

O. Recreation

Under the Senior Housing Alternative, buildout would result in the same number of residents. Similar to the Project, usable common open space and private open space would be provided under this alternative. Overall, impacts associated with recreation under the Senior Housing Alternative would be less than significant and similar to the Project.

P. Transportation

Operation-related vehicle trips would be decreased under the Senior Housing Alternative, resulting in a net decrease of 120 daily vehicle trip ends per day compared to the Project. As discussed in the VMT analysis (*Technical Appendix R* of this EIR) for this alternative, the senior housing land use results in reduced vehicle trips and trip lengths. Therefore, this alternative would result in a reduction in VMT of 1,458 during the baseline year (2022) and 1,471 during the long range condition (2045) with the same number of residents. As a result, the Senior Housing Alternative would result in a reduction in VMT impacts. However, impacts would exceed the City's baseline VMT threshold and impacts would be significant and unavoidable but reduced as compared to the Project.

Q. Tribal Cultural Resources

The Senior Housing Alternative would result in a similar potential to adversely affect any tribal cultural resources on the Project site as the Project. However, like the Project, mitigation measures would be required to reduce potential impacts to less than significant. Therefore, impacts that could occur under the Senior Housing Alternative would be similar to those associated with the Project.

R. Utilities and Service Systems

The total number of residential units under the Senior Housing Alternative would be the same as the Project. Therefore, the demand for regional water supplies and generation of wastewater would be the same as the Project. Thus, the impacts related to water supplies and wastewater would be similar than the less than significant impacts that would occur from implementation of the proposed Project. Similarly, solid waste generation would be similar to the Project and require the same landfill capacity. Therefore, impacts to utilities and service system would be similar to the Project and less than significant impacts.

S. Conclusion

1. Avoid or Substantially Lessen the Significant Impacts of the Project

The Senior Housing Alternative would result in reduced impacts related to air quality (operation), energy, GHG emissions, noise (off-site traffic-related), and transportation (VMT) due to the decrease in vehicular trips and trip lengths. However, significant and unavoidable impacts related to VMT would occur with the implementation of this alternative, similar to the Project. Impacts related to aesthetics,

biological resources, cultural resources, geology and soils, hazardous and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems would be similar to the Project.

2. Attainment of Project Objectives

The Existing Zoning Alternative would meet some of the Project's objectives (Objectives A, D–E), as described in Subsection 6.1.1, but would only partially meet Objective B and would not meet Objective C, as follows:

- *Objective B–Provide a variety of housing types and affordability (for lower income, moderate, and above moderate income households) that satisfies the residential market and accommodates increased demand for housing*. This alternative would only partially meet Objective B because although this alternative would result in units restricted for seniors, it would not result in a variety of affordable housing types for lower income, moderate, and above moderate income households.

- *Objective C–Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.* This alternative would not meet this objective because the affordable component would not be comprised of workforce housing, unlike the Project which would provide a range of affordability levels to support middle-income workers seeking to live closer to where they work.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the CEQA Guidelines states that, if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

The No Project/No Development Alternative has the least impact to the environment because it would not involve any construction activities or residential operations. In addition, it would eliminate a significant unavoidable impact of the Project, VMT. While this alternative would avoid the significant effects of the Project, it would not receive the environmental benefits from the implementation of stormwater drainage and water quality filtration features. Additionally, none of the Project Objectives would be met.

Pursuant to Section 15126.6(e)(2), since the environmentally superior alternative is the No Project/No Development Alternative, another alternative was selected as the environmentally superior alternative. The Senior Housing Alternative is environmentally superior to the Project. As shown in Table 6-1, *Comparison of Alternatives and Project-related Environmental Impacts*, the Senior Housing Alternative would have less impacts under five of the environmental topical areas. The reduction in impacts is due to the fact that the use would generate reduced vehicular trips and trip lengths as

compared to the proposed Project, which would result in a reduction in operational-related impacts, including air quality, GHG emissions, energy, noise, and transportation impacts. However, this alternative would still result in significant and unavoidable VMT impacts. Table 6-2, *Alternatives Attainment of Project Objectives*, identifies the ability of each alternative to meet the fundamental purpose and basic objectives of the Project, listed above under 6.1.1, *Project Objectives*. The Senior Housing Alternative would meet some of the Project's objectives (Objectives A, D–E), but would only partially meet Objective B and would not meet Objective C, as discussed above.

Table 6-1 Comparison of Alternatives and Project-related Environmental Impacts

Impact Area	Project	No Project/ No Development	Maximum Density Allowed	Senior Housing
Aesthetics	LTS	No Impact (less)	LTS (Similar)	LTS (Similar)
Air Quality				
Construction	LTS	No Impact (less)	LTS (Similar)	LTS (Similar)
Operation	LTS	No Impact (less)	LTS (Greater)	LTS (Less)
Biological Resources	LTS/M	No Impact (less)	LTS/M (Similar)	LTS/M (Similar)
Cultural Resources	LTS/M	No Impact (less)	LTS/M (Similar)	LTS/M (Similar)
Energy	LTS	No Impact (less)	LTS (Greater)	LTS (Less)
Geology and Soils	LTS/M	No Impact (less)	LTS/M (Similar)	LTS/M (Similar)
GHG Emissions	LTS	No Impact (less)	SU (Greater)**	LTS (Less)
Hazards and Hazardous Materials	LTS	No Impact (less)	LTS (Similar)	LTS (Similar)
Hydrology and Water Quality	LTS	No Impact (greater)	LTS (Similar)	LTS (Similar)
Land Use and Planning	LTS	No Impact (less)	LTS (Similar)	LTS (Similar)
Noise				
Construction	LTS	No Impact (less)	LTS (Similar)	LTS (Similar)
On-Site Operations	LTS	No Impact (less)	LTS (Greater)	LTS (Similar)
Off-Site Traffic-Related	LTS	No Impact (less)	LTS (Greater)	LTS (Less)
Population and Housing	LTS	No Impact (less)	LTS (Similar)	LTS (Similar)
Public Services	LTS	No Impact (less)	LTS (Greater)	LTS (Similar)
Recreation	LTS	No Impact (less)	LTS (Greater)	LTS (Similar)
Transportation	SU	No Impact (less)*	SU (Similar)	SU (Less)
Tribal Cultural Resources	LTS/M	No Impact (less)	LTS/M (Similar)	LTS/M (Similar)
Utilities and Service Systems	LTS	No Impact (less)	LTS (Greater)	LTS (Similar)

