Disney | ABC Studios at The Ranch

Draft Environmental Impact Report

Volume I

SCH No. 2010011010
County Project No. TR071216-(5)
Plan Amendment No. 200900010
Zone Change No. 200900012
Vesting Tentative Tract Map No. 071216
Conditional Use Permit No. 200900126
Oak Tree Permit No. 200900041
Parking Permit No. 201000002
Environmental Review No. 200900112

Lead Agency:
County of Los Angeles
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1348
Los Angeles, California 90012

May 2012

Disney | ABC Studios at The Ranch

Draft Environmental Impact Report

Volume I

SCH No. 2010011010
County Project No. TR071216-(5)
Plan Amendment No. 200900010
Zone Change No. 200900012
Vesting Tentative Tract Map No. 071216
Conditional Use Permit No. 200900126
Oak Tree Permit No. 200900041
Parking Permit No. 201000002
Environmental Review No. 200900112

Lead Agency:

County of Los Angeles
Department of Regional Planning
Impact Analysis Section
320 West Temple Street, Room 1348
Los Angeles, California 90012

May 2012

Prepared By:

matrix environmental

6701 Center Drive West, Suite 900
Los Angeles, California 90045

TABLE OF CONTENTS

Page

VOLUME I

I. INTRODUCTION I-1

II. EXECUTIVE SUMMARY II-1

III. ENVIRONMENTAL SETTING III-1

IV. PROJECT DESCRIPTION IV-1

V. ENVIRONMENTAL IMPACT ANALYSIS V.A-1
- A. Geotechnical Hazards V.A-1
- B. Flood Hazards V.B-1
- C. Noise V.C-1
- D. Water Quality V.D-1
- E.1 Air Resources—Air Quality V.E.1-1
- E.2 Air Resources—Global Climate Change V.E.2-1
- F. Biological Resources V.F-1
- G. Cultural and Paleontological Resources V.G-1
- H. Agricultural and Forestry Resources V.H-1

VOLUME II

- I. Visual Qualities V.I-1
- J. Traffic, Access, and Parking V.J-1
- K.1 Public Services—Law Enforcement V.K.1-1
- K.2 Public Services—Fire Protection V.K.2-1
- L.1 Utilities and Service Systems—Water Supply V.L.1-1
- L.2 Utilities and Service Systems—Wastewater/Sewage Disposal V.L.2-1
- L.3 Utilities and Service Systems—Solid Waste V.L.3-1
- L.4 Utilities and Service Systems—Energy V.L.4-1
- M. Environmental Safety/Fire Hazards V.M-1
- N. Land Use V.N-1

VI. PROJECT ALTERNATIVES VI-1
- A. Alternative 1: No Project/No Build VI-16
- B. Alternative 2: Development in Accordance with Existing Plans VI-27
- C. Alternative 3: Reduced Program VI-46

Page

D. Alternative 4: Alternative Design with Reduced Program VI-64
E. Environmentally Superior Alternative VI-83

VII. OTHER ENVIRONMENTAL CONSIDERATIONS VII-1

VIII. LIST OF PREPARERS VIII-1

IX. REFERENCES IX-1

X. ACRONYMS AND ABBREVIATIONS X-1

LIST OF APPENDICES

VOLUME III

Appendix A NOP/Initial Study/NOP Comment Letters

Appendix B.1 Preliminary Geotechnical Report

Appendix B.2 Preliminary Geotechnical Report

VOLUME IV

Appendix C Drainage Concept/SUSMP/LID Plan

VOLUME V

Appendix C Drainage Concept/SUSMP/LID Plan (Continued)
(Sediment Transport Analyses)

VOLUME VI

Appendix D Noise Worksheets

Appendix E.1 Air Quality Worksheets

Appendix E.2 GHG Worksheets

Appendix F.1 Biological Resources Assessment

Appendix F.2 Biological Resources Assessment Supplement

Appendix F.3 Biological Resources Assessment Addendum

Appendix F.4 County Oak Tree Report

Appendix F.5 City Oak Tree Report

Appendix F.6 Oak Tree and Woodland Mitigation and Monitoring Plan

Appendix F.7 Jurisdictional Waters Report

Appendix F.8 Preliminary Fuel Modification Plan

Appendix F.9 Wildlife Impacts Analysis

Appendix F.10 Sensitive Species Surveys

Appendix F.11 Habitat Mitigation and Monitoring Plan

VOLUME VII

Appendix G.1 Historic Resources Assessment

Appendix G.2 Archaeological and Paleontological Resources Assessment

Appendix G.3 Supplement to Archaeological and Paleontological Resources Assessment

Appendix H.1 Design Guidelines

Appendix H.2 Light Memo

VOLUME VIII

Appendix I Traffic Study

VOLUME IX

Appendix J.1 Los Angeles County Sheriff's Department and California Highway Patrol Correspondence

Appendix J.2 Los Angeles County Fire Department Correspondence

Appendix K.1 Water Supply Assessment

Appendix K.2 Water Report

Appendix K.3 Sewer Report

Appendix K.4 Sewer Area Study

Appendix K.5 Dry Utilities Report

Appendix L.1 Environmental Records Search I

Appendix L.2 Environmental Records Search II

Appendix L.3 Soil Sampling Analytical Report

Appendix M Sunnyvale Analysis

LIST OF FIGURES

Figure		Page
III-1	Location of Related Projects	III-42
IV-1	Regional and Local Vicinity Map	IV-2
IV-2	Aerial Photograph of Golden Oak Ranch	IV-4
IV-3	Existing Uses	IV-6
IV-4	Proposed Uses	IV-11
IV-5	Proposed Uses Outside of Golden Oak Ranch	IV-12
IV-6	Conceptual Site Plan—Soundstage Option	IV-14
IV-7	Conceptual Site Plan—Studio Office Option	IV-16
IV-8	Site Circulation—Soundstage Option	IV-25
IV-9	Site Circulation—Studio Office Option	IV-26
IV-10	Landscaping Concept—Soundstage Option	IV-29
IV-11	Landscaping Concept—Studio Office Option	IV-30
IV-12	Proposed Trail	IV-34
IV-13	Temporary Construction Road	IV-47
IV-14	Retaining Walls—Soundstage Option	IV-49
IV-15	Retaining Walls—Studio Office Option	IV-50
IV-16	Tract Map	IV-53
IV-17	Exhibit “A” Map	IV-55
V.A-1	Regional Faults in Southern California	V.A-6
V.A-2	Seismic Hazard Zone Map	V.A-9
V.A-3	Project Grading Plan	V.A-19
V.A-4	Grading Profiles	V.A-20
V.A-5	Water Tank Grading Plan	V.A-21
V.A-6	Conditional Parking Areas Grading Plan	V.A-22
V.A-7	Proposed Placerita Canyon Connector Trail	V.A-23

