



## DRAFT ENVIRONMENTAL IMPACT REPORT

Sycamore Canyon Business Park Buildings 1 and 2  
SCH No. 2015081042

Prepared for



Community Development Department  
Planning Division

August 2016




**Draft**  
**Environmental Impact Report**  
**Sycamore Canyon Business Park Buildings 1 and 2**  
**SCH No. 2015081042**

*Prepared for:*  
City of Riverside  
Community Development Department Planning Division  
3900 Main Street, Third Floor  
Riverside, California 92522  
Contact: Patricia Brenes, Principal Planner  
(951) 826-2307

*Prepared by:*  
Albert A. WEBB Associates  
3788 McCray Street  
Riverside, California 92506  
Contact: Cheryl DeGano, Principal Environmental Analyst  
(951) 686-1070

This DEIR has been prepared in compliance with the  
California Environmental Quality Act and  
City of Riverside CEQA Resolution No. 21106,  
and reflects the independent judgment of the  
City of Riverside.



---

Ted White, AICP, City Planner

August 2016

# TABLE OF CONTENTS, ACRONYMS, UNITS OF MEASUREMENT, AND CHEMICAL SYMBOLS

## Table of Contents

<b>1. Executive Summary .....</b>	<b>1-1</b>
1.1. Introduction .....	1-1
1.1.1. Lead and Responsible Agencies .....	1-1
1.1.2. Environmental Process.....	1-1
1.2. Project Information .....	1-2
1.2.1. Project Applicant.....	1-2
1.2.2. Project Location .....	1-3
1.2.3. Existing Site Description.....	1-3
1.3. Project Description .....	1-6
1.4. Project Objectives.....	1-9
1.5. Discretionary Actions and Approvals .....	1-10
1.6. Areas of Controversy and Issues to be Resolved .....	1-11
1.7. Environmental Analysis.....	1-13
1.8. Summary of Project Alternatives.....	1-55
1.9. Environmentally Superior Alternative .....	1-57
1.10. Other CEQA Topics.....	1-57
1.10.1. Significant Unavoidable Adverse Impacts .....	1-58
1.10.2. Growth Inducing Impacts .....	1-58
1.10.3. Significant Irreversible Environmental Changes which would be Involved in the Proposed Project Should it be Implemented .....	1-58
<b>2. Introduction .....</b>	<b>2-1</b>
2.1. Purpose and Scope .....	2-1
2.2. Authorization.....	2-1
2.3. Lead and Responsible Agency .....	2-1
2.4. Project Applicant .....	2-2
2.5. Compliance with CEQA .....	2-2
2.5.1. Environmental Procedures .....	2-2
2.5.2. Potentially Significant Environmental Effects.....	2-14
2.5.3. Format.....	2-15
2.6. Documents Incorporated by Reference .....	2-16
2.6.1. City of Riverside General Plan 2025 Final Program Environmental Impact Report .....	2-16
2.6.2. City of Riverside General Plan 2025 .....	2-17
2.6.3. City of Riverside Municipal Code .....	2-17
2.6.4. Sycamore Canyon Business Park Specific Plan (SCBPSP) and EIR.....	2-17
2.6.5. Sycamore Canyon Specific Plan and EIR.....	2-18

2.6.6.	Sycamore Highlands Specific Plan (Formerly known as the Lusk Highlander Specific Plan).....	2-18
2.6.7.	Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan.....	2-19
<b>3.</b>	<b>Project Description .....</b>	<b>3-1</b>
3.1.	Project Location and Setting.....	3-1
3.1.1.	Project Location .....	3-1
3.1.2.	Economic Revitalization Studies and Specific Plans in the Project Area .....	3-1
3.1.3.	Project Site – Existing Conditions.....	3-8
3.1.4.	Land Use Designation and Zoning .....	3-14
3.1.5.	Surrounding Land Uses.....	3-14
3.2.	Project Characteristics.....	3-17
3.2.1.	General Plan Amendment (P16-0101) .....	3-17
3.2.2.	Tentative Parcel Map No. 36879 .....	3-22
3.2.3.	Minor Conditional Use Permit (P14-1082) .....	3-22
3.2.4.	Grading Exceptions and Variance (P16-0103).....	3-22
3.2.5.	Design Review (P14-1081) .....	3-26
3.2.6.	Project Objectives .....	3-44
3.2.7.	Discretionary Actions and Approvals.....	3-45
<b>4.</b>	<b>Environmental Effects Found Not to be Significant.....</b>	<b>4-1</b>
4.1.	Effects Found Not to Be Significant as Part of the EIR Process.....	4-1
<b>5.</b>	<b>Environmental Impact Analysis.....</b>	<b>5-1</b>
<b>5.1.</b>	<b>Aesthetics.....</b>	<b>5.1-1</b>
5.1.1.	Setting.....	5.1-1
5.1.2.	Related Regulations .....	5.1-4
5.1.3.	Thresholds of Significance .....	5.1-7
5.1.4.	Project Design Features .....	5.1-7
5.1.5.	Environmental Impacts Before Mitigation.....	5.1-10
5.1.6.	Proposed Mitigation Measures.....	5.1-31
5.1.7.	Environmental Impacts after Mitigation Measures are Implemented .....	5.1-36
5.1.8.	References .....	5.1-37
<b>5.2.</b>	<b>Agriculture and Forestry Resources.....</b>	<b>5.2-1</b>
5.2.1.	Setting.....	5.2-1
5.2.2.	Related Regulations .....	5.2-3
5.2.3.	Thresholds of Significance .....	5.2-6
5.2.4.	Project Design Features .....	5.2-7
5.2.5.	Environmental Impacts Before Mitigation.....	5.2-7
5.2.6.	Proposed Mitigation Measures.....	5.2-9
5.2.7.	Environmental Impacts after Mitigation Measures are Implemented .....	5.2-9