LTS = Less than Significant; LTS/M = Less than Significant with Mitigation; SU = Significant and Unavoidable
* = Eliminates SU impact
** = New SU impact

Table 6-2 Alternatives Attainment of Project Objectives

Project Objectives	No Project/ No Development	Maximum Density Allowed	Senior Housing
A. Provide residential development consistent with the City's General Plan, including the 2021-2029 Housing Element, to help meet the City's RHNA requirement.	Not Met	Met	Met
B. Provide a variety of housing types and affordability (for lower income, moderate, and above moderate income households) that satisfies the residential market and accommodate increased demand for housing.	Not Met	Partially Met	Partially Met
C. Provide a variety of affordable housing types to support middle-income workers, providing an opportunity for residents to live closer to where they work.	Not Met	Met	Not Met
D. Improve the City's jobs housing balance to support reduced commute distances consistent with the Southern California Association of Governments' Connect SoCal.	Not Met	Met	Met
F. Create a unique residential character that provides for a high quality architectural design.	Not Met	Met	Met

7.0 ORGANIZATIONS AND PERSONS CONSULTED

7.1 PERSONS CONTRIBUTING TO EIR PREPARATION

7.1.1 CITY OF LOS ALAMITOS

Ron Noda
Development Services Director

Tom Oliver
Associate Planner

Lorry Hempe
Interim Public Works Superintendent

Rene Carmody
Public Works Supervisor

Chris Kelley
City Engineer

7.1.2 T&B PLANNING, INC.

Nicole Morse, Esq.
Principal

Tracy Chu
Assistant Project Manager

Justin Nguyen
Environmental Analyst

Andrea Halfhill
Environmental Analyst

Cristina Maxey
GIS/Graphics Manager

Rhea Smith
GIS/Graphics Technician

7.1.3 TECHNICAL REPORT PREPARATION

BFSA Environmental Services

Phase I Cultural Resources Study
Irem Oz, Architectural Historian; Andrew J. Garrison, Project Archaeologist; and Brian F. Smith, President/Principal Investigator

Paleontological Assessment
Todd A. Wirths, Senior Paleontologist

C&V Consulting Inc.

Preliminary Hydrology Report; Preliminary Water Quality Management Plan; Alternate Preliminary Hydrology Study; Sanitary Sewer Analysis
Philip Malcomson, P.E.

EFI Global, Inc.

Phase I Environmental Site Assessment
Alberto Jimenez, Project Manager; Christopher Rude, Senior Project Manager
Phase II Environmental Site Assessment
Christopher Rude, Senior Project Manager; Brian Brennan, Senior Project Manager; Brian Martasin, Principal Geologist

Glen Lukos Associates, Inc.

Biological Resources Report
Jeff Ahrens, Senior Wildlife Biologist

Jurisdictional Delineation
Tony Bomkamp , Technical Director

Johnson Aviation, Inc.

Airport Land Use Assessment
Nick Johnson

LGC Geotechnical, Inc.

Geotechnical Report
Ryan Douglas, Project Engineer

LSA Associates, Inc.

Historic Resources Evaluation
Casey Tibbet, Associate Cultural Resources Manager/Architectural Historian

RRM Design Group

Park Impact Analysis

Tom Hare, Principal Park Planner

Urban Crossroads

Air Quality Impact Analysis; Health Risk Assessment; Energy Analysis; Greenhouse Gas Analysis
Haseeb Qureshi, Principal; Alyssa Tamase, Environmental Analyst; Michael Tirohn, Environmental Scientist

Noise Impact Analysis
Bill Maddux, Senior Associate

Vehicle Miles Traveled (VMT) Analysis; Senior Housing VMT Alternative Analysis
Alex So, Senior Associate

Traffic Analysis; Senior Housing Traffic Alternative Analysis
Charlene So, P.E.; Aric Evatt PTP, President

Walker Consultants

Arbor Park Parking Study and Layout; Onsite Parking Analysis
Jeff Weckstein, Project Manager

7.2 Persons Consulted/Written or Verbal Communication

7.2.1 Public Service Correspondence

Correspondence with public service providers is included in *Technical Appendix L* of this EIR.

Los Alamitos Unified School District
Andrew Pulver, Superintendent
Elvia Galicia, Assistant Superintendent of Business Services

Los Alamitos Police Department
Michael Claborn, Chief of Police

Orange County Fire Authority
Tamera Rivers, Management Analyst

Orange County Public Library
Julie Oakley, Administrative Manager

Seal Beach Police Department
Michael Ezroj, Police Captain

7.2.2 Tribal Cultural Consultations

Campo Band of Diegueno Mission Indians
Ralph Goff, Chairperson

Ewiiaapaayp Band of Kumeyaay
Robert Pinto, Chairperson
Michael Garcia, Vice Chairperson

Gabrieleno Band of Mission Indians – Kizh Nation
Andrew Salas, Chairman

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
Christina Conley, Tribal Consultant and Administrator

Gabrielino/Tongva Nation
Sandonne Goad, Chairperson

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Antony Morales, Chairperson
Gabrieleno-Tongva Tribe
Charles Alvarez

Juaneno Band of Mission Indians Acjachemen Nation- Belardes
Matias Belardes, Chairperson

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson

Mesa Grande Band of Diegueno Mission Indians
Michael Linton, Chairperson

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
Javaughn Miller, Tribal Administrator

Pala Band of Mission Indians
Shasta Gaughen, Tribal Historic Preservation Officer

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair

Soboba Band of Luiseno Indians
Isaiah Vicanco, Chairperson

8.0 REFERENCES

8.1 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing the 4665 Lampson Avenue EIR and are bound separately as *Technical Appendices*. Electronic copies of the *Technical Appendices* are available for review at the City of Los Alamitos at 3191 Katella Ave, Los Alamitos, CA 90720. Hardcopies of the *Technical Appendices* may be made available upon request.