Figure **Page**

V.B-1 Existing Drainage Conditions V.B-4
V.B-2 Existing Floodplain Map V.B-7
V.B-3 Conceptual Drainage Conditions and Facilities V.B-15
V.B-4 Post-Project Floodplain Map V.B-28
V.B-5 Debris Basins V.B-33
V.C-1 Noise Measurement Locations V.C-16
V.E.1-1 SCAQMD Source Receptor Areas V.E.1-17
V.E.1-2 MATES III Total Cancer Risk for Project Area V.E.1-20
V.E.1-3 Air Quality Sensitive Receptors Locations V.E.1-21
V.F-1 Plant Communities and Jurisdictional Features—Development Area V.F-17
V.F-2 Plant Communities and Jurisdictional Features—Water Tank Area and Trail Area V.F-18
V.F-3 Plant Communities—Conditional Parking Areas and Potential Mobile Home Relocation Areas V.F-19
V.F-4 Plant Communities—Off-Site Infrastructure Improvement Areas (Southwest of Development Area) V.F-20
V.F-5 Plant Communities—Off-Site Infrastructure Improvement Areas and SR-14 Interchange Improvements (Southwest of Development Area) V.F-21
V.F-6 Plant Communities—Off-Site Infrastructure Improvement Areas (West of Development Area) V.F-22
V.F-7 Plant Communities—Off-Site Infrastructure Improvement Areas (West of Development Area) V.F-23
V.F-8 Plant Communities—Off-Site Infrastructure Improvement Areas (West of Development Area) V.F-24
V.F-9 Plant Communities—Off-Site Infrastructure Improvement Areas and SR-14 Interchange Improvements (North of Development Area) V.F-25
V.F-10 Plant Communities—Off-Site Infrastructure Improvement Areas (North of Development Area) V.F-26
V.F-11 Plant Communities—Off-Site Infrastructure Improvement Areas (North and West of Development Area) V.F-27
V.F-12 California Gnatcatcher Final Designated Critical Habitat V.F-37

Figure **Page**

V.F-13 Oak Tree Map (On-Site) V.F-41
V.F-14 Oak Tree Map (Off-Site) V.F-43
V.F-15 Impacts to Plant Communities and Jurisdictional Features—Development Area V.F-65
V.F-16 Impacts to Plant Communities and Jurisdictional Features—Water Tank Area and Trail Area V.F-66
V.F-17 Impacts to Oak Trees V.F-73
V.F-18 Oak Tree Assessment—Trail Area V.F-75
V.F-19 Potential Oak Woodland Expansion and Restoration Areas V.F-79
V.F-20 Impacts to Jurisdictional Features (With Site Development Plan) V.F-82
V.F-21 Impacts to Jurisdictional Features—Drainage B Detail V.F-83
V.F-22 Impacts to Jurisdictional Features—Water Tank Area and Trail Area Detail V.F-84
V.F-23 Placerita Creek Restoration Plan V.F-85
V.I-1 Photo Location Map V.I-4
V.I-2 Photographs of Project Site and Surrounding Area V.I-5
V.I-3 Existing and Proposed Views—SR-14 NB Off-Ramp V.I-6
V.I-4 Existing and Proposed Views—SR-14 NB V.I-7
V.I-5 Existing and Proposed Views—Placerita Canyon Road V.I-8
V.I-6 Existing and Proposed Views—SR-14 SB On-Ramp V.I-9
V.I-7 Existing and Proposed Views—Placerita Canyon Road V.I-10
V.I-8 Conceptual Rendering of Project Main Entrance V.I-24
V.I-9 Conceptual Rendering of Proposed Soundstages V.I-25
V.I-10 Conceptual Rendering of Proposed Plaza V.I-26
V.I-11 Conceptual Rendering of Creek View V.I-27
V.I-12 Conceptual Rendering of Aerial View of Project V.I-28
V.J-1 Existing Conditions (2010) Peak-Hour Levels of Service V.J-5
V.J-2 Proposed Parking Plan—Soundstage Option V.J-24
V.J-3 Alternative Parking Plan—Studio Office Option V.J-25

Figure **Page**

V.J-4 Existing plus Ambient Growth Conditions (2020) Peak-Hour Levels of Service V.J-31

V.J-5 Project Trip Distribution V.J-33

V.J-6 Existing plus Ambient Growth plus Project Conditions (Soundstage and Studio Office Options)—Peak-Hour Levels of Service V.J-35

V.J-7 Existing plus Ambient Growth plus Project with Mitigation (Soundstage and Studio Office Options)—Peak-Hour Levels of Service V.J-65

V.J-8 Existing plus Ambient Growth plus Project with Mitigation plus Related Projects with Cumulative Mitigation (Soundstage and Studio Office Options)—Peak-Hour Levels of Service V.J-72