5.2.8. References ..... 5.2-9

**5.3. Air Quality ..... 5.3-1**

5.3.1. Physical Setting..... 5.3-1

5.3.2. Climate ..... 5.3-2

5.3.3. Precipitation and Temperature ..... 5.3-2

5.3.4. Winds ..... 5.3-2

5.3.5. Categories of Emission Sources..... 5.3-3

5.3.6. Air Pollution Constituents ..... 5.3-3

5.3.7. Toxic Air Contaminants ..... 5.3-6

5.3.8. Monitored Air Quality..... 5.3-8

5.3.9. Related Regulations ..... 5.3-10

5.3.10. Thresholds of Significance ..... 5.3-19

5.3.11. Project Design Features ..... 5.3-20

5.3.12. Environmental Impacts before Mitigation ..... 5.3-22

5.3.13. Proposed Mitigation Measures..... 5.3-35

5.3.14. Summary of Environmental Effects after Mitigation Measures are  
Implemented ..... 5.3-39

5.3.15. References ..... 5.3-40

**5.4. Biological Resources..... 5.4-1**

5.4.1. Setting..... 5.4-1

5.4.2. Related Regulations ..... 5.4-10

5.4.3. Thresholds of Significance ..... 5.4-17

5.4.4. Project Design Features ..... 5.4-18

5.4.5. Environmental Impacts Before Mitigation..... 5.4-18

5.4.6. Proposed Mitigation Measures..... 5.4-30

5.4.7. Environmental Impacts after Mitigation Measures are Implemented ..... 5.4-33

5.4.8. References ..... 5.4-34

**5.5. Cultural Resources ..... 5.5-1**

5.5.1. Setting..... 5.5-1

5.5.2. Related Regulations ..... 5.5-13

5.5.3. Thresholds of Significance ..... 5.5-23

5.5.4. Project Design Features ..... 5.5-23

5.5.5. Environmental Impacts Before Mitigation..... 5.5-24

5.5.6. Proposed Mitigation Measures..... 5.5-33

5.5.7. References ..... 5.5-36

**5.6. Geology and Soils ..... 5.6-1**

5.6.1. Setting..... 5.6-1

5.6.2. Related Regulations ..... 5.6-6

5.6.3. Thresholds of Significance ..... 5.6-10

5.6.4. Project Design Features .....	5.6-11
5.6.5. Environmental Impacts Before Mitigation.....	5.6-11
5.6.6. Proposed Mitigation Measures.....	5.6-14
5.6.7. Environmental Impacts after Mitigation Measures are Implemented .....	5.6-14
5.6.8. References .....	5.6-15
<b>5.7. Greenhouse Gas Emissions .....</b>	<b>5.7-1</b>
5.7.1. Setting.....	5.7-1
5.7.2. Related Regulations .....	5.7-3
5.7.3. Thresholds of Significance .....	5.7-28
5.7.4. Project Design Features .....	5.7-31
5.7.5. Environmental Impacts Before Mitigation.....	5.7-34
5.7.6. Proposed Mitigation Measures.....	5.7-55
5.7.7. Environmental Impacts after Mitigation Measures are Implemented .....	5.7-55
5.7.8. References .....	5.7-56
<b>5.8. Hazards and Hazardous Materials.....</b>	<b>5.8-1</b>
5.8.1. Setting.....	5.8-1
5.8.2. Related Regulations .....	5.8-9
5.8.3. Thresholds of Significance .....	5.8-14
5.8.4. Project Design Features .....	5.8-15
5.8.5. Environmental Impacts Before Mitigation.....	5.8-17
5.8.6. Proposed Mitigation Measures.....	5.8-26
5.8.7. Environmental Impacts after Mitigation Measures Implemented .....	5.8-29
5.8.8. References .....	5.8-29
<b>5.9. Hydrology and Water Quality .....</b>	<b>5.9-1</b>
5.9.1. Setting.....	5.9-1
5.9.2. Related Regulations .....	5.9-8
5.9.3. Thresholds of Significance .....	5.9-14
5.9.4. Project Design Features .....	5.9-15
5.9.5. Environmental Impacts Before Mitigation.....	5.9-22
5.9.6. Proposed Mitigation Measures.....	5.9-29
5.9.7. Environmental Impacts after Mitigation Measures are Implemented .....	5.9-29
5.9.8. References .....	5.9-29
<b>5.10. Land Use and Planning.....</b>	<b>5.10-1</b>
5.10.1. Setting.....	5.10-1
5.10.2. Related Regulations .....	5.10-6
5.10.3. Thresholds of Significance .....	5.10-9
5.10.4. Project Design Features .....	5.10-9
5.10.5. Environmental Impacts before Mitigation .....	5.10-9
5.10.6. Proposed Mitigation Measures.....	5.10-11