Appendix A:	Notice of Preparation (NOP) and Written Comments on the NOP
Appendix B1:	Air Quality Impact Analysis
Appendix B2:	Health Risk Assessment
Appendix C1:	Biological Resources Report
Appendix C2:	Jurisdictional Delineation
Appendix D1:	Phase I Cultural Resources Study
Appendix D2:	Historic Resources Evaluation
Appendix E:	Energy Analysis
Appendix F1:	Geotechnical Report
Appendix F2:	Paleontological Assessment
Appendix G:	Greenhouse Gas Analysis
Appendix H1:	Phase I Environmental Site Assessment
Appendix H2:	Phase II Environmental Site Assessment
Appendix I1:	Preliminary Hydrology Report
Appendix I2:	Preliminary Water Quality Management Plan
Appendix I3:	Alternate Preliminary Hydrology Study
Appendix J1:	Airport Land Use Assessment
Appendix J2:	FAA's Determination of No Hazard to Air Navigation
Appendix K:	Noise Impact Analysis
Appendix L:	Public Service Correspondences
Appendix M:	Park Impact Analysis
Appendix N1:	Traffic Analysis
Appendix N2:	Vehicle Miles Traveled Analysis
Appendix O:	Sanitary Sewer Analysis
Appendix P:	Onsite Parking Analysis
Appendix Q:	Arbor Park Parking Study and Layout
Appendix R:	Senior Housing Alternative Analyses

8.2 REFERENCES AND DOCUMENTS INCORPORATED BY REFERENCE

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

Cited As:	***Citation:***
ALUC, 2017	Airport Land Use Commission (ALUC), 2017. *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos*. August 17, 2017. Web. Available: https://files.ocair.com/media/2021-02/JFTB,LosAlamitos-AELUP2017.pdf
AQMD, 2008	Air Quality Management District (AQMD), 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008. Web. Available: https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf
BFSA, 2022	BFSA Environmental Services (BFSA), 2022. *Paleontological Assessment for the 4665 Lampson Avenue Project*. September 21, 2022. *Technical Appendix F2*.
BFSA, 2023	BFSA Environmental Services (BFSA), 2023. *Phase I Cultural Resources Study for the 4665 Lampson Avenue Project*. April 7, 2023. *Technical Appendix D1*.
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Aeronautics Act*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=PUC&division=9.&title=&part=1.&chapter=&article=
CA Legislative Info, n.d.	CA Legislative Info, n.d. *ARTICLE 1.7. Disclosure of Natural and Environmental Hazards, Right-to-Farm, and Other Disclosures Upon Transfer of Residential Property*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=1103.2.&lawCode=CIV
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Assembly Bill 16*. Web. Available: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB16
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Assembly Bill No. 2515 (Water Conservation in Landscaping Act)*. Web. Available: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB2515
CA Legislative Info, n.d.	CA Legislative Info, n.d. *CA Gov. Code Section 51178*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=51178
CA Legislative Info, n.d.	CA Legislative Info, n.d. *California Water Code*. Web. Available: http://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=WAT&tocTitle=+Water+Code+-+WAT
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Chapter 7.5 The Alquist-Priolo Earthquake Fault Zoning Act*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?division=2.&chapter=7.5.&lawCode=PRC
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Density Bonuses and Other Incentives [65915 – 65918]*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65915&lawCode=GOV

Cited As:	***Citation:***
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Division 13. Environmental Quality.* Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=21096.
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Hazardous Waste Control*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=20.&title=&part=&chapter=6.5.&article=
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Health and Safety Code 7050.5*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=7050.5
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Article 10.6 Housing Elements [65580-65589.11]*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=7.&part=&chapter=3.&article=10.6.
CA Legislative Info, n.d.	CA Legislative Info, n.d. *HSC Part 1.5*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=13.&title=&part=1.5.&chapter=&article=
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Part 2. Birds [3500-3863]*. Web. Available: http://www.leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?division=4.&chapter=1.&part=2.&lawCode=FGC
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Quimby Act (Gov Code 66477)*. Web. Available: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=66477.&lawCode=GOV
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill 2095 (Water Recycling in Landscaping Act)*. Web. Available: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=199920000SB2095
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill 221 (Gov. Code Section 66473.7)*. Web. Available: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=66473.7.&lawCode=GOV
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill 330*. Web. Available: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB330
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015*. Web. Available: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB350
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill 610*. Web. Available: http://www.leginfo.ca.gov/pub/01-02/bill/sen/sb_0601-0650/sb_610_bill_20011009_chaptered.html

