

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
ACRONYMS AND ABBREVIATIONS.....		xiv
EXECUTIVE SUMMARY		ES-1
1.0	INTRODUCTION	1-1
1.1	OVERVIEW	1-1
1.2	LAND USE BACKGROUND	1-3
1.3	LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES	1-4
1.4	PURPOSE AND LEGAL AUTHORITY	1-5
	1.4.1 Tiering and Prior Environmental Review	1-6
1.5	SCOPE OF THE EIR	1-7
1.6	AREAS OF KNOWN PUBLIC CONTROVERSY	1-9
1.7	ORGANIZATION OF THE EIR.....	1-9
2.0	PROJECT DESCRIPTION.....	2-1
2.1	INTRODUCTION	2-1
2.2	PROJECT APPLICANT TEAM.....	2-2
2.3	EXISTING PHYSICAL SETTING	2-2
	2.3.1 Project Location	2-2
	2.3.2 Project Vicinity.....	2-3
	2.3.3 Project Site	2-6
2.4	EXISTING REGULATORY SETTING	2-7
	2.4.1 City of San Luis Obispo Land Use Element	2-7
	2.4.2 Airport Area Specific Plan	2-8
	2.4.3 Airport Land Use Plan.....	2-9
2.5	PROJECT OBJECTIVES.....	2-10
2.6	PROJECT OVERVIEW	2-10
	2.6.1 Required Approvals.....	2-11
	2.6.2 AASP Amended Policies.....	2-13
	2.6.3 Development Plan	2-18
	2.6.3.1 Proposed Housing.....	2-20
	2.6.3.2 Project Inclusionary Housing	2-21
	2.6.3.3 Proposed Neighborhood Commercial Uses	2-23
	2.6.3.4 Proposed Parks and Open Space	2-23
	2.6.3.5 Relationship of Project Development to ALUP Safety Areas	2-27
	2.6.4 Project Design	2-27
	2.6.5 Circulation	2-28
	2.6.5.1 Offsite Improvements and Integration with the External Circulation Network	2-30
	2.6.5.2 Class I Paths and Class II Bicycle Lanes, and Pedestrian Circulation	2-32
	2.6.5.3 Proposed Vehicular Circulation within the Project Site	2-33

	2.6.5.4	Parking.....	2-36
	2.6.5.5	Transit Improvements.....	2-36
2.6.6		Utilities and Services.....	2-36
	2.6.6.1	Water.....	2-36
	2.6.6.2	Sanitary Sewer.....	2-37
	2.6.6.3	Dry Utilities.....	2-40
	2.6.6.4	Fire Protection Services.....	2-40
2.6.7		Stormwater Conveyances.....	2-40
2.6.8		Tank Farm Creek Realignment and Restoration.....	2-43
	2.6.8.1	Offsite Improvements.....	2-44
	2.6.8.2	Onsite Tank Farm Creek Realignment and Floodplain Improvements.....	2-46
2.7		PROJECT CONSTRUCTION.....	2-47
	2.7.1	Phasing.....	2-47
	2.7.2	Construction Activities.....	2-51
	2.7.2.1	Site Preparation and Grading.....	2-51
	2.7.2.2	Onsite Infrastructure Improvements.....	2-52
	2.7.2.3	Offsite Infrastructure Improvements.....	2-52
	2.7.2.4	Building Construction.....	2-53
	2.7.3	Phasing of Transportation Improvements.....	2-53
3.0		ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION MEASURES.....	3-1
3.0.1		APPROACH TO TIERED ANALYSIS.....	3-1
3.0.2		IMPACT CLASSIFICATION.....	3-2
3.0.3		MITIGATION MEASURES.....	3-3
3.0.4		CUMULATIVE IMPACT ANALYSIS.....	3-3
3.1		AESTHETICS AND VISUAL RESOURCES.....	3.1-1
3.1.1		LUCE UPDATE EIR.....	3.1-1
3.1.2		ENVIRONMENTAL SETTING.....	3.1-2
	3.1.2.1	Regional Visual Character.....	3.1-2
	3.1.2.2	Visual Character of the Project Site and Surroundings.....	3.1-3
	3.1.2.3	Visual Resources.....	3.1-6
	3.1.2.4	Scenic Vistas and Scenic Highways.....	3.1-6
	3.1.2.5	Light and Glare, and Nighttime Lighting.....	3.1-7
3.1.3		REGULATORY SETTING.....	3.1-7
	3.1.3.1	Federal.....	3.1-8
	3.1.3.2	State.....	3.1-8
	3.1.3.3	Local.....	3.1-8
3.1.4		ENVIRONMENTAL IMPACT ANALYSIS.....	3.1-15
	3.1.4.1	Thresholds of Significance.....	3.1-15
	3.1.4.2	Impact Assessment Methodology.....	3.1-15
	3.1.4.3	Project Impacts and Mitigation Measures.....	3.1-21
	3.1.4.4	Cumulative Impacts.....	3.1-29
3.2		AGRICULTURAL RESOURCES.....	3.2-1
3.2.1		LUCE UPDATE EIR.....	3.2-2