5.10.7. Environmental Impacts after Mitigation Measures are Implemented ..... 5.10-11

5.10.8. References ..... 5.10-11

**5.11. Mineral Resources ..... 5.11-1**

5.11.1. Setting..... 5.11-1

5.11.2. Related Regulations ..... 5.11-2

5.11.3. Thresholds of Significance ..... 5.11-3

5.11.4. Project Design Features ..... 5.11-3

5.11.5. Environmental Impacts before Mitigation ..... 5.11-3

5.11.6. Proposed Mitigation Measures..... 5.11-4

5.11.7. Environmental Impacts after Mitigation Measures are Implemented ..... 5.11-4

5.11.8. References ..... 5.11-4

**5.12. Noise ..... 5.12-1**

5.12.1. Setting..... 5.12-1

5.12.2. Related Regulations ..... 5.12-11

5.12.3. Thresholds of Significance ..... 5.12-18

5.12.4. Project Design Features ..... 5.12-19

5.12.5. Environmental Impacts before Mitigation ..... 5.12-20

5.12.6. Proposed Mitigation Measures..... 5.12-45

5.12.7. Environmental Impacts after Mitigation Measures are Implemented ..... 5.12-48

5.12.8. References ..... 5.12-48

**5.13. Population and Housing ..... 5.13-1**

5.13.1. Setting..... 5.13-1

5.13.2. Related Regulations ..... 5.13-3

5.13.3. Thresholds of Significance ..... 5.13-4

5.13.4. Project Design Features ..... 5.13-5

5.13.5. Environmental Impacts before Mitigation ..... 5.13-5

5.13.6. Proposed Mitigation Measures..... 5.13-7

5.13.7. Environmental Impacts after Mitigation Measures are Implemented ..... 5.13-7

5.13.8. References ..... 5.13-7

**5.14. Public Services ..... 5.14-1**

5.14.1. Setting..... 5.14-1

5.14.2. Related Regulations ..... 5.14-4

5.14.3. Thresholds of Significance ..... 5.14-6

5.14.4. Project Design Features ..... 5.14-6

5.14.5. Environmental Impacts before Mitigation ..... 5.14-6

5.14.6. Proposed Mitigation Measures..... 5.14-8

5.14.7. Environmental Impacts after Mitigation Measures are Implemented ..... 5.14-9

5.14.8. References ..... 5.14-9

**5.15. Recreation ..... 5.15-1**

5.15.1. Setting.....	5.15-1
5.15.1.1.Parks .....	5.15-1
5.15.1.2.Recreational Facilities .....	5.15-1
5.15.2. Related Regulations .....	5.15-3
5.15.3. Thresholds of Significance .....	5.15-6
5.15.4. Project Design Features .....	5.15-6
5.15.5. Environmental Impacts before Mitigation .....	5.15-7
5.15.6. Proposed Mitigation Measures.....	5.15-8
5.15.7. Summary of Project- Specific Environmental Effects after Mitigation Measures are Implemented .....	5.15-12
5.15.8. Environmental Impacts after Mitigation Measures are Implemented .....	5.15-13
5.15.9. References .....	5.15-13
<b>5.16. Transportation/Traffic.....</b>	<b>5.16-1</b>
5.16.1. Setting.....	5.16-1
5.16.2. Related Regulations .....	5.16-20
5.16.3. Thresholds of Significance .....	5.16-25
5.16.4. Project Design Features .....	5.16-26
5.16.5. Environmental Impacts before Mitigation .....	5.16-27
5.16.6. Proposed Mitigation Measures.....	5.16-56
5.16.7. Environmental Impacts after Mitigation Measures are Implemented .....	5.16-56
5.16.8. References .....	5.16-57
<b>5.17. Utilities and Service Systems .....</b>	<b>5.17-1</b>
5.17.1. Setting.....	5.17-1
5.17.2. Thresholds of Significance .....	5.17-11
5.17.3. Project Design Features .....	5.17-12
5.17.4. Environmental Impacts before Mitigation .....	5.17-12
5.17.5. Proposed Mitigation Measures.....	5.17-18
5.17.6. Environmental Impacts after Mitigation Measures are Implemented .....	5.17-18
5.17.7. References .....	5.17-18
<b>6. Other CEQA Topics.....</b>	<b>6-1</b>
6.1. Cumulative Impact Analysis.....	6-1
6.1.1. Introduction.....	6-1
6.1.2. Assessment of Cumulative Impacts .....	6-1
6.1.3. Aesthetics .....	6-7
6.1.4. Agricultural and Forestry Resources .....	6-8
6.1.5. Air Quality.....	6-9
6.1.6. Biological Resources.....	6-10
6.1.7. Cultural Resources.....	6-11
6.1.8. Geology and Soils .....	6-11



6.1.9. Greenhouse Gas Emissions .....	6-13
6.1.10. Hazards and Hazardous Materials.....	6-13
6.1.11. Hydrology/Water Quality .....	6-16
6.1.12. Land Use and Planning .....	6-17
6.1.13. Mineral Resources.....	6-18
6.1.14. Noise.....	6-18
6.1.15. Population and Housing .....	6-20
6.1.16. Public Services.....	6-21
6.1.17. Recreation.....	6-23
6.1.18. Transportation/Traffic.....	6-24
6.1.19. Utilities and Service Systems .....	6-27
6.1.20. Energy Conservation .....	6-28
6.2. Significant Unavoidable Adverse Impacts.....	6-29
6.3. Growth Inducing Impacts.....	6-29
6.4. Significant Irreversible Environmental Changes which would be Involved in the Proposed Project Should it be Implemented .....	6-30
6.5. Consistency with Regional Plans .....	6-30
6.5.1. Southern California Association of Governments' Regional Transportation Plan and Compass Growth Visioning.....	6-32
6.6. References.....	6-40
<b>7. Energy Conservation.....</b>	<b>7-1</b>
7.1. Setting .....	7-1
7.1.1. Electricity .....	7-1
7.1.2. Natural Gas.....	7-2
7.1.3. Transportation Fuel.....	7-4
7.2. Related Regulations.....	7-5
7.2.1. Federal Regulations .....	7-5
7.2.2. State Regulations .....	7-6
7.2.3. Local Regulations .....	7-9
7.3. Thresholds of Significance.....	7-11
7.4. Project Design Features.....	7-12
7.5. Environmental Impacts Before Mitigation .....	7-15
7.6. Proposed Mitigation Measures .....	7-21
7.7. Environmental Impacts after Mitigation Measures are Implemented.....	7-22
7.8. References.....	7-22
<b>8. Alternatives to the Proposed Project.....</b>	<b>8-1</b>
8.1. Project Objectives.....	8-1
8.2. Summary of the Project's Significant and Unavoidable Impacts.....	8-2
8.3. Rationale for Alternative Section .....	8-2
8.4. Alternatives Rejected from Further Consideration.....	8-3