V.K.1-1 Law Enforcement Stations Within the Project Vicinity V.K.1-2

V.K.2-1 Existing and Proposed Fire Stations Within the Project Vicinity V.K.2-2

V.K.2-2 Preliminary Fuel Modification Plan V.K.2-14

V.L.1-1 Proposed Off-Site Water Improvements V.L.1-23

V.L.1-2 Proposed On-Site Water Improvements V.L.1-26

V.L.2-1 Proposed Off-Site Sewer Line—Oak Orchard Alignment V.L.2-7

V.L.2-2 Proposed On-Site Sewer System V.L.2-9

V.L.3-1 County of Los Angeles Landfills V.L.3-3

V.N-1 Applicable and Proposed Area Plan Designations V.N-3

V.N-2 Existing and Proposed Zoning Designations V.N-4

LIST OF TABLES

Table		Page
II-1	Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance	II-9
III-1	List of Related Projects	III-41
IV-1	Project Buildout—Soundstage Option	IV-15
IV-2	Project Buildout—Studio Office Option	IV-17
V.C-1	Typical Noise Levels	V.C-2
V.C-2	Land Use Compatibility for Community Noise Exposure	V.C-6
V.C-3	County of Los Angeles Exterior Noise Standards	V.C-8
V.C-4	County of Los Angeles Construction Noise Limits	V.C-10
V.C-5	City of Santa Clarita Exterior Noise Limits	V.C-11
V.C-6	FTA Vibration Impact Criteria—Typical Human Annoyance Levels	V.C-12
V.C-7	FTA Vibration Impact Criteria—Typical Levels for Building Damage	V.C-12
V.C-8	Caltrans Guidelines—Typical Vibration Annoyance Thresholds	V.C-13
V.C-9	Caltrans Guidelines—Typical Vibration Damage Thresholds	V.C-13
V.C-10	Measured Off-Site Ambient Noise Levels	V.C-17
V.C-11	Traffic Noise Model Calibration	V.C-18
V.C-12	Calculated Existing Roadway Traffic Noise Levels	V.C-19
V.C-13	Noise Levels Generated by Typical Construction Equipment	V.C-25
V.C-14	Construction Noise Impacts from On-Site Activities	V.C-26
V.C-15	Off-Site Roadway Traffic Noise Impacts—Soundstage Option	V.C-34
V.C-16	Off-Site Roadway Traffic Noise Impacts—Office Studio Option	V.C-34
V.C-17	Construction Vibration Impacts	V.C-44
V.C-18	Cumulative Off-Site Roadway Traffic Noise Impacts—Soundstages within Northern Portion of the Site Option	V.C-47
V.C-19	Cumulative Off-Site Roadway Traffic Noise Impacts—Studio Offices within Northern Portion of the Site Option	V.C-47

Table **Page**

V.E.1-1 Ambient Air Quality Standards V.E.1-3

V.E.1-2 Summary of Ambient Air Quality In the Project Vicinity V.E.1-18

V.E.1-3 Unmitigated Project—Estimate of Construction Emissions (Pounds per Day) V.E.1-37

V.E.1-4 Unmitigated Project—Maximum Ambient Construction Pollutant Impacts at the Closest Sensitive Receptors V.E.1-39

V.E.1-5 Unmitigated Project—Regional Operational Emissions (Pounds per Day) V.E.1-43

V.E.1-6 Unmitigated Project—Localized Operational Emissions (Pounds per Day) V.E.1-44

V.E.1-7 Local Area Carbon Monoxide Dispersion Analysis V.E.1-45

V.E.2-1 Global Warming Potentials V.E.2-3

V.E.2-2 California GHG Inventory (Million Metric Tons CO_2e) V.E.2-4

V.E.2-3 Construction Related Emissions with 2020 Mandates (Metric Tons of CO_2e) V.E.2-32

V.E.2-4 Annual GHG Emissions Summary (Metric Tons of CO_2e) V.E.2-33

V.F-1 Existing Plant Communities V.F-16

V.F-2 Tree Assessment Summary V.F-42

V.F-3 Temporary and Permanent Impacts to Plant Communities V.F-64

V.G-1 Alterations to Ranch Resources V.G-26

V.J-1 Study Intersection Summary and Existing (2010) Levels of Service V.J-4

V.J-2 Existing Plus Ambient Growth Conditions, Both without and with Soundstage Option (2020) Intersection V/C and Levels of Service V.J-30

V.J-3 Soundstage Option Trip Generation V.J-32

V.J-4 Existing Plus Ambient Growth Conditions, Both without and with Studio Office Option (2020) Intersection V/C and Levels of Service V.J-34

V.J-5 Studio Office Option Trip Generation V.J-36

V.J-6 Caltrans Intersection Analysis—Soundstage and Studio Office Options V.J-39

V.J-7 Caltrans On-Ramp Analysis—Soundstage and Studio Office Options V.J-40

V.J-8 Caltrans Off-Ramp Analysis—Soundstage and Studio Office Options V.J-41

Table **Page**

V.J-9 CMP Intersection Analysis (Soundstage and Studio Office Options).....V.J-43

V.J-10 Future Conditions, Both without and with Soundstage Option (2020) Freeway Segment Levels of Service V.J-44

V.J-11 Future Conditions, Both without and with Studio Office Option (2020) Freeway Segment Levels of Service V.J-46

V.J-12 Soundstage Option Parking Code and Demand Requirements.....V.J-52

V.J-13 Studio Office Option Parking Code and Demand Requirements V.J-53

V.J-14 Existing Plus Ambient Growth Plus Project with Mitigation Plus Related Projects Conditions (Soundstage Option, 2020) Intersection Peak-Hour Levels of Service V.J-57

V.J-15 Existing Plus Ambient Growth Plus Project with Mitigation Plus Related Projects Conditions (Studio Office Option, 2020) Intersection Peak-Hour Levels of Service.....V.J-58

V.J-16 Existing Plus Ambient Growth Plus Project with Mitigation Conditions (Soundstage Option, 2020) Intersection Levels of Service V.J-64

V.J-17 Existing Plus Ambient Growth Plus Project with Mitigation Conditions (Studio Office Option, 2020) Intersection Levels of Service.....V.J-66

V.J-18 Existing Plus Ambient Growth Plus Project with Mitigation Conditions, with Related Projects (Soundstage and Studio Office Options, 2020) Access Analysis.....V.J-68

V.J-19 Existing Plus Ambient Growth Plus Project with Mitigation Plus Related Projects, with Cumulative Mitigation (Soundstage Option, 2020) Intersection Peak-Hour Levels of Service.....V.J-70

V.J-20 Existing Plus Ambient Growth Plus Project with Mitigation Plus Related Projects, with Cumulative Mitigation (Studio Office Option, 2020) Intersection Peak-Hour Levels of Service.....V.J-73

V.K.2-1 Existing and Proposed County Fire Department Stations Located In the Project Vicinity V.K.2-4

V.K.2-2 Fire and Paramedic Response Data for 2009..... V.K.2-5

V.L.1-1 Long-Term Water Available to CLWA for Average/Normal Years (2006 Reliability Report) V.L.1-8

V.L.1-2 Water Available to CLWA for Single- and Multiple-Dry Years (2006 Reliability Report) V.L.1-8

Table **Page**

V.L.1-3 Long-Term Water Available to CLWA for Average/Normal Years (2009 Draft Reliability Report) V.L.1-10

V.L.1-4 Water Available to CLWA for Single- and Multiple-Dry Years (2009 Draft Reliability Report) V.L.1-10

V.L.1-5 SWP Table A Supply Reliability (af) V.L.1-11

V.L.1-6 Historical Water Use for Newhall County Water District (Acre-Feet) (SCVWR, 2008) V.L.1-16

V.L.1-7 Past, Current, and Projected Water Demands (By Customer Type) Newhall County Water District V.L.1-18