3.2.2	ENVIRONMENTAL SETTING	3.2-2
3.2.2.1	Regional Context.....	3.2-2
3.2.2.2	Local Context	3.2-3
3.2.2.3	Project Site	3.2-4
3.2.3	REGULATORY SETTING	3.2-7
3.2.3.1	Federal	3.2-7
3.2.3.2	State	3.2-7
3.2.3.3	Local	3.2-10
3.2.4	ENVIRONMENTAL IMPACT ANALYSIS	3.2-15
3.2.4.1	Thresholds of Significance.....	3.2-15
3.2.4.2	Impact Assessment Methodology	3.2-16
3.2.4.3	Project Impacts and Mitigation Measures	3.2-18
3.2.4.4	Cumulative Impacts.....	3.2-26
3.3	AIR QUALITY AND GREENHOUSE GAS EMISSIONS.....	3.3-1
3.3.1	LUCE UPDATE EIR.....	3.3-1
3.3.2	ENVIRONMENTAL SETTING	3.3-2
3.3.2.1	Regional Climate and Meteorology	3.3-2
3.3.2.2	Greenhouse Gases and Global Climate Change.....	3.3-3
3.3.2.3	Regional Air Quality	3.3-4
3.3.2.4	Regional Emissions	3.3-4
3.3.2.5	Emissions in the Vicinity of the Project Site.....	3.3-6
3.3.3	REGULATORY SETTING	3.3-7
3.3.3.1	Federal	3.3-7
3.3.3.2	State	3.3-8
3.3.3.3	Local.....	3.3-13
3.3.4	ENVIRONMENTAL IMPACT ANALYSIS	3.3-15
3.3.4.1	Thresholds of Significance.....	3.3-15
3.3.4.2	Impact Assessment Methodology	3.3-19
3.3.4.3	Project Impacts and Mitigation Measures	3.3-22
3.4	BIOLOGICAL RESOURCES	3.4-1
3.4.1	LUCE UPDATE EIR.....	3.4-1
3.4.2	ENVIRONMENTAL SETTING	3.4-2
3.4.2.1	Project Site Overview.....	3.4-2
3.4.2.2	Upland Habitat	3.4-5
3.4.2.3	Vegetation	3.4-8
3.4.2.4	Wildlife.....	3.4-9
3.4.2.5	Special Status Species	3.4-10
3.4.2.6	Critical Habitat	3.4-17
3.4.3	REGULATORY SETTING	3.4-18
3.4.3.1	Federal	3.4-18
3.4.3.2	State	3.4-19
3.4.3.3	Local.....	3.4-21
3.4.4	ENVIRONMENTAL IMPACT ANALYSIS	3.4-28
3.4.4.1	Thresholds of Significance.....	3.4-28
3.4.4.2	Impact Assessment Methodology	3.4-29

3.4.4.3	Project Impacts and Mitigation Measures	3.4-30
3.4.4.4	Cumulative Impacts.....	3.4-67
3.5	CULTURAL RESOURCES	3.5-1
3.5.1	LUCE UPDATE EIR.....	3.5-1
3.5.2	ENVIRONMENTAL SETTING	3.5-1
3.5.2.1	Prehistoric Setting	3.5-1
3.5.2.2	Historical Setting.....	3.5-3
3.5.2.3	Project Site Historic Context.....	3.5-4
3.5.2.4	Documented Cultural Resources	3.5-4
3.5.3	REGULATORY SETTING	3.5-7
3.5.3.1	Federal	3.5-7
3.5.3.2	State	3.5-7
3.5.3.3	Local.....	3.5-9
3.5.4	ENVIRONMENTAL IMPACT ANALYSIS	3.5-12
3.5.4.1	Thresholds of Significance.....	3.5-12
3.5.4.2	Impact Assessment Methodology	3.5-13
3.5.4.3	Project Impacts, Mitigation Measures, and Residual Impacts	3.5-14
3.5.4.4	Cumulative Impacts.....	3.5-21
3.6	HAZARDS AND HAZARDOUS MATERIALS	3.6-1
3.6.1	LUCE UPDATE EIR.....	3.6-1
3.6.2	ENVIRONMENTAL SETTING	3.6-2
3.6.2.1	Wildfire Risk	3.6-2
3.6.2.2	Hazardous Materials.....	3.6-3
3.6.2.3	Airport Safety Hazards.....	3.6-7
3.6.3	REGULATORY SETTING	3.6-9
3.6.3.1	Federal	3.6-9
3.6.3.2	State	3.6-11
3.6.3.3	Local.....	3.6-14
3.6.4	ENVIRONMENTAL IMPACT ANALYSIS	3.6-20
3.6.4.1	Thresholds of Significance.....	3.6-20
3.6.4.2	Impact Assessment Methodology	3.6-20
3.6.4.3	Project Impacts and Mitigation Measures.....	3.6-22
3.6.4.4	Cumulative Impacts.....	3.6-28
3.6.5	REFERENCES	3.6-30
3.7	HYDROLOGY AND WATER QUALITY	3.7-1
3.7.1	LUCE UPDATE EIR.....	3.7-1
3.7.2	ENVIRONMENTAL SETTING	3.7-2
3.7.2.1	Regional Hydrology	3.7-2
3.7.2.2	Project Site Hydrology	3.7-7
3.7.3	REGULATORY SETTING	3.7-13
3.7.3.1	Federal	3.7-13
3.7.3.2	State	3.7-14
3.7.3.3	Local.....	3.7-17
3.7.4	ENVIRONMENTAL IMPACT ANALYSIS	3.7-28