Cited As:	Citation:
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill 901*. Web. Available: http://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=WAT&division=6.&title=&part=2.6.&chapter=&article=
CA Legislative Info, n.d.	CA Legislative Info, n.d. *Senate Bill No. 50*. Web. Available: http://www.leginfo.ca.gov/pub/97-98/bill/sen/sb_0001-0050/sb_50_bill_19980827_chaptered.pdf
CAB, n.d.	California Architects Board (CAB), n.d. *Essential Services Buildings Seismic Safety Act*. Web. Available: https://www.cab.ca.gov/general_information/esbssa.shtml
CalFire, 2022	California Department of Forestry and Fire Protection (CalFire), 2022. *FHSZ Viewer*. Web. Available: https://egis.fire.ca.gov/FHSZ/
CAL GUARD, 2023	Cal Guard California Military Department (CAL GUARD), 2023. *Joint Forces Training Base – Los Alamitos*. Web. Available: https://calguard.ca.gov/jftb_losalamitos/
CalRecycle, 2019	California Department of Resources Recycling and Recovery (CalRecycle), 2019. *Estimated Solid Waste Generation Rates*. Web. Available: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates
CalRecycle, 2022a	California Department of Resources Recycling and Recovery (CalRecycle), 2022a. *SWIS Facility/Site Activity Details Frank R. Bowerman Sanitary LF (30-AB-0360)*. Web. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2767?siteID=2103
CalRecycle, 2022b	California Department of Resources Recycling and Recovery (CalRecycle), 2022b. *WIS Facility/Site Activity Details Olinda Alpha Landfill (30-AB-0035)*. Web. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093
CalRecycle, n.d.	California Department of Resources Recycling and Recovery (CalRecycle), n.d. *History of California Solid Waste Law, 1990-1994*. Web. Available: https://www.calrecycle.ca.gov/Laws/Legislation/calhist/1990to1994
CalRecycle, n.d.	California Department of Resources Recycling and Recovery (CalRecycle), n.d. *History of California Solid Waste Law, 1985-1989*. Web. Available: https://www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989
CalRecycle, n.d.	California Department of Resources Recycling and Recovery (CalRecycle), n.d. *Introdution and Background: California's Mandatory Commercial Recycling Law*. Web. Available: https://www.calrecycle.ca.gov/Recycle/Commercial/
Caltrans, 2022	California Department of Transportation (Caltrans), 2022. *Scenic Highways*. Web. Accessed November 8, 2022. Available: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways
CAPCOA, 2021	California Air Pollution Control Officers Association (CAPCOA), 2021. *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. December 2021. Web. Available: https://www.caleemod.com/handbook/index.html

Cited As:	***Citation:***
CARB, n.d.	California Air Resources Board (CARB), n.d. *California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley)*. Web. Available: https://ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley
CBSC, 2020	California Building Standards Commission (CBSC), 2020. *2019 California Green Building Standards Code.* Web. Available: https://codes.iccsafe.org/content/CAGBC2019JUL21S/cover
CBSC, 2022	California Building Standards Commission (CBSC), 2022. *Guide to Title 24 California Building Standards Code.* Web. Available: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/Guidebooks---Title-24
CBSC, n.d.	California Building Standards Commission (CBSC), n.d. *California Building Standards Code*. Web. Available: https://www.dgs.ca.gov/BSC/Codes
CDC, 1994	California Department of Conservation (CDC), 1994. *Generalized Mineral Land Classification of OC - 94-15 Plate 1*.
CDC, 2022	California Department of Conservation (CDC), 2022. *FMMP Important Farmland Finder*. Web. Available: https://maps.conservation.ca.gov/DLRP/CIFF/
CDC, n.d.	California Department of Conservation (CDC), n.d. *Seismic Hazards Mapping Act*. Web. Available: https://www.conservation.ca.gov/cgs/shma
CDE, 2019	California Department of Education (CDE), 2019. *School Facility Program Handbook.* January 2019. Web. Available: https://www.dgs.ca.gov/-/media/Divisions/OPSC/Services/Guides-and-Resources/SFP_Hdbk_ADA.pdf?la=en&hash=B871984008A7D2E35D16DB50DDE0C87791C294A7
CDE, 2023	California Department of Education (CDE), 2023. *Enrollment Multi-Year Summary by Grade*. Web. Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdYears.aspx?cds=3073924&agglevel=district&year=2014-15&ro=y&ro=y
CDFW, n.d.	California Department of Fish and Wildlife (CDFW), n.d. *Lake and Streambed Alteration Program*. Web. Available: https://www.wildlife.ca.gov/conservation/lsa
CDFW, n.d.	California Department of Fish and Wildlife (CDFW), n.d. *California Endangered Species Act (CESA) Permits*. Web. Available : https://wildlife.ca.gov/Conservation/CESA/Permitting
CDFW, n.d.	California Department of Fish and Wildlife (CDFW), n.d. *Natural Community Conservation Planning (NCCP)*. Web. Available: https://wildlife.ca.gov/conservation/planning/nccp
CDFW, n.d.	California Department of Fish and Wildlife (CDFW), n.d. *California Laws Protecting Native Plants*. Web. Available: https://wildlife.ca.gov/Conservation/Plants/Laws
CEC, 2022	California Energy Commission (CEC), 2022. *Building Energy Efficiency Standards - Title 24*. December 23, 2022. Web. Available: https://www.energy.ca.gov/programs-

Cited As:	Citation:
	and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency
CEC, 2023	California Energy Commission (CEC), 2023. *Final 2022 Integrated Energy Policy Report Update*. February 2023. Web. Available: https://www.energy.ca.gov/sites/default/files/2023-02/Adopted_2022_IEPR_Update_with_errata_ada.pdf
CEC, n.d.	California Energy Commission (CEC), n.d. *Renewables Portfolio Standard*. Web. Available: https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard
City of Los Alamitos, 2014a	City of Los Alamitos, 2014. *City of Los Alamitos General Plan Draft Environmental Impact Report – Volume 1*. August 2014. Web. Available: http://cityoflosalamitos.org/DocumentCenter/View/437/Environmental-Impact-Report-Draft---Volume-1-PDF
City of Los Alamitos, 2014b	City of Los Alamitos, 2014. *City of Los Alamitos General Plan Draft Environmental Impact Report – Volume 2*. August 2014. Web. Available: https://cityoflosalamitos.org/DocumentCenter/View/438/Environmental-Impact-Report-Draft---Volume-2-PDF
City of Los Alamitos, 2015a	City of Los Alamitos, 2015a. *City of Los Alamitos General Plan*. March 23, 2015. Web. Available: https://cityoflosalamitos.org/DocumentCenter/View/436/2035-General-Plan-PDF
City of Los Alamitos, 2015b	City of Los Alamitos, 2015b. *City of Los Alamitos General Plan Update Revised Final Environmental Impact Report*. February 2015. Web. Available: https://cityoflosalamitos.org/DocumentCenter/View/432/Environmental-Impact-Report-Final-PDF
City of Los Alamitos, 2021	City of Los Alamitos, 2021. *Active Transportation Plan* February 2021. Web. Available: https://cityoflosalamitos.org/DocumentCenter/View/440/Active-Transportation-Plan-PDF
City of Los Alamitos, 2023a	City of Los Alamitos, 2023a. *Los Alamitos, California Municipal Code*. January 2023. Web. Available: https://library.qcode.us/lib/los_alamitos_ca/pub/municipal_code
City of Los Alamitos, 2023b	City of Los Alamitos, 2023b. *City of Los Alamitos 2021-2029 Housing Element*. February 2023. Web. Available: https://cityoflosalamitos.org/DocumentCenter/View/2847/Los-Alamitos-Housing-Element-FINAL-Adopted?bidId=
City of Los Alamitos, n.d.	City of Los Alamitos, n.d. *Trash Collection Services*. Web. Available: https://cityoflosalamitos.org/183/Trash-Collection-Services
City of Seal Beach, 2003	City of Seal Beach, 2003. *City of Seal Beach General Plan*. December 2003. Web. Available: https://www.sealbeachca.gov/Portals/0/Documents/Cover%20and%20Introduction.pdf