V.L.1-8 CWLA Total Water Supply Vs. Estimated Demand (af) V.L.1-19

V.L.2-1 Project Wastewater Generation (Studio Office Option) V.L.2-13

V.L.3-1 Solid Waste Disposal and Estimated Remaining Capacity for Los Angeles County Landfills V.L.3-4

V.L.3-2 Solid Waste Disposal and Estimated Remaining Capacity for Out-Of-County Landfills V.L.3-7

V.L.3-3 Estimated Construction and Demolition Waste Generation V.L.3-17

V.L.3-4 Project Solid Waste Disposal V.L.3-19

V.L.3-5 Related Projects—Estimated Solid Waste Generation V.L.3-22

V.L.4-1 Estimated Project Electricity Usage (Soundstage Option) V.L.4-15

V.L.4-2 Estimated Project Natural Gas Usage (Soundstage Option) V.L.4-16

V.L.4-3 Related Projects' Electricity Usage V.L.4-20

V.L.4-4 Related Projects' Natural Gas Usage V.L.4-21

V.M-1 Hazardous Materials and Fire Hazards Regulatory Setting V.M-2

V.N-1 Project Consistency with the Los Angeles County General Plan V.N-37

V.N-2 Project Consistency with the 1990 Santa Clarita Valley Area Plan V.N-55

V.N-3 Project Consistency with SCAG RTP and Compass Growth Vision V.N-67

VI-1 Comparison of Land Uses Under the Alternatives VI-4

VI-2 Comparison of Impacts Associated with the Proposed Project and Impacts of the Alternatives VI-9

VI-3 Trip Generation of Project Alternatives (Year 2020) VI-21

I. Introduction

I. INTRODUCTION

A. PURPOSE OF THIS ENVIRONMENTAL IMPACT REPORT

The purpose of an environmental impact report (EIR) is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant impacts can be mitigated or avoided (California Public Resources Code [PRC] Section 21002.1). A detailed description of the proposed Disney | ABC Studios at the Ranch (Project) is provided in Section IV, Project Description, of this Draft EIR.

The Project requires approval of certain discretionary actions by the County of Los Angeles (County) and other governmental agencies. Therefore, in accordance with PRC Section 21080, the Project is subject to environmental review requirements under the California Environmental Quality Act (CEQA). For purposes of complying with CEQA, the County is identified as the Lead Agency for the Project.

In accordance with Section 15121(a) of the State CEQA Guidelines, this EIR is an informational document that will inform public agency decision makers and the public of: (1) the significant environmental effects of the Project; (2) identify possible ways to minimize the significant effects; and (3) describe reasonable alternatives to the Project. Thus, the EIR is an important document that is ultimately used by decision makers when considering whether or not to approve, deny, or modify a proposed project.

This Draft EIR has been prepared in conformance with CEQA (PRC Section 21000, et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations [CCR] Section 15000, et seq.). Section 15151 of the State CEQA Guidelines defines the standards for EIR adequacy as follows:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR*

inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

This Draft EIR is intended to serve as a Project EIR under CEQA. Section 15161 of the State CEQA Guidelines states that a Project EIR should focus primarily on changes in the environment that would result from the development project. In addition, a Project EIR must examine all phases of a project including planning, construction and operation. This Project EIR is intended to provide the environmental information necessary for the County to make a final decision on the requested entitlements for this Project. This Draft EIR is also intended to support necessary approvals by other agencies.

B. ENVIRONMENTAL REVIEW PROCESS

In accordance with the requirements of CEQA, the County prepared an Initial Study dated January 4, 2010, that identified the topics to be analyzed in the EIR. The Initial Study is contained in Appendix A of this Draft EIR.

Based on the review of environmental issues by the County, this Draft EIR analyzes the following environmental topics:

- Geotechnical Hazards
- Flood Hazards
- Noise
- Water Quality
- Air Quality
- Global Climate Change
- Biological Resources
- Cultural and Paleontological Resources
- Agricultural/Forestry Resources
- Visual Qualities
- Traffic, Access, and Parking

- Public Services
  - Law Enforcement
  - Fire Protection
- Utilities and Service Systems
  - Water Supply
  - Wastewater/Sewage Disposal
  - Solid Waste
  - Energy
- Environmental Safety/Fire Hazards
- Land Use

The County determined through the Initial Study the Project would not have the potential to cause significant impacts related to Mineral Resources, Education/Parks/ Libraries, and Population/Housing/Employment/Recreation. Therefore, these issues are not analyzed in this Draft EIR. The Initial Study, demonstrating no significant impacts would occur for these issue areas, is included in Appendix A and is summarized in Section VII, Other Environmental Considerations, of this Draft EIR. Issues relating to change of character and growth-inducing impacts are also discussed in Section VII of this Draft EIR.

In compliance with the State CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was prepared and distributed on January 7, 2010, to the State Clearinghouse, various public agencies, and other interested parties for the required 30-day review and comment period. Additionally, a Scoping Meeting was held on January 21, 2010, at the William S. Hart Regional Park to facilitate public review and comment on the Project. The NOP (including the Initial Study), NOP comments received by the County, and Scoping Meeting comments are contained in Appendix A of this Draft EIR.

This Draft EIR was prepared under the direction and supervision of the Los Angeles County Department of Regional Planning (LACDRP), Impact Analysis Section. This Draft EIR has been subjected to a 30-day County internal department review, prior to the required 45-day public review and comment period as mandated by CEQA (State CEQA Guidelines Section 15105). During the public review period, written comments concerning the adequacy of the document may be submitted by interested public agencies and

members of the public to the County of Los Angeles, Department of Regional Planning, 320 West Temple Street, Los Angeles, California 90012; Attention: Christina Tran.

Public hearings will be held before the Los Angeles County Hearing Examiner, Regional Planning Commission, and Board of Supervisors. The Hearing Examiner will conduct a public hearing to take testimony on the Draft EIR during the public review and comment period. After the public review and comment period, written responses to all written comments and oral testimony pertaining to environmental issues will be prepared as part of the Final EIR. As required by CEQA, responses to comments submitted by responsible public agencies will be distributed to those agencies for review prior to consideration of the Final EIR by the Regional Planning Commission. Upon completion of the Final EIR and other required documentation, the Regional Planning Commission may certify the EIR, adopt findings relative to the Project's environmental effects after implementation of mitigation measures, and approve or deny the Vesting Tentative Tract Map, Conditional Use Permit, Oak Tree Permit, and Parking Permit, and make a recommendation to the Board of Supervisors regarding the Zone Change and Plan Amendment. The Board of Supervisors will complete the public hearing process by adopting or rejecting the EIR and all Project entitlements.

C. ORGANIZATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

The Draft EIR is comprised of the following sections:

I. **Introduction.** This section briefly discusses the purpose of the EIR, identifies the environmental issues assessed in the EIR, and describes the environmental review process and organization of the EIR.

II. **Executive Summary.** This section provides a summary of the Project Description, Alternatives to the Project, environmental impacts and mitigation measures.

III. **Environmental Setting.** This section provides an overview of the Project site and surrounding area, including a description of the existing physical and built environment and a list of related projects considered in the cumulative impact analysis.

IV. **Project Description.** This section provides a detailed description of the Project, including Project location, Project characteristics, Project objectives, and required discretionary actions.

V. **Environmental Impact Analysis.** This section presents the environmental setting, Project and cumulative impact analyses, mitigation measures, and

conclusions regarding the level of significance after mitigation for each environmental impact issue.

VI. Project Alternatives. This section provides an analysis of a range of reasonable alternatives to the Project.

VII. Other Environmental Considerations. This section provides a discussion of significant unavoidable impacts that would result from the Project and the reasons why the Project is being proposed notwithstanding the significant unavoidable impacts. An analysis of the significant irreversible changes in the environment and potential secondary effects that would result from the Project also is presented. In addition, this section analyzes the Project's potential growth-inducing impacts, which could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Furthermore, discussion is provided regarding change of character impacts, which include changes in land use pattern, scale, or character, or reduction of agricultural land. Potential secondary effects caused by the implementation of the Project's mitigation measures are also addressed. Finally, a discussion of possible effects of the Project that were determined not to be significant within the Initial Study is provided.

VIII. List of Preparers. This section lists the persons that contributed to the preparation of this Draft EIR.

IX. References. This section lists all the references and sources used in the preparation of the Draft EIR.

X. Acronyms and Abbreviations. This section provides a list of acronyms and abbreviations used in the Draft EIR.

This Draft EIR is presented in nine volumes as follows: Volume I—Sections I through V.H; Volume II—Sections V.I through X; Volume III—Appendices A through B.2; Volume IV—Appendix C (Part 1); Volume V—Appendix C (Part 2); Volume VI—Appendices D through F.11; Volume VII—Appendices G.1 through H.2; Volume VIII—Appendix I; and Volume IX—Appendices J.1 through M.

II. Executive Summary

II. EXECUTIVE SUMMARY

A. INTRODUCTION

This Executive Summary is intended to provide the reader with a clear and simple description of the Project and its potential environmental impacts. State CEQA Guidelines Section 15123 requires that the summary identify: "1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; 2) areas of controversy known to the Lead Agency including issues raised by agencies and the public; and 3) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." This summary focuses on the major areas of the Project that are important to decision makers.

B. PROJECT SUMMARY

Golden Oak Ranch (Ranch) comprises approximately 890 acres in the unincorporated Santa Clarita Valley area of the County.[1] The Ranch is located immediately east of State Route 14 (SR-14). Placerita Canyon Road, a secondary highway, runs through the southern portion of the Ranch in an east-west direction.

The Project would provide for the development of a state-of-the-art motion picture and television studio within the westernmost portion of the Ranch, referred to as the Development Area. The Development Area is comprised of approximately 58 acres, a substantial portion of which is located on two large, mostly barren fill pads next to SR-14. Additional Project elements are proposed within areas referred to herein as the Water Tank Area, the Trail Area, the Potential Mobile Home Relocation Areas, and the Conditional

[1] *The western portion of the 890-acre Ranch includes an approximately 30-acre, 330-foot strip of land that traverses the Ranch in a generally northwest to southeast direction and is owned by the City of Los Angeles Department of Water and Power (referred to as the LADWP transmission corridor). The southwest corner of the Ranch also includes two smaller LADWP transmission corridors totaling approximately four acres and used for transmission purposes. The Applicant holds an easement from LADWP to access and use the land within the LADWP transmission corridor.*

Parking Areas, all located within the Ranch, and the Off-Site Infrastructure Improvement Areas. The Off-Site Infrastructure Improvement Areas include areas outside the Ranch where water and sewer infrastructure, the replacement of several existing power poles, and reconfiguration of several roadway intersections are proposed. Collectively, the Development Area and these other areas comprise the Project site.[2]

Specifically, the Project would develop up to 12 soundstages, production offices, six mills, a warehouse, writers/producers bungalows, a commissary, an administration building, a central utility plant, and an electrical substation within the Development Area.[3] This development scenario is referred to herein as the Soundstage Option. The Project also includes an option to develop studio office uses in lieu of four soundstages, two mills, and production offices within the northern portion of the Development Area. This alternative scenario is referred to as the Studio Office Option. With implementation of the Project, approximately 195 acres of the Ranch would continue to be used for outdoor filming/movie ranch uses with some intermittent agricultural uses. Approximately 637 acres of the Ranch would continue to be used primarily as a filming backdrop with some intermittent agricultural and oil production uses. The proposed studio uses and continued filming activities could operate 24 hours per day, as under existing conditions. The number of employees associated with the Project would vary based on filming schedules and demand, with up to 1,240 persons associated with Development Area activities potentially present each day, for a total of up to 1,840 persons potentially present on the Ranch on a daily basis.

Under the Soundstage Option, the southern portion of the Development Area (south of Placerita Creek and west of the transmission line corridor) would contain eight soundstages, four mills, and four production offices in the center of the development; writers/producers bungalows and a commissary/amenity building to the north of the soundstages; and a warehouse and a central utility plant along the southern boundary of the Development Area near Placerita Canyon Road. Four additional soundstages, two mills, two production offices, and an electrical substation would be developed in the northern portion of the Development Area, located north of Placerita Creek. These areas would be connected via a 220-foot long bridge that would span Placerita Creek, and an

---

[2] *Refer to Figures IV-4 and IV-5 in Section IV, Project Description, for a depiction of each of the Project site areas within the Ranch and outside of the Ranch, respectively.*

[3] *The 58-acre Development Area includes approximately 12 acres that are owned by LADWP and traverse the easternmost portion of the Development Area. This area would be graded and used for surface parking as part of the Project.*

access road at the westernmost portion of the Development Area adjacent to SR-14. Buildout of the Soundstage Option would result in a total of approximately 555,950 gross square feet of building area, plus approximately 66,300 square feet of ancillary facilities.