3.7.4.1	Thresholds of Significance	3.7-28
3.7.4.2	Impact Assessment Methodology	3.7-30
3.7.4.3	Project Impacts and Mitigation Measures	3.7-32
3.7.4.4	Cumulative Impacts.....	3.7-53
3.8	LAND USE AND PLANNING.....	3.8-1
3.8.1	LUCE UPDATE EIR.....	3.8-1
3.8.2	ENVIRONMENTAL SETTING	3.8-2
3.8.2.1	Surrounding Land Uses	3.8-2
3.8.2.2	Project Site	3.8-6
3.8.3	REGULATORY SETTING	3.8-7
3.8.3.1	Federal	3.8-7
3.8.3.2	State	3.8-8
3.8.3.3	Regional.....	3.8-9
3.8.3.4	Local.....	3.8-15
3.8.4	CONSISTENCY WITH PLANS AND POLICIES	3.8-23
3.8.5	ENVIRONMENTAL IMPACT ANALYSIS	3.8-51
3.8.5.1	Thresholds of Significance.....	3.8-51
3.8.5.2	Impact Assessment Methodology	3.8-51
3.8.5.3	Project Impacts and Mitigation Measures	3.8-52
3.8.5.4	Cumulative Impacts.....	3.8-62
3.9	NOISE.....	3.9-1
3.9.1	LUCE UPDATE EIR.....	3.9-1
3.9.2	ENVIRONMENTAL SETTING	3.9-1
3.9.2.1	Fundamentals of Sound and Environmental Noise	3.9-1
3.9.2.2	Project Site	3.9-5
3.9.2.3	Land Use Compatibility	3.9-7
3.9.2.4	Sensitive Receptors	3.9-8
3.9.3	REGULATORY SETTING	3.9-10
3.9.3.1	Federal	3.9-10
3.9.3.2	State	3.9-10
3.9.3.3	Local.....	3.9-11
3.9.4	ENVIRONMENTAL IMPACT ANALYSIS	3.9-16
3.9.4.1	Thresholds of Significance.....	3.9-16
3.9.4.2	Impact Assessment Methodology	3.9-17
3.9.4.3	Project Impacts and Mitigation Measures	3.9-20
3.9.4.4	Cumulative Impacts.....	3.9-32
3.10	POPULATION AND HOUSING.....	3.10-1
3.10.1	LUCE UPDATE EIR.....	3.10-1
3.10.2	ENVIRONMENTAL SETTING	3.10-1
3.10.2.1	Population.....	3.10-1
3.10.2.2	Employment	3.10-3
3.10.2.3	Housing	3.10-6
3.10.3	REGULATORY SETTING	3.10-14
3.10.3.1	Federal	3.10-14

TABLE OF CONTENTS

3.10.3.2	State	3.10-15
3.10.3.3	Local	3.10-15
3.10.4	ENVIRONMENTAL IMPACT ANALYSIS	3.10-20
3.10.4.1	Thresholds of Significance	3.10-20
3.10.4.2	Impact Assessment Methodology	3.10-20
3.10.4.3	Project Impacts and Mitigation Measures	3.10-21
3.10.4.4	Cumulative Impacts.....	3.10-26
3.11	PUBLIC SERVICES.....	3.11-1
3.11.1	LUCE UPDATE EIR.....	3.11-1
3.11.2	ENVIRONMENTAL SETTING	3.11-2
3.11.1.1	Police Services	3.11-2
3.11.1.2	Fire Protection Services.....	3.11-4
3.11.1.3	Schools	3.11-7
3.11.1.4	Parks	3.11-9
3.11.3	REGULATORY SETTING	3.11-9
3.11.3.1	Federal	3.11-9
3.11.3.2	State	3.11-10
3.11.3.3	Local	3.11-10
3.11.4	ENVIRONMENTAL IMPACT ANALYSIS	3.11-12
3.11.4.1	Thresholds of Significance	3.11-12
3.11.4.2	Impact Assessment Methodology	3.11-13
3.11.4.3	Project Impacts and Mitigation Measures	3.11-13
3.11.4.4	Cumulative Impacts.....	3.11-21
3.12	TRANSPORTATION AND TRAFFIC.....	3.12-1
3.12.1	LUCE UPDATE EIR.....	3.12-1
3.12.2	ENVIRONMENTAL SETTING	3.12-2
3.12.2.1	Area Roadway Network	3.12-2
3.12.2.2	Traffic Operations at Intersections	3.12-5
3.12.2.3	Traffic Operations Along Roadway Segments.....	3.12-12
3.12.2.4	Alternative Transportation	3.12-13
3.12.3	REGULATORY SETTING	3.12-18
3.12.3.1	Federal	3.12-18
3.12.3.2	State	3.12-18
3.12.3.3	Local	3.12-19
3.12.4	ENVIRONMENTAL IMPACT ANALYSIS	3.12-25
3.12.4.1	Thresholds of Significance	3.12-25
3.12.4.2	Impact Assessment Methodology	3.12-26
3.12.4.3	Project Impacts and Mitigation Measures	3.12-34
3.12.4.4	Cumulative Impacts.....	3.12-67
3.13	UTILITIES	3.13-1
3.13.1	LUCE UPDATE EIR.....	3.13-1
3.13.2	ENVIRONMENTAL SETTING	3.13-2
3.13.2.1	Wastewater Treatment.....	3.13-2
3.13.2.2	Water Supply	3.13-4
3.13.2.3	Solid Waste Disposal.....	3.13-10