Cited As:	***Citation:***
City of Seal Beach, 2018	City of Seal Beach, 2018. *Sewer Master Plan 2018*. February 2018. Web. Available: https://www.sealbeachca.gov/Portals/0/Documents/Draft%202018%20Sewer%20Master%20Plan.pdf
City of Seal Beach, 2024	City of Seal Beach, 2024. *Lampson Avenue Bike Lane Gap Closure Project*. April 8, 2024. Web. Available: https://www.sealbeachca.gov/Portals/0/Lampson-Ave-Bike-Lane-Gap-Closure-Factsheet-April-8-2024-F.pdf
C&V, 2022	C&V Consulting Inc. (C&V), 2022. *Sanitary Sewer Analysis.* September 2022. *Technical Appendix O*.
C&V, 2023	C&V Consulting Inc. (C&V), 2023. *Alternate Preliminary Hydrology Study*. September 2023. *Technical Appendix I3*.
C&V, 2024a	C&V Consulting Inc. (C&V), 2024a. *Preliminary Hydrology Study*. March 2024. *Technical Appendix I1*.
C&V, 2024b	C&V Consulting Inc. (C&V), 2024b. *Preliminary Water Quality Management Plan.* March 13, 2024. *Technical Appendix I2*.
DOF, 2022	California Department of Finance, 2022. *E-5 Population and Housing Estimates for Cities, Counties, and the State*. May 2022. Web. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/
DTSC, 2019	California Department of Toxic Substances Control (DTSC), 2019. *Hazardous Waste and Hazardous Substances Law Code Excerpts.* Web. Available: https://dtsc.ca.gov/wp-content/uploads/sites/31/2020/03/Linked-TOC-2019_a.pdf
DTSC, n.d.	California Department of Toxic Substances Control (DTSC), n.d.. *Envirostor Database.* Web. Available: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=4665+Lampson+Avenue
DTSC, n.d.	California Department of Toxic Substances Control (DTSC), n.d. *Official California Code of Regulations (CCR), Title 22, Division 4.5*. Web. Available: https://dtsc.ca.gov/title22/
DWR, 2003	Department of Water Resources (DWR), 2003. *Guidebook for Implementation of SB 610 and SB 221*. October 8, 2003. Web. Available: http://sntbberry.cityofsanteeca.gov/sites/FanitaRanch/Public/Remainder%20of%20the%20Record/(2)%20Reference%20Documents%20from%20EIR%20&%20Technical%20Reports/Tab%20185%20-%202003-10%20CDWR%20Guidebook%20for%20Impl%20SB%20610.pdf
DWR, 2016	Department of Water Resources (DWR), 2003. *Guidebook for Urban Water Suppliers*. October 8, 2003. March 2016. Web. Available: https://cawaterlibrary.net/wp-content/uploads/2017/06/UWMP_Guidebook_Mar_2016_FINAL.pdf
DWR, 2020	Department of Water Resources (DWR), 2020. *Basin Prioritization*. Web. Available: https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization

Cited As:	***Citation:***
DWR, n.d.	Department of Water Resources (DWR), n.d. *Sustainable Groundwater Management Act (SGMA)*. Web. Available: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management
EFI, 2023	EFI Global, Inc (EFI), 2023. *Phase I Environmental Site Assessment*. January 18, 2023. *Technical Appendix H1*.
EFI, 2022	EFI Global, Inc (EFI), 2022. *Phase II Environmental Site Assessment.* September 22, 2022. *Technical Appendix H2*.
EPA, 2009	United States Environmental Protection Agency (EPA), 2009. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*. March 2009. Web. Available: https://archive.epa.gov/region9/buildingreuse/web/pdf/cd-meas.pdf
EPA, 2022a	United States Environmental Protection Agency (EPA), 2022a. *Summary of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)*. September 12, 2022. Web. Available: https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act
EPA, 2022b	United States Environmental Protection Agency (EPA), 2022b. *Summary of the Toxic Substances Control Act*. October 4, 2022. Web. Available: https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act
EPA, 2022c	United States Environmental Protection Agency (EPA), 2022c. *Summary of the Occupational Safety and Health Act*. October 4, 2022. Web. Available: https://www.epa.gov/laws-regulations/summary-occupational-safety-and-health-act
EPA, 2022d	United States Environmental Protection Agency (EPA), 2022d. *Summary of Clean Water Act*. July 6, 2022. Web. Available: https://www.epa.gov/laws-regulations/summary-clean-water-act
EPA, 2022e	United States Environmental Protection Agency (EPA), 2022e. *Summary of the Resource Conservation and Recovery Act*. September 12, 2022. Web. Available: https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act
EPA, 2022f	United States Environmental Protection Agency (EPA), 2022f. *Summary of the Safe Drinking Water Act*. September 12, 2022. Web. Available: https://www.epa.gov/laws-regulations/summary-safe-drinking-water-act
EPA, 2023	United States Environmental Protection Agency (EPA), 2023. *Clean Water Act Section 401: State Certification of Water Quality*. December 6, 2023. Web. Available: https://www.epa.gov/cwa-401/clean-water-act-section-401-state-certification-water-quality
EPA, n.d.	United States Environmental Protection Agency (EPA), n.d. *Wetland Regulatory Authority*. Web. Available: https://www.epa.gov/sites/production/files/2015-03/documents/404_reg_authority_fact_sheet.pdf
EPIC, 2010	Energy Policy Initiatives Center (EPIC), 2010. *California's Solar Shade Control Act*. March 2010. Web. Available: https://www.sandiego.edu/law/documents/centers/epic/100329_SSCA_Final_000.pdf