8.4.1. Original Project as Submitted.....	8-3
8.4.2. Alternative Project Location .....	8-6
8.5. Description of Alternatives Evaluated in the DEIR.....	8-9
8.5.1. Alternative 1 – No Project, No Build .....	8-11
8.5.1.1. Evaluation of Alternative 1: No Project/No Build.....	8-11
8.5.2. Alternative 2 – No Project/Specific Plan Build Alternative .....	8-16
8.5.2.1. Evaluation of Alternative 2 – No Project/Specific Plan Build Alternative .....	8-17
8.5.3. Alternative 3 – Reduced Density Alternative .....	8-25
8.5.3.1. Evaluation of Alternative 3 .....	8-26
8.6. Comparison of Alternatives.....	8-34
8.7. Environmentally Superior Alternative .....	8-34
8.8. References.....	8-36
<b>9. References .....</b>	<b>9-1</b>

## Appendices

### Appendix A – Documents Related to the Notice of Preparation

- A.1 Notice of Preparation
- A.2 Written Comments Received in Response to the NOP
- A.3 Notes from the August 26, 2015 Scoping Meeting

### Appendix B –Air Quality

- B Sycamore Canyon Business Park Warehouse CalEEMod Emissions Estimates, LST Analysis, and Screening HRA

### Appendix C – Biological Resources

- C.1 Sycamore Canyon Business Park Warehouse Project Biological Assessment and Western Riverside Multi-Species Habitat Conservation Plan Compliance Report
- C.2 Least Bells' Vireo Presence/Absence Surveys
- C.3 Jurisdictional Delineation Report, Sycamore Canyon Business Park Warehouse Project
- C.4 Determination of Biologically Equivalent or Superior Preservation Sycamore Canyon Business Park Warehouse Project
- C.5 90-Day Wet Season Results, Vernal Pool Branchiopod Surveys at the Sycamore Canyon Business Park Warehouse Project, Riverside County, California dated June 1, 2016 (Rocks).
- C.6 Focused Survey for Burrowing Owl (*Athene cunicularia*), Sycamore Canyon Business Park Warehouse Project

### Appendix D – Cultural Resources

- D.1 Cultural Resources Assessment of the Sycamore Canyon Business Park Buildings 1 & 2, Riverside County, California
- D.2 Paleontological Resource Assessment for the Sycamore Canyon Business Park Buildings 1 & 2, City of Riverside, Riverside County, California
- D.3 AB 52/SB 18 Log

### Appendix E – Geology and Soils

- E.1 Report of Geophysical Investigation, Proposed 950,000 Square Foot Distribution Center, Sycamore V Project, Riverside, California
- E.2 Geotechnical Investigation, Proposed Industrial Development, Lance and Sierra Ridge Drives, Riverside, California

### Appendix F – Greenhouse Gas Emissions

- F Greenhouse Gas Modeling Output

**Appendix G – Hazards and Hazardous Materials**

- G.1 Phase I Environmental Site Assessment Update, 17 Vacant Parcels, ±75 Acres Northwest of Sierra Ridge Drive and Lance Drive, Riverside, California.
- G.2 Limited Phase II Subsurface Investigation, 17 Vacant Parcels, ±75 Acres, Northwest of Sierra Ridge Drive and Lance Drive, Riverside, California.

**Appendix H – Hydrology and Water Quality**

- H.1 Preliminary Hydrology Calculations
- H.2 Project Specific Preliminary Water Quality Management Plan

**Appendix I – Noise**

- I Sycamore Canyon Business Park Warehouse Noise Impact Analysis.

**Appendix J – Traffic/Transportation**

- J Revised Traffic Impact Analysis, Sycamore Canyon Industrial Buildings 1 & 2.

**Appendix K – Utilities and Service Systems**

- K Water Supply Assessment

**Appendix L - Energy**

- L Energy Consumption Tables

**Appendix M – Project Compliance with Adopted General Plan Policies and Good Neighbor Guidelines****Appendix N – City of Riverside Parks, Recreation, and Community Services Department Park Improvement Details**