3.13.2.4	Energy Services	3.13-11
3.13.3	REGULATORY SETTING	3.13-13
3.13.3.1	Federal	3.13-13
3.13.3.2	State	3.13-14
3.13.3.3	Local	3.13-16
3.13.4	ENVIRONMENTAL IMPACT ANALYSIS	3.13-22
3.13.4.1	Thresholds for Determining Significance	3.13-22
3.13.4.2	Impact Assessment Methodology	3.13-22
3.13.4.3	Project Impacts and Mitigation Measures	3.13-23
3.13.4.4	Cumulative Impacts.....	3.13-32
4.0	OTHER CEQA SECTIONS.....	4-1
4.1	IRREVERSIBLE ENVIRONMENTAL IMPACTS	4-1
4.2	GROWTH-INDUCING IMPACTS	4-2
4.3	EFFECTS FOUND NOT TO BE SIGNIFICANT.....	4-4
4.3.1	Geological Resources	4-4
4.3.2	Mineral and Forestry Resources.....	4-7
4.4	UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS	4-7
5.0	ALTERNATIVES	5-1
5.1	INTRODUCTION	5-1
5.2	PROJECT OBJECTIVES.....	5-2
5.3	SUMMARY OF SIGNIFICANT AND UNAVOIDABLE IMPACTS.....	5-2
5.3.1	Air Quality.....	5-2
5.3.2	Noise.....	5-3
5.3.3	Transportation and Traffic.....	5-3
5.4	ALTERNATIVES ANALYSIS	5-4
5.4.1	Alternatives Considered but Discarded.....	5-4
5.4.1.1	Retention of Agricultural Uses Alternative.....	5-5
5.4.1.2	Increased Housing Development Alternative.....	5-5
5.4.1.3	Major Reduced Project Alternative.....	5-6
5.4.1.4	Business Park Land Use Alternative.....	5-6
5.4.2	Alternatives Carried Forward for Analysis	5-7
5.4.2.1	No Project Alternative.....	5-7
5.4.2.2	Mitigated Project Alternative	5-12
5.4.2.3	Residential Plus Business Park Land Use Alternative	5-77
5.5	IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE	5-86
6.0	LIST OF PREPARERS	6-1
7.0	REFERENCES AND PERSONS OR ORGANIZATIONS CONTACTED	7-1

APPENDICES

A Initial Study
B Notice of Preparation and Comment Letters
C Vesting Tentative Tract Map
D Draft Avila Ranch Development Plan
E Avila Ranch Drainage Report
F Project Design Guidelines
G Land Evaluation and Site Assessment
H CalEEMod Estimates
I Biological Report
J Wetland Delineation Study
K Cultural Resources Inventory and Evaluation for the Avila Ranch Development
L Preliminary Site Assessment and Phase II Addendum for the Avila Ranch Property
M Water Supply Assessment
N ALUP Conformity Analysis Pre-application
O Sound Level Assessment for Avila Ranch Project
P Transportation Impact Study
Q Mitigated Project Alternatives Development Plan
R AASP Amendments

LIST OF FIGURES

<u>NUMBER</u>	<u>TITLE</u>	<u>PAGE</u>
Figure 1-1.	Project Site Aerial	1-2
Figure 2-1.	Project Site Aerial	2-4
Figure 2-2.	Land Use Plan	2-19
Figure 2-3.	Types of Proposed Residential Development	2-22
Figure 2-4a.	Architectural Design Concepts.....	2-25
Figure 2-4b.	Architectural Design Concepts.....	2-26
Figure 2-5.	Proposed Circulation Plan.....	2-29
Figure 2-6.	Buckley Road Extension Cross Section	2-31
Figure 2-7.	Project Interior Road Cross Sections.....	2-35
Figure 2-8.	Proposed Water Supply Plan.....	2-38
Figure 2-9.	Proposed Wastewater Collection System.....	2-39
Figure 2-10.	Proposed Drainage Conditions on the Project Site	2-42
Figure 2-11.	Proposed Drainage Outlet Structure in Tank Farm Creek	2-43
Figure 2-12.	Illustrative Tank Farm Creek Cross Sections.....	2-45
Figure 2-13.	Construction Phasing.....	2-50
Figure 2-14.	Phasing of Project Transportation Improvements	2-54
Figure 3.0-1.	Cumulative Projects	3-7
Figure 3.1-1.	KVA Location Map.....	3.1-17
Figure 3.2-1.	Agricultural Resources within the Project Site	3.2-5
Figure 3.2-2.	Agricultural Soils within the Project Site.....	3.2-7
Figure 3.4-1.	Existing Biological Conditions on the Project Site and Buckley Road Extension Area.....	3.4-4
Figure 3.4-2.	Potential Project Impacts to Tank Farm Creek	3.4-33
Figure 3.6-1	San Luis Obispo County Regional Airport	3.6-8
Figure 3.7-1.	Existing Drainage Conditions on the Project Site and Chevron Tank Farm Property and Vicinity.....	3.7-11
Figure 3.7-2.	Proposed Drainage Conditions on the Chevron Tank Farm Property and Vicinity	3.7-31
Figure 3.8-1.	Zoning Designations.....	3.8-5
Figure 3.9-1.	Existing Measured Sound Level Contours within the Project Site ..	3.9-9
Figure 3.11-1.	Public Services	3.11-3
Figure 3.12-1.	Existing Traffic Conditions	3.12-9
Figure 3.12-2.	Existing plus Project Traffic Impacts.....	3.12-28
Figure 5-1.	Conceptual Mitigated Project Alternative.....	5-14
Figure 5-2.	Mitigated Project Alternative Composite Site Plan	5-15
Figure 5-3.	Illustrative Tank Farm Creek Cross Sections for the Mitigated Project Alternative.....	5-31
Figure 5-4.	Conceptual Residential Plus Business Park Land Use Alternative...	5-78