Cited As:	Citation:
EPIC, 2014	Energy Policy Initiatives Center (EPIC), 2014. *California's Solar Rights Act*. December 2014. Web. Available: https://www.sandiego.edu/law/documents/centers/epic/Solar%20Rights%20Act-A%20Review%20of%20Statutes%20and%20Relevant%20Cases.pdf
FAA, n.d.	Federal Aviation Administration (FAA), n.d. *Details on FAA Noise Levels, Stages, and Phaseouts*. Web. Available: https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/airport_aircraft_noise_issues/levels
FAA, 2022a	Federal Aviation Administration (FAA), 2022a. *Notification of Proposed Construction or Alteration on Airport Part 77*. November 16, 2022. Web. Available: https://www.faa.gov/airports/central/engineering/part77
FAA, 2022b	Federal Aviation Administration (FAA), 2022b. *Determination of No Hazard to Air Navigation*. January 26, 2022. *Technical Appendix J2*.
FEMA, 2009	Federal Emergency Management Agency (FEMA), 2009. *FEMA Flood Map Service Center: Search By Address*. December 3, 2009. Web. Available: https://msc.fema.gov/portal/search?AddressQuery=4665%20lampson%20avenue%20los%20alamitos#searchresultsanchor
FEMA, 2021	Federal Emergency Management Agency (FEMA), 2021. *Executive Order 11988 Floodplain Management*. October 20, 2021. Web. Available: https://www.fema.gov/glossary/executive-order-11988-floodplain-management
FEMA, 2023	Federal Emergency Management Agency (FEMA), 2023. *Flood Insurance*. April 26, 2023. Web. Available: https://www.fema.gov/flood-insurance
FEMA, 2024	Federal Emergency Management Agency (FEMA), 2024. *Descriptions of All Policies*. February 7, 2024. Web. Available: https://www.fema.gov/emergency-managers/practitioners/environmental-historic/laws/descriptions#11990
FHWA, 2020	Federal Highway Administration (FHWA), 2020. *Intermodal Surface Transportation Efficiency Act of 1991 Information*. February 24, 2020. Web. Available: https://www.fhwa.dot.gov/planning/public_involvement/archive/legislation/istea.cfm
FHWA, 2022	Federal Highway Administration (FHWA), 2022. *Highway Traffic Noise*. June 15, 2022. Web. Available: https://www.fhwa.dot.gov/environment/noise/
FTA, 2018	Federal Transit Administration (FTA), 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. Web. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf
GLA, 2024	Glen Lukos Associates, Inc., 2024. *Biological Technical Report for 4665 Lampson Avenue Project.* April 1, 2024. *Technical Appendix C1*.
GLA, 2023	Glen Lukos Associates, Inc., 2023. *Jurisdictional Determination for Project Site at 4665 Lampson Avenue, Los Alamitos, Orange County.* October 16, 2023. *Technical Appendix C2*.

Cited As:	***Citation:***
Google Earth, n.d.	Google Earth, n.d. *Google Earth*. Web. Available: https://earth.google.com/web/
GSWC, 2021	Golden State Water Company (GSWC), 2021. *West Orange Service Area 2020 Urban Water Management Plan*. July 15, 2021. Web. Available: https://wuedata.water.ca.gov/public/uwmp_attachments/1441205680/GSWC-West%20Orange%202020%20UWMP%20Final.pdf
HUD, n.d.	HUD, n.d. *Housing Discrimination Under the Fair Housing Act*. Web. Available: https://www.hud.gov/program_offices/fair_housing_equal_opp/fair_housing_act_overview
Johnson, 2023	Johnson Aviation, Inc, 2023. *Airport Land Use Compatibility Assessment – 4665 Lampson Avenue Project, Los Alamitos, CA*. October 2, 2023. *Technical Appendix J1*.
LAUSD, 2023a	Los Alamitos Unified Shool District (LAUSD), 2023a. *School Information*. Web. Available: https://www.losal.org/our-district/schools
LAUSD, 2023b	Los Alamitos Unified Shool District (LAUSD), 2023b. *My School Locator*. Web. Available: https://locator.decisioninsite.com/?StudyID=212051
LGC, 2021	LGC Geotechnical, Inc. (LGC), 2021. *Preliminary Geotechnical Evaluation and Design Recommendations for Proposed Single-Family and Multi-Family Residential Development, 4665 Lampson Avenue, Los Alamitos, California*. December 21, 2021. *Technical Appendix F1*.
LSA, 2022	LSA Associates, Inc. (LSA), 2022. *Historic Resources Evaluation – Primary Record and Building, Structure, and Object (BSO) Form for 4665 Lampson Avenue in Los Alamitos, Orange County, California*. December 1, 2022. *Technical Appendix D2*.
NAHC, n.d.	Native American Heritage Commission (NAHC), n.d. *State Laws and Codes*. Web. Available: http://nahc.ca.gov/codes/state-laws-and-codes/
Navy Life SW, n.d.	Navy Life SW Navy Region Southwest (Navy Life SW), n.d. *Navy Golf Course*. Web. Available: https://www.navylifesw.com/programs/63c4dee3-9058-4efe-bf4b-a2095e765bcf
NOAA, n.d.	National Oceanic and Atmospheric Administration (NOAA), n.d. *American Indian Religious Freedom Act*. Web. Available: https://coast.noaa.gov/data/Documents/OceanLawSearch/Summary%20of%20Law%20-%20American%20Indian%20Religious%20Freedom%20Act.pdf
NPS, 2022	National Park Services (NPS), 2022. *National Historic Landmarks Program*. August 26, 2022. Web. Available: https://www.nps.gov/orgs/1582/index.htm
NPS, 2023a	National Park Services (NPS), 2023a. *The National Historic Preservation Act*. May 4, 2023. Web. Available: https://www.nps.gov/archeology/tools/laws/nhpa.htm
NPS, 2023b	National Park Services (NPS), 2023b. *National Register of Historic Places FAQ*. March 9, 2023. Web. Available: https://www.nps.gov/subjects/nationalregister/faqs.htm
NPS, 2023c	National Park Services (NPS), 2023c. *The Native American Graves Protection and Repatriation Act*. May 23, 2023. Web. Available: https://www.nps.gov/subjects/nagpra/index.htm