## List of Figures

Figure 1-1	Vicinity Map .....	1-4
Figure 1-2	Location Map.....	1-5
Figure 1-3	Site Plan .....	1-8
Figure 3-1	Vicinity Map .....	3-4
Figure 3-2	Location Map.....	3-5
Figure 3-3a	Views of Project Site in Existing Condition .....	3-11
Figure 3-3b	Views of Project Site in Existing Condition .....	3-12
Figure 3-3c	Views of Project Site in Existing Condition .....	3-13
Figure 3-4	Land Use Designation.....	3-15
Figure 3-5	Zoning Map .....	3-16
Figure 3-6	Proposed General Plan Amendment.....	3-18
Figure 3-7a	Proposed Specific Plan Amendment .....	3-19
Figure 3-7b	Proposed Specific Plan Amendment .....	3-20
Figure 3-7c	Proposed Specific Plan Amendment .....	3-21
Figure 3-8	Tentative Parcel Map .....	3-24
Figure 3-9	Grading Exception .....	3-25
Figure 3-10	Proposed Site Plan .....	3-28
Figure 3-11	Conceptual Landscape Plan .....	3-30
Figure 3-12a	Colored Elevations and Material Board.....	3-31
Figure 3-12b	Colored Elevations and Material Board.....	3-32
Figure 3-12c	Colored Elevations and Material Board.....	3-33
Figure 3-13a	Line of Sight.....	3-37
Figure 3-13b	Line of Sight.....	3-38
Figure 5.1-1	Surrounding Area.....	5.1-3
Figure 5.1-2a	Photo Simulations.....	5.1-24
Figure 5.1-2b	Photo Simulations.....	5.1-25
Figure 5.1-2c	Photo Simulations.....	5.1-26
Figure 5.2-1	Designated Farmland at the Project Site.....	5.2-2
Figure 5.4-1	Vegetation Communities Map.....	5.4-3
Figure 5.4-2	USACE/RWQCB Jurisdictional Delineation Map.....	5.4-6
Figure 5.4-3	CDFW Jurisdictional Delineation Map.....	5.4-7
Figure 5.8-1a	MARB/IPA Land Use Compatibility Plan.....	5.8-7
Figure 5.8-1b	Site Plan with MARB/IPA Land Use Compatibility Zones .....	5.8-8

Figure 5.9-1	Santa Ana River Watershed .....	5.9-2
Figure 5.9-2	Project Site Connectivity to Santa Ana River .....	5.9-3
Figure 5.9-3	Existing Condition Hydrology Map.....	5.9-5
Figure 5.9-4	Proposed Condition Hydrology Map.....	5.9-17
Figure 5.9-5	Proposed Offsite Storm Drain and Marsh .....	5.9-19
Figure 5.12-1	Noise Measurement Locations .....	5.12-6
Figure 5.12-2	Noise/Land Use Compatibility Criteria .....	5.12-14
Figure 5.12-3	Worst Case Construction Noise Scenario ( $L_{eq}$ ) With No Temporary Barrier .....	5.12-23
Figure 5.12-4	Worst Case Construction Noise Scenario ( $L_{eq}$ ) With 12-Foot High Temporary Barrier.....	5.12-25
Figure 5.12-5	Operational Noise Levels No Mitigation .....	5.12-27
Figure 5.12-6	Operational Noise Levels With Mitigation .....	5.12-29
Figure 5.12-7	Back Up Beeper Operational Noise Levels with No Mitigation.....	5.12-31
Figure 5.12-8	Dock Areas Operational Noise Levels with No Mitigation .....	5.12-33
Figure 5.16-1	Study Area Map .....	5.16-2
Figure 5.16-2	Existing Roadway System .....	5.16-5
Figure 5.16-3	Project Trip Distribution (Passengers Cars – Outbound).....	5.16-11
Figure 5.16-4	Project Trip Distribution (Passengers Cars – Inbound).....	5.16-12
Figure 5.16-5	Project Trip Distribution (Trucks – Outbound) .....	5.16-13
Figure 5.16-6	Project Trip Distribution (Trucks – Inbound) .....	5.16-14
Figure 5.16-7	Project Only AM Peak Hour Intersection Volumes (in PCE).....	5.16-15
Figure 5.16-8	Project Only PM Peak Hour Intersection Volumes (in PCE).....	5.16-16
Figure 5.16-9	Cumulative Development Location Map .....	5.16-39
Figure 5.16-10	Site Queuing Analysis with 53’ Trailer Trucks .....	5.16-50
Figure 5.16-11	Site Queuing Analysis with 48’ Trailer Trucks .....	5.16-51
Figure 6-1	Cumulative Development Location Map .....	6-6
Figure 8-1	Original Project .....	8-4
Figure 8-2	Alternative Location 1 .....	8-7
Figure 8-3	Alternative Location 2 .....	8-8
Figure 8-4	Alternative Location 3 .....	8-10

## List of Tables

Table 1-A	Project Site APNs .....	1-3
Table 1-B	DEIR Impact Summary Matrix.....	1-13
Table 1-C	Comparison of Alternatives Matrix.....	1-56
Table 2-A	Summary of Written Comments Received in Response to the Notice of Preparation .....	2-3
Table 2-B	Summary of Oral Comments Received at August 26, 2015 Scoping Meeting.....	2-8
Table 3-1	Tentative Parcel Map 36879 .....	3-22
Table 5.1-A	Line of Sight Analysis.....	5.1-14
Table 5.3-A	TAC Concentration Levels and Associated Health Risks .....	5.3-7
Table 5.3-B	Air Quality Monitoring Summary from 2012-2014 (SRA 23) .....	5.3-9
Table 5.3-C	Attainment Status .....	5.3-10
Table 5.3-D	SCAQMD CEQA Regional Significance Thresholds .....	5.3-24
Table 5.3-E	Estimated Daily Construction Emissions.....	5.3-25
Table 5.3-F1	Estimated Daily Project Operational Emissions (Summer) .....	5.3-26
Table 5.3-F2	Estimated Daily Project Operational Emissions (Winter) .....	5.3-26
Table 5.3-G	LST Results for Construction Emissions.....	5.3-28
Table 5.3-H	LST Results for Operational Emissions .....	5.3-28
Table 5.3-I	Health Risk Assessment (Construction) .....	5.3-33
Table 5.3-J	Health Risk Assessment (Operation).....	5.3-33
Table 5.4-A	Summary of Jurisdictional Areas .....	5.4-8
Table 5.4-B	Project Compliance with MSHCP Urban/Wildlands Interface Guidelines.....	5.4-25
Table 5.5-A	Cultural Resources Occurring on the Project Site.....	5.5-10
Table 5.5-B	SB 18/AB 52 Response Log .....	5.5-18
Table 5.6-A	Instrumental Intensity Scale .....	5.6-5
Table 5.7-A	Global Warming Potentials and Atmospheric Lifetimes .....	5.7-3
Table 5.7-B	Project Construction Equipment GHG Emissions .....	5.7-40
Table 5.7-C	Annual Project Energy-Related GHG Emissions .....	5.7-41
Table 5.7-D	Project Opening Year (2018) Total Annual GHG Emissions .....	5.7-42
Table 5.7-E	Total BAU GHG Emissions .....	5.7-43