Under the Studio Office Option, development in the southern portion of the Development Area would involve the same uses, floor area, and layout as under the Soundstage Option. Also similar to the Soundstage Option, the Studio Office Option would include an electrical substation in the northernmost portion of the Development Area. However, in lieu of four soundstages, two mills, and associated production offices in the northern portion of the Development Area, the Studio Office Option would involve the development of studio office uses in one office building north of Placerita Creek. Buildout of the Studio Office Option would result in a total of approximately 510,000 gross square feet of building area, plus approximately 66,300 square feet of ancillary facilities.

The proposed buildings within the Development Area would be designed to reflect the existing agrarian and rustic character of the Ranch. Building heights would range from approximately 20 to 60 feet in height, with the soundstages being the tallest features.[4] The buildings located within the western portion of the Development Area would be screened from Placerita Canyon Road and SR-14 by a vegetation barrier heavily planted with trees and shrubs. Along Placerita Canyon Road, much of the existing landscaped area that includes mature native trees, including mature oak trees, would provide additional screening of the Project buildings. The Project would require an Oak Tree Permit for the removal of 158 oak trees, including 16 heritage oak trees, and encroachment on 82 other oak trees, including 3 heritage oak trees. The Project includes a comprehensive oak tree and woodland mitigation program that would involve the planting of at least 1,600 oak trees (with the guaranteed survival of 1,144 oak trees through the seven-year monitoring period) of a variety of sizes within areas of the Ranch east of the Development Area.

Primary access to the Ranch is along Placerita Canyon Road. Unpaved private roads provide internal circulation within the Ranch. To improve access to the Ranch and the Development Area, the Applicant proposes to reconfigure and signalize the SR-14 northbound off-ramp at Placerita Canyon Road. The reconfiguration would allow for northbound vehicles exiting SR-14 to cross Placerita Canyon Road and directly enter the Development Area via the Ranch's new main entry driveway. Although the current Ranch

---

[4] *Per Los Angeles County Code Section 22.08.080 H, building height is defined as the plumb line distance from the point being measured to the grade.*

main entrance (i.e., the existing driveway further to the east) would continue to be used, primary ingress to the Development Area would be provided via the new entry across from the SR-14 northbound off-ramp. If the proposed off-ramp improvements are not approved by Caltrans, the Project traffic ingress would be restricted to the current Ranch main entrance on Placerita Canyon Road. In addition, the Ranch's existing gated entrance on Placerita Canyon Road, located west of the current Ranch main entrance, would continue to be restricted for emergency access. The Project would also include roadway improvements at the following intersections: Sierra Highway/SR-14 Southbound Ramps; Sierra Highway/Placerita Canyon Road; and the current Ranch main entrance/Placerita Canyon Road. As part of improvements at the latter intersection, a retaining wall ranging in height from 4 to 18 feet would be located along the south side of Placerita Canyon Road across from the current Ranch main entrance to shore up an existing steep hill.

Also as part of the Project, the Applicant would dedicate a variable-width, 12- to 20-foot-wide easement for a proposed trail, referred to as the Placerita Canyon Connector Trail, which would be constructed as a public, multi-use trail for hiking, mountain-biking, and equestrian use and would connect to existing trails within Angeles National Forest.[5] The trail would extend from the SR-14 northbound off-ramp adjacent to Placerita Canyon Road to southeast of the Water Tank Area at the Ranch's southern property line. Short segments of the trail would remain unimproved in order to avoid grading beneath any oak tree canopies, and a segment would follow a portion of the water tank access road. The Placerita Canyon Connector Trail would also include a trailhead/staging area near the existing access road to the Water Tank Area, which would consist of an approximately 19,000 square foot dirt or gravel surface with un-striped parking for up to four vehicles and horse trailers, a kiosk for way-finding, regulatory and directional signage, horse ties, an entry gate, and potentially lodge pole fencing where needed. As the trail would be for daytime use, no lighting would be provided at the trailhead or along the trail. Additionally, no waste bins would be provided as all trail users would be expected to pack out any trash.

The Project would provide at least 1,228 parking spaces within the Development Area (with up to 260 spaces in the northern pad area including 88 tandem spaces, up to 507 spaces in the southern pad area, and up to 569 spaces within the parking lots located in the City of Los Angeles Department of Water and Power [LADWP] transmission corridor) under the Soundstage Option, and at least 1,162 parking spaces within the Development

[5] *The trail would replace a County proposed Placerita Creek Connector Trail, which is designated within the Santa Clarita Valley Area Plan's Trails Plan as well as the new draft Conservation and Open Space Element and aligned along Placerita Creek.*

Area (with up to 460 spaces in the northern pad area, up to 507 spaces in the southern pad area, and up to 569 spaces within the parking lots located in the LADWP transmission corridor) under the Studio Office Option. If LADWP were to revoke the parking license agreement for the parking lots within the LADWP transmission corridor, one or two conditional surface lots located on the Ranch east of the Development Area would be constructed and used. The northern Conditional Parking Area could provide 295 parking spaces, and the southern Conditional Parking Area could provide 482 parking spaces.

New water infrastructure would be constructed to connect the Development Area with the nearest Newhall County Water District (NCWD) delivery system. Sanitary sewer service for the Development Area would be provided by connecting a proposed on-site wastewater system to the City of Santa Clarita's existing local wastewater collection system through the construction of a new sewer main. Other off-site improvements include the replacement of an estimated nine existing overhead distribution poles along public road rights-of-way on Sierra Highway and possibly Placerita Canyon Road by Southern California Edison (SCE) in order to connect to the proposed electrical substation. The Project's storm drain system would be designed to flow to Placerita Creek, as under existing conditions, and sized to ensure post-development peak flow rates would not exceed pre-development peak flow rates so as to prevent off-site downstream flooding caused by the Project. Following disturbance of portions of Placerita Creek during Project construction, the reconstructed creek slopes would be stabilized with soil cement which would be buried to allow surface revegetation, and a permanent, paved 15-foot-wide access road to be used by the County for maintenance purposes would be introduced at the top of the slope stabilization, with the slopes vegetated with native vegetation.

To accommodate Project construction, the uninhabited structure located within the Development Area would be removed, and the Ranch foreman's mobile home would be relocated to one of two potential sites on the Ranch east of the Development Area. The existing private septic system that serves the mobile home would be removed and a new septic system would be installed near the new mobile home location.