Cited As:	Citation:
NPS, 2023d	National Park Services (NPS), 2023d. *Antiquities Act 1906-2006*. March 30, 2023. Web. Available: https://www.nps.gov/subjects/archeology/antiquities-act.htm
NPS, 2023e	National Park Services (NPS), 2023e. *Fossils and Paleontology Laws, Regulations, and Policies*. January 27, 2023. Web. Available: https://www.nps.gov/subjects/fossils/fossil-protection.htm
NPS, n.d.	National Park Services (NPS), n.d. *Administrative Code, Title 14, Section 4308*. Web. Available: https://www.parks.ca.gov/pages/627/files/california%20code%20of%20regulations.doc
OCFA, 2022a	Orange County Fire Authority (OCFA), 2022a. *Operations Division 1*. Web. Available: https://ocfa.org/AboutUs/Departments/OperationsDirectory/Division1.aspx
OCFA, 2022b	Orange County Fire Authority (OCFA), 2022b. *2022 Statistical Annual Report*. Web. Available: https://ocfa.org/Uploads/Transparency/OCFA%20Annual%20Report%202022.pdf
OCSD, 2022	Orange County Sanitation District (OCSD), 2022. *OCSD Budget Update Fiscal Year 2023-2024*. July 1, 2022. Web. Available: https://www.ocsan.gov/home/showpublisheddocument/33968/638237148537200000
OCWD, n.d.	Orange County Water District (OCWD), n.d. *Board of directors & service area*. Web. Available: https://www.ocwd.com/about/service-area-board-of-directors/
OCWD, 2015	Orange County Water District (OCWD), 2015. *Orange County Water District Groundwater Management Plan 2015 Update*. June 17, 2015. Web. Available: https://www.ocwd.com/wp-content/uploads/groundwatermanagementplan2015update_20150624.pdf
OCWD, 2018	Orange County Water District (OCWD), 2018. *Orange County Water District Surface Water Recharge Facilities*. June 11, 2018. Web. Available: https://www.ocwd.com/wp-content/uploads/surfacewaterrechargefacilities.pdf
OCWD, 2022	Orange County Water District (OCWD), 2022. *Basin 8-1 Alternative 2022 Update*. January 1, 2022. Web. Available: https://www.ocwd.com/wp-content/uploads/05cbasin-8-1-alternative-2022-update.pdf
OCWD, n.d.	Orange County Water District (OCWD), n.d.. *History*. Web. Available: https://ocip.ocpublicworks.com/page/history
OHP, n.d.	Office of Historic Preservation (OHP), n.d. *California Register of Historical Resources*. Web. Available: http://ohp.parks.ca.gov/?page_id=21238
OPR, 2005	Office of Planning and Research (OPR), 2005. *Tribal Consultation Guidelines.* April 15, 2005. Web. Available: https://www.parks.ca.gov/pages/22491/files/tribal_consultation_guidelines_vol-4.pdf
OPR, 2017a	Office of Planning and Research (OPR), 2017a. *Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA.* June 2017. Web. Available: https://opr.ca.gov/ceqa/docs/20200224-AB_52_Technical_Advisory_Feb_2020.pdf

Cited As:	Citation:
OPR, 2017b	Office of Planning and Research (OPR), 2017b. *General Plan Guidelines.* July 31, 2017. Web. Available: http://www.opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf
OPR, 2018	Office of Planning and Research (OPR), 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA.* December 2018. Web. Available: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf
OPR, 2022	Office of Planning and Research (OPR), 2022. *CEQA Guidelines*. Web. Available: https://opr.ca.gov/ceqa/guidelines/
OPR, n.d.	Office of Planning and Research (OPR), n.d. *Local Government*. Web. Available: https://opr.ca.gov/planning/land-use/local-government/
OSHA, 2002	Occupational Safety and Health Administration (OSHA), 2002. *Hearing Conservation*. 2002 (Revised). Web. Available: https://www.osha.gov/sites/default/files/publications/osha3074.pdf
RRM Design, 2024	RRM Design Group, 2024. *Potential Impact Analysis of Future Lampson Park Place Residents upon the Identified Parks.* March 20, 2024. *Technical Appendix M.*
SCAG, 2001	Southern California Association of Governments (SCAG), 2001. *The New Economy and Jobs/Housing Balance in Southern California*. April 2001. Web. Available: https://scag.ca.gov/sites/main/files/file-attachments/neweconomyjobshousingbalance.pdf
SCAG, 2020a	Southern California Association of Governments (SCAG), 2020a. *Connect SoCal*. September 3, 2020. Web. Available: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176
SCAG, 2020b	Southern California Association of Governments (SCAG), 2020b. *Demographics and Growth Forecast*. September 3, 2020. Web. Available: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579
SCAG, 2021	Southern California Association of Governments (SCAG), 2021. *SCAG 6th Cycle Final RHNA Allocation Plan*. March 4, 2021. Web. Available: https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-proposed-final-allocation-plan.pdf?1614911196
SCAG, 2022	Southern California Association of Governments (SCAG), 2022. *Local Data Exchange (LDX) Process Data/Map Book*. May 2022. Web. Available: https://scag.ca.gov/sites/main/files/file-attachments/p0222-los-alamitos.pdf?1655311199
SCAG, n.d.	Southern California Association of Governments (SCAG), n.d. *About Us*. Web. Available: https://scag.ca.gov/about-us
SCAG, n.d.	Southern California Association of Governments (SCAG), n.d. *Regional Housing Needs Assessment*. Web. Available: https://scag.ca.gov/rhna
SWRCB, 2014	State Water Resources Control Board (SWRCB), 2014. *0A-Federal, State and Local Laws, Policy and Regulations*. June 23, 2014. Web. Available:

Cited As:	***Citation:***
	http://waterboards.ca.gov/water_issues/programs/nps/encyclopedia/0a_laws_policy.shtml
SWRCB, 2016	State Water Resources Control Board (SWRCB), 2016. *A Compilation of Water Quality Goals*. January 2016. Web. Available: https://www.waterboards.ca.gov/water_issues/programs/water_quality_goals/docs/wq_goals_text.pdf
SWRCB, 2017	State Water Resources Control Board (SWRCB), 2017. *Watershed Management*. August 3, 2017. Web. Available: http://www.waterboards.ca.gov/water_issues/programs/watershed/
SWRCB, 2018	State Water Resources Control Board (SWRCB), 2018. *Federal, State and Local Laws, Policy and Regulation*. June 28, 2018. Web. Available: http://waterboards.ca.gov/water_issues/programs/nps/encyclopedia/0a_laws_policy.shtml
SWRCB, 2022	State Water Resources Control Board (SWRCB), 2022. *1995 Water Quality Control Plan for the Santa Ana River Basin*. December 12, 2022. Web. Available: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/
SWRCB, 2023	State Water Resources Control Board (SWRCB), 2023. *Drought Information - Governor's Drought Declaration*. February 23, 2023. Web. Available: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/executive_orders.html
Urban Crossroads, 2023a	Urban Crossroads, Inc. 2023a. *4665 Lampson Avenue Air Quality Impact Analysis*. May 5, 2023. *Technical Appendix B1*.
Urban Crossroads, 2023b	Urban Crossroads, Inc. 2023b. *4665 Lampson Avenue Construction Health Risk Assessment*. May 8, 2023. *Technical Appendix B2*.
Urban Crossroads, 2023c	Urban Crossroads, Inc. 2023c. *4665 Lampson Avenue Energy Analysis*. May 12, 2023. *Technical Appendix E*.
Urban Crossroads, 2023d	Urban Crossroads, Inc. 2023d. *4665 Lampson Avenue Greenhouse Gas Analysis*. May 12, 2023. *Technical Appendix G*.
Urban Crossroads, 2023e	Urban Crossroads, Inc. 2023e. *4665 Lampson Avenue Traffic Analysis*. June 1, 2023. *Technical Appendix N1*.
Urban Crossroads, 2023f	Urban Crossroads, Inc. 2023f. *4665 Lampson Avenue Vehicle Miles Traveled (VMT) Analysis*. January 12, 2023. *Technical Appendix N2*.
Urban Crossroads, 2023g	Urban Crossroads, Inc. 2023g. *4665 Lampson Avenue Alternative Use Traffic Assessment*. June 1, 2023. *Technical Appendix R*.

Cited As:	***Citation:***
Urban Crossroads, 2023h	Urban Crossroads, Inc. 2023h. *4665 Lampson Avenue Vehicle Miles Traveled (VMT) Alternative Use Analysis*. March 22, 2023. *Technical Appendix R.*
Urban Crossroads, 2024	Urban Crossroads, Inc. 2024. *4665 Lampson Avenue Noise Analysis*. April 10, 2024. *Technical Appendix K*.
U.S. Army Public Health Center, 2020	U.S. Army Public Health Center, 2020. *Environmental Health Sciences, Environmental Noise Consultation Update No. S.0064236b-20, Noise Assessment for Los Alamitos Army Airfield, Joint Forces Training Base, Los Alamitos, California, 1 June 2020*. November 23, 2020.
USCB, 2012	Unitied States Cenus Buerau (USCB), 2012. *2010 Census - Urbanized Area Reference Map: Los Angeles--Long Beach--Anaheim sheet 9*. Web. Available: https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua51445_los_angeles--long_beach--anaheim_ca/DC10UA51445_009.pdf
USCB, 2022	Unitied States Cenus Buerau (USCB), 2022. *American Community Survey*. September 8, 2022. Web. Available: https://www.census.gov/programs-surveys/acs
USDOL, n.d.	Unitied States Department of Labor (USDOL), n.d. *OSHA - California State Plan*. Web. Available: https://www.osha.gov/stateplans/ca
USDOL, n.d.	Unitied States Department of Labor (USDOL), n.d. *Transporting Hazardous Materials*. Web. Available: https://www.osha.gov/trucking-industry/transporting-hazardous-materials
USFWS, 2017	United States Fish and Wildlife Service (USFWS), 2017. *ESA Basics*. February 2017. Web. Available: https://www.fws.gov/sites/default/files/documents/endangered-species-act-basics.pdf
USFWS, n.d.	United States Fish and Wildlife Service (USFWS), n.d. *Migratory Bird Treaty Act of 1918*. Web. Available: https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php
Walker Consultants, 2022	Walker Consultants, 2022. *4655 Lampson Parking Review*. October 17, 2022. *Technical Appendix P.*
Walker Consultants, 2023	Walker Consultants, 2023. *4655 Lampson Project Parking Analysis*. January 30, 2023. *Technical Appendix Q.*