LIST OF TABLES

<u>NUMBER</u>	<u>TITLE</u>	<u>PAGE</u>
Table 2-1.	Land Use Element Performance Standards for the Project Site	2-8
Table 2-2.	ALUP Safety Area Standards	2-9
Table 2-3.	Summary of Proposed Land Uses	2-20
Table 2-4.	Summary of Housing and Population	2-21
Table 2-5.	Summary of Proposed Parks and Open Space	2-27
Table 2-6.	Pipe and Riprap Sizes at Drainage Outlets.....	2-41
Table 2-7.	Phases and Duration	2-48
Table 2-8.	List of Construction Equipment	2-51
Table 3.0-1.	Cumulative Projects List	3-4
Table 3.1-1.	Summary of Project Impacts	3.1-21
Table 3.2-1.	Agricultural Lands within the Project Vicinity	3.2-4
Table 3.2-2.	Project Site Soil Capabilities.....	3.2-6
Table 3.2-3.	LESA Analysis Summary for Project Site	3.2-18
Table 3.2-4.	Summary of Project Impacts	3.2-19
Table 3.2-5.	Comparison of FMMP vs NCRS Prime Farmland Designations... 3.2-19	
Table 3.3-1.	Ambient Air Quality Standards and Attainment Status	3.3-5
Table 3.3-2.	Ambient Air Quality Data at San Luis Obispo - Higuera Street Station.....	3.3-6
Table 3.3-3.	Thresholds of Significance for Construction Operations.....	3.3-16
Table 3.3-4.	Thresholds of Significance for Operational Operations.....	3.3-17
Table 3.3-5.	Summary of Project Impacts	3.3-23
Table 3.3-6.	Maximum Short-term Construction Emissions (Unmitigated)	3.3-24
Table 3.3-7.	Maximum Short-term Construction Emissions (Mitigated).....	3.3-25
Table 3.3-8.	Maximum Long-term Operational Emissions (Unmitigated)	3.3-31
Table 3.3-9.	Potentially Appropriate Mitigation Measures from APCD CEQA Air Quality Handbook	3.3-32
Table 3.3-10.	Maximum Long-term Operational Emissions (Mitigated).....	3.3-39
Table 3.3-11.	Estimated Construction GHG Emissions (Unmitigated).....	3.3-41
Table 3.3-12.	Estimated Operational GHG Emissions (Unmitigated)	3.3-42
Table 3.3-13.	Estimated Operational GHG Emissions (Mitigated).....	3.3-45
Table 3.4-1.	Tank Farm Creek Cross Sections with Riparian Coverage.....	3.4-5
Table 3.4-2.	Habitat Types Located within the Project Site.....	3.4-9
Table 3.4-3.	Special Status Plants with Potential to Occur in the Project Site... 3.4-10	
Table 3.4-4.	Sensitive Wildlife Species with Potential to Occur in the Project Site.....	3.4-11
Table 3.4-5.	Summary of Project Impacts	3.4-31
Table 3.4-6.	Permanent Impacts to Wetlands and Riparian Areas in the Project Site.....	3.4-41
Table 3.4-7.	Proposed Storm Water Outfall Size and Impact Area.....	3.4-43
Table 3.5-1.	Cultural Resources Recorded Within 0.25 Mile of the Project Site. 3.5-5	
Table 3.5-2.	Cultural Resources Recorded Within Project Site	3.5-7
Table 3.5-3.	Summary of Project Impacts	3.5-15