To accommodate the Project, the entire Development Area would be cleared and mass graded at one time. The Project is anticipated to involve approximately 700,000 cubic yards of cut and 350,000 cubic yards of fill within the Ranch, with approximately 350,000 cubic yards of soil export.[6] Development of the Off-Site

[6] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated in relevant sections of the Draft EIR.*

Infrastructure Improvements would involve an estimated 15,000 to 20,000 cubic yards of cut, approximately 10,000 to 12,000 cubic yards of fill, and as much as 5,000 to 8,000 cubic yards of export. In addition, the traffic infrastructure improvements within the Caltrans right-of-way around the SR-14/Placerita Canyon Road on-ramps and off-ramps would require an estimated 11,500 to 14,000 cubic yards of cut, approximately 1,500 to 2,000 cubic yards of fill, and as much as 10,000 to 12,000 cubic yards of export. The disposal site(s) for the excess soil would depend on which sites are accepting fill dirt at the time of export. Landfills in Lancaster or Sun Valley would be used, thus requiring travel from the Development Area along Placerita Canyon Road to SR-14 north or south, respectively.

C. AREAS OF CONTROVERSY

Section 15123(b)(2) of the State CEQA Guidelines indicates that an EIR summary should identify areas of controversy known to the lead agency including issues raised by agencies and the public. This EIR has taken into consideration the comments received from the public and various agencies in response to the Notice of Preparation (NOP) and during the public scoping meeting held on January 21, 2010. Written comments received during the NOP and scoping period are provided in Appendix A. Based on the scoping process, potential areas of controversy known to the County included special status species, biological resources, law enforcement, water resources, fire protection, cultural resources, geology, traffic, access, and lighting/safety.

D. ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain a discussion of issues to be resolved. With respect to the Project, the key issues to be resolved include whether the Project would have significant impacts, and, if so, how to mitigate potentially significant environmental impacts from the Project, and whether one of the alternatives should be approved rather than the Project.

E. SUMMARY OF PROJECT ALTERNATIVES

In accordance with Section 15126.6 of the CEQA Guidelines, Section VI, Project Alternatives, of this Draft EIR includes an alternatives discussion which evaluates the comparative merits of the Project alternatives. This Draft EIR includes an evaluation of the following alternatives of the Project:

Alternative 1: No Project/No Build

Alternative 1, the No Project/No Build Alternative, assumes no new development would occur on the Development Area. Thus, the physical conditions of the Development Area would remain as they are today. No new buildings would be constructed and no existing buildings would be removed. The existing uses within the Development Area and the remainder of the Ranch would continue to function as they do currently.

Alternative 2: Development in Accordance with Existing Plans

Alternative 2, the Development in Accordance with Existing Plans Alternative, would develop uses consistent with existing land use designations and zoning of the Development Area. Under this scenario, Alternative 2 would include approximately 34 single-family dwelling units spread throughout approximately 34 acres of the approximately 58-acre Development Area. As part of this Alternative, the existing vacant structure within the Development Area would be removed, and the Ranch foreman's mobile home would be relocated within the Ranch, similar to the Project. On- and off-site infrastructure improvements, including a water tank, would also be required.

Alternative 3: Reduced Program

The Reduced Program Alternative includes the Project's proposed uses, but reduces the quantity and footprint of development that would occur to approximately 23.6 acres of the Development Area. Alternative 3 would accommodate only six soundstages or approximately half the number of soundstages and associated production facilities that would be accommodated by the Project. The existing vacant structure within the Development Area would not need to be removed, as it is located in the area to remain undeveloped; however, the Ranch foreman's mobile home would be relocated within the Ranch, similar to the Project. In addition, a new electrical substation would be developed within an approximate two-acre area north of the fill pads, and on- and off-site infrastructure improvements would be required, similar to the Project, including a water tank on the Ranch south of Placerita Canyon Road.

Alternative 4: Alternative Design With Reduced Program

Alternative 4 was developed to reduce the number of oak trees removed within the Development Area. Specifically, this Alternative would expand the Project beyond the Development Area to include additional areas of the Ranch to the east to accommodate most of the proposed program uses, while reducing the number of oak trees removed. Approximately six soundstages and associated production facilities would be accommodated within the existing fill pad areas under this Alternative, and four additional

soundstages and associated production facilities could be accommodated within new development pads elsewhere on the Ranch in areas that do not contain a substantial number of oak trees and do not consist of steep slopes. On- and off-site infrastructure improvements would be required, similar to the Project.

Section VI, Project Alternatives, of this Draft EIR provides descriptions and analyses of each Project alternative to allow the decision makers to determine whether an alternative should be adopted in lieu of the Project. In addition, this section identifies the environmentally superior alternative as required by CEQA. An Alternative Site Alternative and other Project configurations were considered but eliminated from further consideration, as discussed further in Section VI.

F. SUMMARY OF ENVIRONMENTAL IMPACTS, PROJECT DESIGN FEATURES, AND MITIGATION MEASURES

Table II-1 on page II-9 summarizes the potential environmental effects of the Project, the proposed Project Design Features (PDFs) and recommended mitigation measures (MMs), and the level of significance after mitigation. Implementation of the PDFs and MMs, as detailed in each environmental analysis section presented in this EIR, would reduce most of the potentially significant impacts to a less than significant level. However, even with implementation of the PDFs and MMs, the Project would result in the following significant and unavoidable impacts:

- Noise: Construction activities associated with the Off-Site Infrastructure Improvement Areas would result in significant and unavoidable impacts. Short-term cumulative construction noise impacts associated with construction of the Off-Site Infrastructure Improvement Areas would also remain significant and unavoidable. Cumulative off-site operational traffic noise would also result in a significant and unavoidable impact for the existing residential homes along Placerita Canyon Road (west of Sierra Highway).

- Air Resources–Air Quality: Construction activities would result in significant and unavoidable impacts related to the exceedance of regional emissions thresholds for nitrogen oxides (NO_X) and volatile organic compounds (VOCs). Cumulative construction activities would also result in significant and unavoidable impacts related to the exceedance of NO_X and VOC regional emissions thresholds.

- Traffic, Access, and Parking: Cumulative construction traffic impacts would be significant and unavoidable to the extent that haul trips associated with the Project coincide with those of the Kellstrom Project (Related Project No. 3).