Table 5.7-F	Project 2020 Total Annual GHG Emissions.....	5.7-44
Table 5.8-A	MARB/IPA Compatibility Criteria for Zones C1 and D.....	5.8-21
Table 5.8-B	MARB/IPA Compatibility Zone Factors for Zones C1 and D.....	5.8-23
Table 5.9-A	Constituents and Beneficial Uses for Receiving Waters .....	5.9-11
Table 5.9-B	Numeric Water Quality Objectives for Receiving Waters .....	5.9-12
Table 5.12-A	Representative Environmental Noise Levels .....	5.12-2
Table 5.12-B	Existing Noise Levels in Project Vicinity.....	5.12-7
Table 5.12-C	Existing 24-Hour Noise Levels in Project Vicinity.....	5.12-8
Table 5.12-D	Existing Noise Levels at 50 Feet from Centerline.....	5.12-10
Table 5.12-E	Riverside Municipal Code Exterior Nuisance Sound Level Limits ..	5.12-15
Table 5.12-F	Riverside Municipal Code Interior Nuisance Sound Level Limits ...	5.12-17
Table 5.12-G	Construction Equipment and Predicted Construction Noise Levels	5.12-21
Table 5.12-H	Typical Human Reaction and Effect on Buildings Due to Groundborne Vibration .....	5.12-34
Table 5.12-I	Vibration Source Levels for Construction Equipment.....	5.12-35
Table 5.12-J	Pre-and Post-Project Noise Levels (in CNEL) .....	5.12-37
Table 5.12-K	Change in Existing Noise Levels at 50 Feet From Centerline (Existing Plus Project Condition).....	5.12-39
Table 5.12-L	Change in Future Noise Levels at 50 Feet From Centerline (Existing Plus Ambient Plus Cumulative Plus Project Condition)....	5.12-40
Table 5.13-A	SCAG Population, Housing, and Employment Projections .....	5.13-2
Table 5.16-A	LOS Descriptions for Signalized and Unsignalized Intersections.....	5.16-7
Table 5.16-B	LOS for Freeway Segments .....	5.16-8
Table 5.16-C	Intersection LOS, Existing Conditions (2015).....	5.16-17
Table 5.16-D	Freeway Segment LOS, Existing Conditions (2015).....	5.16-19
Table 5.16-E	Trip Generation Rates.....	5.16-18
Table 5.16-F	Project Trip Generation Rates.....	5.16-28
Table 5.16-G	Project Trip Generation in PCE.....	5.16-28
Table 5.16-H	Intersection LOS, Existing Plus Project Conditions (E+P) (2015) .....	5.16-30
Table 5.16-I	Freeway Segment Level of Service E+P (2015).....	5.16-32
Table 5.16-J	Intersection LOS, Existing Plus Ambient Growth Plus Project Conditions (E+A+P) (2018).....	5.16-33
Table 5.16-K	Freeway Segment Level of Service E+A+P (2018) .....	5.16-36
Table 5.16-L	Freeway Segment Level of Service E+A+P with I-215 Project (2018).....	5.16-37



Table 5.16-M	Cumulative Development Trip Generation .....	5.16-40
Table 5.16-N	Intersection LOS, Existing Plus Ambient Growth Plus Cumulative Plus Project Conditions (E+A+C+P) (2018).....	5.16-44
Table 5.16-O	Freeway Segment Level of Service E+A+C +P (2018).....	5.16-46
Table 5.16-P	Freeway Segment Level of Service E+A+C+P with Improvements (2018).....	5.16-47
Table 5.17-A	Existing Landfills .....	5.17-6
Table 5.17-B	Estimated Project Construction-Related Solid Waste Generation .	5.17-15
Table 5.17-C	Estimated Operational Construction-Related Solid Waste Generation .....	5.17-16
Table 6-A	Cumulative Development Projects.....	6-2
Table 6-B	Location in the DEIR in which Consistency with Regional Plans is Discussed .....	6-31
Table 6-C	Proposed Project Consistency with the 2016 RTP/SCS Goals .....	6-32
Table 7-A	Electricity Consumption in RPU Service Area (2014) .....	7-2
Table 7-B	Natural Gas Consumption in SCG Service Area (2014).....	7-4
Table 7-C	Construction Energy Use .....	7-16
Table 7-D	Annual Operational Energy Resource Use .....	7-18
Table 8-A	Alternative 1 (No Project Alternative) Ability to Meet Project Objectives.....	8-14
Table 8-B	Comparison of Alternative 2 (No Project/Specific Plan Build Alternative) to the Proposed Project .....	8-17
Table 8-C	Alternative 2 (No Project Alternative/Specific Plan Build Alternative) Ability to Meet Project Objectives .....	8-23
Table 8-D	Comparison of Alternative 3 (No Project/Specific Plan Build Alternative) to the Proposed Project .....	8-25
Table 8-E	Alternative 3 (Reduced Density Alternative) Ability to Meet Project Objectives.....	8-32
Table 8-F	Comparison of Alternatives Matrix.....	8-35