Table 3.6-1.	USTs and Cleanup Sites within a 0.5 mile-Radius of the Project Site.....	3.6-5
Table 3.6-2.	Fatal Aircraft Accidents within the Vicinity of San Luis Obispo County Regional Airport.....	3.6-9
Table 3.6-3.	Summary of Project Impacts.....	3.6-22
Table 3.7-1.	Summary of Peak Flows in Project Site and Vicinity.....	3.7-12
Table 3.7-2.	Flood Risk Management Legislation and Local Responsibilities ..	3.7-16
Table 3.7-3.	Summary of Project Impacts.....	3.7-32
Table 3.7-4.	Projected Peak Flow Increases in Tank Farm Creek (Phases 1-3).	3.7-39
Table 3.7-5.	Projected Peak Flow Increases in Tank Farm Creek (Full Buildout).....	3.7-40
Table 3.8-1.	Existing City and County Zoning Districts within Project Vicinity	3.8-4
Table 3.8-2.	LUCE Performance Standards for the Project Site.....	3.8-6
Table 3.8-3.	Applicable ALUP Airport Safety Area Standards (ALUP Table 7).....	3.8-10
Table 3.8-4.	Acreage of Project Site within ALUP Airport Safety Areas.....	3.8-15
Table 3.8-5.	LUCE AOZ Standards.....	3.8-19
Table 3.8-6.	Acreage of Project Site within LUCE-defined AOZ.....	3.8-19
Table 3.8-7.	General Plan Policy Consistency Summary.....	3.8-24
Table 3.8-8.	ALUP Consistency Summary.....	3.8-43
Table 3.8-9.	AASP Consistency Summary.....	3.8-44
Table 3.8-10.	Summary of Project Impacts.....	3.8-53
Table 3.8-11.	Residential Units Proposed within AOZs.....	3.8-54
Table 3.8-12.	ALUP Airport Safety Area Standards for Residential Densities1 ..	3.8-55
Table 3.9-1.	Representative Noise Levels.....	3.9-3
Table 3.9-2.	Human Response to Different Levels of Groundborne Vibration ...	3.9-5
Table 3.9-3.	County Construction Exception to Noise Standards.....	3.9-11
Table 3.9-4.	City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due To Transportation Noise Sources.....	3.9-12
Table 3.9-5.	City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Stationary Noise Sources.....	3.9-13
Table 3.9-6.	City of San Luis Obispo Exterior Noise Limits.....	3.9-14
Table 3.9-7.	Maximum Time Periods for Increased Noise Levels.....	3.9-14
Table 3.9-8.	Maximum Noise Levels for Nonscheduled, Intermittent, Short-Term Operation (Less than 10 Days) of Mobile Equipment at Residential Properties.....	3.9-14
Table 3.9-9.	Maximum Noise Levels for Repetitively Scheduled, Relatively Long-Term Operation (10 Days or More) of Stationary Equipment at Residential Properties.....	3.9-15
Table 3.9-10.	Summary of Compatibility of Land Uses with CNEL Contours ...	3.9-15
Table 3.9-11.	Guidelines for Single Noise Events.....	3.9-16
Table 3.9-12.	Noise Ranges of Typical Construction Equipment.....	3.9-18
Table 3.9-13.	Caltrans Vibration Annoyance Potential Criteria.....	3.9-19
Table 3.9-14.	Vibration Source Levels for Construction Equipment.....	3.9-19
Table 3.9-15.	Summary of Project Impacts.....	3.9-21

LIST OF TABLES

Table 3.9-16.	Estimated Outdoor Construction Peak Noise Levels at Sensitive Receptors (Unmitigated)	3.9-23
Table 3.9-17.	Projected Traffic and Noise Level Increases along Adjacent Roadways	3.9-27
Table 3.10-1.	Population Growth between 1990 and 2016	3.10-2
Table 3.10-2.	SLOCOG Medium Growth Population Projections	3.10-3
Table 3.10-3.	Population Growth, 2005-2013, San Luis Obispo City, County, and State of California.....	3.10-3
Table 3.10-4.	Division of Labor within the City, County, and State.....	3.10-5
Table 3.10-5.	City of San Luis Obispo Labor Force and Unemployment 2000-2013	3.10-6
Table 3.10-6.	SLOCOG Medium Non-Farm Employment Projections	3.10-6
Table 3.10-7.	SLOCOG Existing and Projected Housing Supply	3.10-7
Table 3.10-8.	Affordable Rent and Purchase Prices for All Income Categories ..	3.10-8
Table 3.10-9.	Average Floor Area by Unit Type in San Luis Obispo, 2011	3.10-9
Table 3.10-10.	Median Residential Real Estate Sales Prices for City, County, and State from 2001-2013	3.10-9
Table 3.10-11.	Remaining RHNA Need Based on Dwelling Units Approved, Under Construction, or Built, 2014 to 2019	3.10-10
Table 3.10-12.	San Luis Obispo Quantified Housing Objectives, 2014 to 2019 ..	3.10-12
Table 3.10-13.	Jobs-to-Housing Ratio in 2010.....	3.10-13
Table 3.10-14.	Jobs-to-Housing Ratio in 2015.....	3.10-13
Table 3.10-15.	SLOCOG Projections vs. LUCE Buildout Capacity for 2035	3.10-14
Table 3.10-16.	Land Use Element - 1% Population Growth Projection and Housing Supply Thresholds	3.10-16
Table 3.10-17a.	Inclusionary Housing Requirements	3.10-19
Table 3.10-17b.	Inclusionary Housing Adjustment Factors.....	3.10-19
Table 3.10-18.	Summary of Project Impacts	3.10-21
Table 3.10-19.	Population Growth by Project Phase.....	3.10-24
Table 3.10-20.	City and Countywide Population and Housing Projections, 2010-2035	3.10-27
Table 3.11-1.	Public Services Serving the Project Vicinity	3.11-1
Table 3.11-2.	Existing Capacity and Enrollment at SLCUSD Schools (2014-2015).....	3.11-8
Table 3.11-3.	Summary of Project Impacts	3.11-14
Table 3.11-4.	Project Student Generation.....	3.11-20
Table 3.12-1.	LOS Criteria for Signalized and Unsignalized Intersections	3.12-7
Table 3.12-2.	Existing Peak Hour Intersection LOS	3.12-8
Table 3.12-3.	Existing Queues at Intersections in the Project Vicinity	3.12-11
Table 3.12-4.	Existing Peak Hour Segment LOS	3.12-13
Table 3.12-5.	Existing Transit Service	3.12-14
Table 3.12-6.	Proposed Project Trip Generation	3.12-29
Table 3.12-7.	Existing Plus Project Intersection Impact Summary	3.12-30
Table 3.12-8.	Existing plus Project Intersection Queueing Impact Summary....	3.12-31
Table 3.12-9.	Existing Plus Project Roadway Segment Impact Summary.....	3.12-32
Table 3.12-10.	Average estimated VMT for the City, County, and Project.....	3.12-33