## ACRONYMS, UNITS OF MEASUREMENT, AND CHEMICAL SYMBOLS

### Acronyms

AAM	Annual Arithmetic Mean
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
ADOE	Office of Historic Preservation Archaeological Determinations of Eligibility
ADT	Average Daily Trips
AIA	Airport Influence Area
AICUZ	Air Installation Compatible Use Zones
ALUC	Airport Land Use Commission
AMSL	Above Mean Sea Level
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AR4	Fourth Assessment Report (Intergovernmental Panel on Climate Change)
ARRA	American Recovery and Reinvestment Act
ASHREA	American Society of Heating, Refrigeration, and Air Conditioning Engineers
AST	Above-Ground Storage Tank
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BAU	Business-as-usual
BMP	Best Management Practices
BMP	Business and Manufacturing Park
B/OP	Business/Office Park
BP	Before Present
BUG	Backlight, Uplight, and Glare
CAA	Federal Clean Air Act
CAAP	Clean Air Action Plan
CAAQS	California Ambient Air Quality Standards
CAISO	California Independent System Operator
Cal/ARP	California Emergency Management Agency's Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CalTrans	California Department of Transportation
CAP	Climate Action Plan

## Acronyms

CAPCOA	California Air Pollution Control Officer's Association
CARB	California Air Resources Board
CAS	California Climate Adaptation Strategy
CASSA	Critical Area Species Survey Area
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDC	U.S. Center for Disease Control and Prevention
CDF	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CDG	Citywide Design Guidelines
CDSG	Citywide Design and Sign Guidelines
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFD	Community Facilities District
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHP	Combined Heat and Power
CHWMP	Riverside County Hazardous Waste Management Plan
CLUP	Comprehensive Land Use Plan
CMA	Congestion Management Agency
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CPUC	California Public Utilities Commission
CRA	Colorado River Aqueduct
CRHR	California Register of Historical Resources
CUP	Conditional Use Permit
CWA	Federal Clean Water Act
DAP	Drought Allocation Plan
DBESP	Determination of Biologically Equivalent or Superior Preservation
DCV	Design Capture Volume
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fees
DOC	California Department of Conservation

## Acronyms

DOE	U.S. Department of Energy
DOT	Department of Transportation
DPM	Diesel Particulate Matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EG	Electric Generation
EHS	Extremely Hazardous Substance
EISA	Energy Independence and Security Act
EMO	Emergency Management Office
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operation Plan
Eor	Enhanced Oil Recovery
EPA	Environmental Protection Agency
EPAP	Economic Prosperity Action Plan
EPCA	Federal Energy Policy and Conservation Act
ESA	Environmental Site Assessment (Phase I)
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FPEIR	Final Program Environmental Impact Report
GAP	Green Accountability Performance
GHG	Greenhouse Gas
GIS	Geographic Information System
GLC	Ground-Level Concentration
GP	General Plan
GWMP	Groundwater Management Plan
GWP	Global Warming Potential
HARP2 RAST	Hotspots Analysis and Reporting Program Version 2 Risk Assessment Standalone Tool
HCOC	Hydrologic Condition of Concern
HCP	Habitat Conservation Plan
HDV	Heavy Duty Vehicle
HMBP	Hazardous Materials Business Plan
HMMA	California Hazardous Material Management Act
HMMP	Habitat Mitigation and Monitoring Plan

## Acronyms

HMTA	Hazardous Materials Transportation Act
HPD	Office of Historic Preservation Historic Property Directory
HPS	High-Pressure Sodium
HQTA	High Quality Transit Areas
HRA	Health Risk Assessment
HVAC	Heating, Ventilation, and Air Conditioning
HVIP	Heavy Duty Voucher Incentive Project
HVLP	High Velocity-Low Pressure
HWCL	California Hazardous Waste Control Law
IPCC	Intergovernmental Panel on Climate Change
IPM	Integrated Pest Management
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Traffic Engineers
LAFCO	Local Agency Formation Commission
LCFS	Low Carbon Fuel Standards
LDMF	Local Development Mitigation Fee
LED	Light-Emitting Diode
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
LIUNA	Laborers International Union of North America
LOS	Level of Service
LPS	Low-Pressure Sodium
LST	Localized Significance Threshold
LUST	Leaking Underground Storage Tank
MARB	March Air Reserve Base
MARB/IPA LUCP	March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MCUP	Minor Conditional Use Permit
MDR	Medium Density Residential
MEP	Maximum Extent Practicable
MOE	Measurement of Effectiveness
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MU	Management Units
MUTCD	California Manual on Uniform Traffic Control Devices

## Acronyms

MVUSD	Moreno Valley Unified School District
NAAQS	National Ambient Air Quality Standards
n/a	Not applicable
NAHC	Native American Heritage Commission
NAS	National Academy of Sciences
NCCP	Natural Communities Conservation Plan
NCDC	National Clean Diesel Campaign
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic and Safety Administration
NIMS	National Incident Management System
NPDES	National Pollutant Discharge Elimination System
NOP	Notice of Preparation
NPC	Neighborhood Policing Center
NRC	Nuclear Regulatory Commission
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health and Hazard Assessment
OHWM	Ordinary High Water Mark
OPC	Ocean Protection Council (California)
OPR	Governor's Office of Planning and Research
OS	Open Space
OSHA	U.S. Department of Labor's Occupational Safety and Health Administration
OWSC	One Way Stop Controlled
P	Public Park
PCE	Passenger Car Equivalence
PEL	Permissible Exposure Limit
PG&E	Pacific Gas & Electric
PQP	Public/Quasi-Public
PRC	Public Resources Code
PRCSD	Parks, Recreation and Community Services Department
PV	Photovoltaic
PW	Public Works Department (City of Riverside)
R-1-7000	Single-Family Residential Zone with minimum 7,000 square-foot lots
R-1-1/2 acre	Single-Family Residential Zone with minimum half-acre lots
RBOB	Reformulated Gasoline Blendstock for Oxygenate Blending
RC	Residential Conservation Zone
RCA	Regional Conservation Authority (Western Riverside County)
RCALUC	Riverside County Airport Land Use Commission
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCP	Reinforced Concrete Pipe

## Acronyms

RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RCWRD	Riverside County Waste Resources Department
REC	Recognized Environmental Conditions
REL	Reference Exposure Level
RFD	Riverside Fire Department
RFS	Renewable Fuel Standard
RGNG	Riverside Good Neighbor Guidelines
RMC	Riverside Municipal Code
RPL	Riverside Public Library
RPS	Renewable Portfolio Standard
RPU	Riverside Public Utilities
RRG	Riverside Restorative Growthprint
RSHA	Regional System of Highways and Arterials
RST	Regional Significance Threshold
RTA	Riverside Transit Agency
RTP/SCS	Regional Transportation Plan / Sustainable Communities Strategy
RUSD	Riverside Unified School District
RWQCB	Regional Water Quality Control Board
RWQCP	Regional Water Quality Control Plant
SARA	Superfund Amendments and Reauthorization Act
SAR-DAMP	Santa Ana Regional Drainage Area Management Plan
SBCM	San Bernardino County Museum
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCBPSP	Sycamore Canyon Business Park Specific Plan
SCG	Southern California Gas Company
SCSP	Sycamore Canyon Specific Plan
SCWP SKR	Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan
SDG&E	San Diego Gas & Electric
SEMS	Standardized Emergency Management System
SHAG	Sycamore Highlands Action Group
SHS	State Highway System
SJVAPCD	San Joaquin Valley Air Pollution Control District
SKR-HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SMARA	California Surface Mining and Reclamation Act
SOON	Surplus Off-road Opt-in for NO <sub>x</sub>
SPS	Sustainability Policy Statement
SRA	Source Receptor Area

## Acronyms

SRPS	Sustainable Riverside Policy Statement
SRRE	Source Reduction and Recycling Element
SSC	Species of Special Concern
SVP	Society of Vertebrate Paleontology
SWANCC	Solid Waste Agency of Northern Cook County
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SZ	Scientific Resource area
TAC	Toxic Air Contaminant
TAZ	Transportation Analysis Zone
T-BACT	Best Available Control Technology for Toxics
TCL	Traditional Cultural Landscape
TDM	Transportation Demand Management Regulations
TEA-21	Transportation Equity Act for the 21 <sup>st</sup> Century
TIA	Traffic Impact Analysis
TMDL	Total Maximum Daily Load
TOD	Transit-Oriented Development
TPM	Tentative Parcel Map
TPQ	Threshold Planning Quantity
TRU	Transport Refrigeration Unit
TUA	Traditional Use Area
TUMF	Transportation Uniform Mitigation Fee (Western Riverside County)
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VIP	Voucher Incentive Program
VLDR	Very Low Density Residential
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WA	Williamson Act
WCI	Western Regional Climate Action Initiative
WCSSP	Water Conservation and Supply Shortage Program
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan



## Acronyms

WRCOG	Western Riverside County Council of Governments
WRP	Waste Recycling Plan
WSA	Water Supply Assessment
WSAP	Water Supply Allocation Plan
WSC	Waters of the State of California
WSDM	Water Surplus and Demand Management Plan
WQMP	Water Quality Management Plan
WUEMP	Water Use Efficiency Master Plan
WWRF	Western Water Recycling Facility
ZEV	Zero-emission vehicle

## Units of Measurement and Chemical Symbols

AF	Acre-feet
AFY	Acre feet per year
Bcf	Billion cubic feet
BTU	British thermal units
C <sub>2</sub> F <sub>6</sub>	Perfluoroethane
CF	Cubic Feet
CF <sub>4</sub>	Perfluoromethane
cfs	Cubic Feet per Second
CH <sub>4</sub>	Methane
cm/s	Centimeters per second
CNEL	Community Noise Equivalent Levels
CO	Carbon monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> E	Carbon dioxide equivalents
dB	Decibels
dBA	A-weighted decibels
DNL	Day-Night Level (or L <sub>dn</sub> )
DU	Dwelling unit
gpm	Gallons per minute
g/s	Grams per second
gWh/yr	Gigawatt hours per year
HC	Hydrocarbons
HFC	Hydrofluorocarbons
kV	Kilovolt
kWh	Kilowatt-hours
L <sub>eq</sub>	Equivalent noise level
L <sub>max</sub>	Maximum noise level
L <sub>min</sub>	Minimum noise level
LF	Linear Feet
MG	Megawatts
mgd	Million gallons per day
MMTCO <sub>2</sub> e	Million metric tons of carbon dioxide equivalent
MT/yr	Metric tons per year
NH <sub>4</sub> NO <sub>3</sub>	Ammonium nitrate
NO	Nitric oxide
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Generic term for mono-nitrogen oxides NO and NO <sub>2</sub>
N <sub>2</sub> O	Nitrous oxide
O <sub>3</sub>	Ozone
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyl
PM-10	Particulate matter 2.5 to 10 microns in diameter

PM-2.5	Particulate matter 2.5 microns or less in diameter
ppb	Parts per billion
ppm	Parts per million
ppv	Peak particle velocity
RMS	Root mean square
ROG	Reactive organic gases
SF	Square Feet
SF <sub>6</sub>	Sulfur Hexafluoride
SO <sub>2</sub>	Sulfur dioxide
TSF	Thousand square feet gross floor area
µg/m <sup>3</sup>	Micrograms per cubic meter
X/Q	Dilution factor (dispersion modeling)