Table 3.12 11. Summary of Project Impacts 3.12-35

Table 3.12-12. Trip Generation per Proposed Development Phase 3.12-41

Table 3.12-13. Near-term Plus Project Intersection Impact Summary 3.12-68

Table 3.12-14. Near-term plus Project Segment Impact Summary 3.12-68

Table 3.12-15. Long-term Cumulative Impact Summary 3.12-74

Table 3.13-1. Utilities Serving the Project Site 3.13-2

Table 3.13-2. Current Storage within the City of San Luis Obispo's Reservoirs . 3.13-4

Table 3.13-3. City of San Luis Obispo's Water Resource Annual Availability ... 3.13-7

Table 3.13-4. Current Water Demand and Water Availability in the City of San Luis Obispo 3.13-8

Table 3.13-5. Water Distribution Infrastructure 3.13-9

Table 3.13-6. Summary of Project Impacts 3.13-23

Table 3.13-7. Wastewater Projections Resulting from the Project 3.13-24

Table 3.13-8. Estimated Water Demand from Project WSA 3.13-29

Table 3.13-9. Estimated Project Water Demand based on City Water Use Factors 3.13-30

Table 3.13-10. Estimated Solid Waste Production 3.13-32

Table 5-1. Comparison of Proposed MPA to the Proposed Project 5-17

Table 5-2. Summary of Proposed MPA Land Uses 5-18

Table 5-3. Summary and Comparison of Housing and Population 5-20

Table 5-4. MPA Construction Phasing 5-33

Table 5-5. MPA Impacts, Mitigation Measures, and Residual Impacts 5-35

Table 5-6. Maximum Short-term Construction Emissions (Unmitigated) 5-45

Table 5-7. Maximum Short-term Construction Emissions (Mitigated) 5-45

Table 5-8. Maximum Long-term Operational Emissions (Unmitigated) 5-46

Table 5-9. Maximum Long-term Operational Emissions (Mitigated) 5-47

Table 5-10. Estimated Construction GHG Emissions (Unmitigated) 5-48

Table 5-11. Estimated Operational GHG Emissions (Unmitigated) 5-48

Table 5-12. Estimated Operational GHG Emissions (Mitigated) 5-49

Table 5-13. Permanent Impacts to Wetlands and Riparian Areas 5-52

Table 5-14. Residential Units Proposed within AOZs 5-60

Table 5-15. ALUP Airport Safety Area Standards for Residential Densities1 5-61

Table 5-16. MPA Student Generation 5-67

Table 5-17. Approximate Estimated Vehicular Trip Generation under the MPA 5-68

Table 5-18. Wastewater Projections Resulting from the MPA. 5-74

Table 5-19. Estimated MPA Water Demand based on City Water Use Factors .. 5-76

Table 5-20. Estimated Solid Waste Production under the MPA 5-76

Table 5-21. Housing Proposed under Residential Plus Business Park Land Use Alternative 5-80

Table 5-22. ALUP Safety Area Standards for Unit or Persons Densities1 5-83

Table 5-23. Consistency with AOZs 5-83

Table 5-24. Estimated Net New Daily Trips under Residential Plus Business Park Land Uses Alternative 5-85

Table 5-25. Impact Comparison of Alternatives to the Proposed Project 5-87

ACRONYMS AND ABBREVIATIONS

AASP	Airport Area Specific Plan
AB	Assembly Bill
AC	Advisory Circular
ACM	asbestos containing materials
ACOS	Airport Compatibility Open Space Plan
ACTM	Airborne Toxic Control Measure
ADA	Americans with Disabilities Act
AF	acre-feet
AFY	acre feet per year
AHERA	Asbestos Hazard Emergency Response Act
Airport	San Luis Obispo County Regional Airport
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Plan
Amec Foster Wheeler	Amec Foster Wheeler, Environment and Infrastructure, Inc.
AOZ	Airport Overlay Zones
APCD	Air Pollution Control District
APN	Assessor Parcel Number
Applicant	Avila Ranch LLC
ARI	Architectural Resource Inventory
ARIM	Archaeological Resource Impact Mitigation
BACT	Best Available Control Technology
bgs	below the ground surface
BMP	Best Management Practice
BS-SP	Business Park – Specific Plan
C/OS	Conservation/Open Space
CAAQS	California Ambient Air Quality Standards
CAC	California Administrative Code
Cal Poly	California State Polytechnic University
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAMP	Construction Activity Management Plan
CAP	Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Code
CAA	California Clean Air Act
CCR	California Code of Regulations
CCTC	Central Coast Transportation Consulting
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife

CDZ	Clustered Development Zone
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	Chlorofluorocarbons
CH ₄	Methane
CHC	Cultural Heritage Committee
CHRIS	California Historical Resources Information System
CIMIS	California Irrigation Management Information System
City	City of San Luis Obispo
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	Compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
COS	Conservation and Open Space
County	County of San Luis Obispo
CRHR	California Register of Historical Places
CSC	California Species of Concern
CUPA	Certified Unified Program Agency
CVC	California Vehicle Code
CWA	Clean Water Act
cy	cubic yard
dB	decibel
dba	A-weighted decibel
DBH	Diameter breast height
DDM	Drainage Design Manual
Development Plan	Avila Ranch Development Plan
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
du/acre	dwelling units per acre
EDT	estimated daily trips
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FCAA	Federal Clean Air Act
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FSC	Federal Species of Concern
FTA	Federal Transit Administration
FWHA	Federal Highway Administration

ACRONYMS AND ABBREVIATIONS

GHG	Greenhouse Gases
gpcd	Gallons per capita per day
GWh	gigawatt hours
HAP	Hazardous Air Pollutant
HCD	California Department of Housing and Community Development
HCM	Highway Capacity Manual
HDD	Horizontal Directional Drilling
HRA	Health Risk Assessment
HSC	Health and Safety Code
HVAC	heating, ventilation, and air conditioning
in/sec	inches per second
IS	Initial Study
ITE	Institute of Transportation Engineers
KVA	Key Viewing Area
LAFCO	Local Agency Formation Commission
LBP	lead based paint
lbs/day	pounds per day
LCC	Land Capability Classification
L _{dn}	Day-night average noise level
LE	Land Evaluation
LEED-ND	Leadership in Energy and Environmental Design for Neighborhood Development
L _{eq}	equivalent energy noise level
LESA	Land Evaluation and Site Assessment
L _{max}	noise level at noise source
L _{min}	minimum instantaneous noise level
LNG	liquefied natural gas
LOS	level of service
LOVR	Los Osos Valley Road
LUCE	Land Use and Circulation Element
LUCE Update EIR	Land Use and Circulation Element Update Environmental Impact Report
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MCI	mass casualty incident
MCL	maximum contaminant level
mg/m ³	milligrams per cubic meter
mgd	million gallons per day
MMRP	Mitigation, maintenance, monitoring, and reporting plan
MMTCO _{2e}	Million metric tons of carbon dioxide equivalent
mph	miles per hour
msl	mean sea level
MT/yr	metric tons per year

NAAQS	National ambient air quality standards
NAHC	Native American Heritage Commission
National Contingency Plan	National Oil and Hazardous Substances Pollution Contingency Plan
NESHAP	National Emission Standard for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOA	Naturally Occurring Asbestos
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	ozone
OPR	Office of Planning and Research
OSHA	Federal Occupational Safety and Health Administration
Pb	Lead
PCB	polychlorinated biphenyls
PEA	Preliminary Endangerment Assessment
PG&E	Pacific Gas and Electric Company
PM ₁₀	10-micron particulate matter
PM _{2.5}	2.5-micron particulate matter
POC	Points of Connection
ppb	parts per billion
PPM	parts per million
PRC	Public Resources Code
Project	Avila Ranch Development Project
PSA	Preliminary Site Assessment and Phase II Addendum for the Avila Ranch Property
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Needs Plan
ROG	reactive organic gases
ROW	right of way
RPZ	Runway Protection Zone
RTP	Regional Transportation Plan
RTP/SCG	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SA	Site Assessment
Santa Margarita Lake	Salinas Reservoir
SARE	Subsurface Archaeological Resource Evaluations
SB	Senate Bill

ACRONYMS AND ABBREVIATIONS

Scoping Plan	Climate Change Scoping Plan
SE	California Endangered
sf	square feet
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SLCUSD	San Luis Coastal Unified School District
SLO Transit	City of San Luis Obispo Transit Division
SLOCOG	San Luis Obispo Council of Governments
SLOFD	San Luis Obispo Fire Department
SLOPD	San Luis Obispo Police Department
SLORTA	San Luis Obispo Regional Transit Authority
SO ₂	sulfur dioxide
SoCal Gas	Southern California Gas Company
SP/yr	service pollutant/year
SP-4	Specific Focus Area
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCM	Transportation Control Measures
TIF	Transportation Impact Fee
TIS	Traffic Impact Study
ton/qtr	tons per quarter
tpd	tons per day
TPH	total petroleum hydrocarbons
TRB	Transportation Research Board
U.S. 101	U.S. Highway 101
U.S. Census	U.S. Census Bureau
UBC	Uniform Building Code
URL	Urban Reserve Line
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	Underground storage tank
VdB	Vibration decibel
VMT	vehicle miles traveled
VTM	Vesting Tract Map
WL	CDFG Watch List
WL-Fed	USFWS Watch List
WRF	Water Reclamation Facility
WRRF	Water Resource Recovery Facility
WWME	Water and Wastewater Management Element
ZOI	Zone of Influence
µg/m ³	micrograms per cubic meter