Table II-1
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
A. GEOTECHNICAL HAZARDS		
Surface Fault Rupture		
No lineaments suggestive of surficial faulting were identified as passing through the Project site. The Whitney fault, which crosses through the Development Area, and the San Gabriel fault, which is located approximately 0.75 mile north of the Project site, are regarded as potentially active faults. The presence of the Whitney fault represents some potential for surface fault rupture, which could result in a potentially significant impact. With implementation of MM A-1 through MM A-3, potential impacts regarding fault rupture would be reduced to a less than significant level.	**MM A-1:** Prior to the issuance of a grading permit(s), the Applicant shall submit to the County of Los Angeles Department of Public Works for review and approval a final Geotechnical Investigation Report based on final Project designs prepared by a registered civil engineer and certified engineering geologist, in compliance with the County's codes and policies, including GS051.0 and GS063.0 of the County of Los Angeles Department of Public Works Manual for Preparation of Geotechnical Reports, and consistent with the Preliminary Geotechnical Investigation Reports contained in Appendices B.1 and B.2 of the Draft EIR. **MM A-2:** Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the Uniform Building Code as adopted by the County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the final Geotechnical Investigation Report. **MM A-3:** Prior to issuance of a grading permit, the Applicant shall submit a grading plan to the Soils Section of the County of Los Angeles Department of Public Works for verification of	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	compliance with County codes and policies.	
Seismic Groundshaking		
The strongest groundshaking in the Project site would likely result from an earthquake on the nearby San Gabriel fault. Thus, potential impacts associated with seismic groundshaking could be significant. Off-site impacts with respect to seismic groundshaking would generally be the same as on-site impacts. With implementation of MM A-1 through MM A-3, potential impacts associated with seismic groundshaking would be reduced to a less than significant level.	Refer to **MM A-1 through MM A-3** above.	Less Than Significant with Mitigation
Liquefaction		
Much of the Project site falls within a potential liquefaction hazard zone. Thus, the potential exists for liquefaction to occur in the Project site and could represent a potentially significant impact. However, the majority of the proposed structures would be supported on pile foundations or reinforced with seismic-tolerant connections in order to reduce impacts for potential seismic-settlement hazards due to liquefaction. Design features, such as soil improvement through overexcavation and recompaction of susceptible soils, would also be implemented as part of the Project. Off-site impacts with respect to liquefaction would generally be the same as on-site impacts. With implementation of MM A-1 through MM A-3, impacts would be reduced to a less than significant level.	Refer to **MM A-1 through MM A-3** above.	Less Than Significant with Mitigation
Landslides		
With the exception of relatively steep slopes within the northern portion of the Development Area, Water Tank Area, and the Trail Area, the natural slopes within much of the area proposed for new development within the Project site are relatively flat, and no evidence of pre-existing slope instability was encountered. Furthermore, the Seismic Hazards Zone Maps indicate the Project site does not lie within an area designated as prone to future earthquake-induced landslides or in an area of previous landslide occurrence. Off-site impacts with respect to landslides would	Refer to **MM A-1 through MM A-3** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
generally be the same as on-site impacts. With implementation of MM A-1 through MM A-3, impacts would be reduced to a less than significant level.		
Lateral Spreading		
Portions of the Development Area have slopes associated with the fill pads and Placerita Creek, which may be underlain by liquefiable soils and, as such, the potential for lateral spreading exists, resulting in a potentially significant impact. Off-site impacts with respect to lateral spreading would generally be the same as on-site impacts. With implementation of MM A-1 through MM A-3, impacts would be reduced to a less than significant level.	Refer to **MM A-1 through MM A-3** above.	Less Than Significant with Mitigation
Subsidence		
Significant quantities of water or petroleum are not being and have not been historically extracted beneath the Development Area and the remainder of the Ranch. With compliance with regulatory requirements and recommendations set forth in the Geotechnical Reports, subsidence is not anticipated to pose a significant hazard to the Project, and impacts due to subsidence would be less than significant. Off-site impacts with respect to subsidence would generally be the same as on-site impacts.	No mitigation is proposed or required; refer to **MM A-1 through MM A-3** above.	Less Than Significant
Sedimentation and Erosion		
Potentially significant impacts related to sedimentation and erosion could occur as a result of exposed soils during Project construction and from vegetated areas during Project operations. However, construction activities would occur in accordance with erosion control requirements imposed by the County pursuant to grading permit regulations and in accordance with National Pollutant Discharge Elimination System (NPDES) permit requirements, including impmentation of a Storm Water Pollution Prevention Plan (SWPPP), and the Project would have a Standard Urban Stormwater Mitigation Plan (SUSMP) in place during the operational life of the Project. Off-site impacts with respect to erosion and sedimentation would be generally the same as the on-site impacts. Construction-related and operational impacts would be less than	**PDF A-1:** During construction and operation of the Project, appropriate erosion control and drainage devices shall be implemented as specified in the Project's Stormwater Pollution Prevention Plan and Standard Urban Stormwater Mitigation Plan. **PDF A-2:** Excavation and grading activities shall be scheduled during dry weather periods to the extent feasible. If grading occurs during the rainy season (October 15 through April 1), diversion dikes and channels shall be	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
significant. In addition, the Project's increases in streambed elevation from hydromodification to Placerita Creek would not impact the creek's capacity, as all runoff would be contained within the natural channel. Accordingly, Project operations would not have a significant impact with respect to downstream sedimentation.	constructed to channel runoff around the site. Channels shall be lined with grass, jute mesh or berms to reduce runoff velocity. **PDF A-3:** Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use. No mitigation is proposed or required.	
Expansive Soils and Differential Seismic-Settlement		
There is some possibility that expansive clayey soils are located within Placerita Creek and its floodplain. However, where detrimental expansive clayey soils are encountered within the Project site, overexcavation to a level below the bottom of the proposed building footings and recompaction as engineered fill would be performed. Off-site impacts with respect to expansive soils and differential settlement would be generally the same as the on-site impacts. With implementation of MM A-1 through MM A-3, impacts would be reduced to a less than significant level.	Refer to **MM A-1 through MM A-3** above.	Less Than Significant with Mitigation
Soils and On-Site Wastewater Treatment Systems		
The Project would remove the existing septic tank that services the Ranch foreman's mobile home and relocate the mobile home and install a new septic tank at one of two potential sites (i.e., one of the Potential Mobile Home Relocation Areas). Upon compliance with Los Angeles County Department of Public Health Environmental Protection Bureau conditions, as required by MMs D-1 and D-2 provided in Section V.D, Water Quality, the new septic system would be installed in accordance with conditions that ensure the system would be adequately supported by soils. The off-site wastewater improvements would not include septic tanks or alternative wastewater disposal systems. Therefore, impacts would be less than significant.	Refer to **MM D-1 and MM D-2** below.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Hillside Management and Slope Alteration		
Some of the Project's earthwork activities would occur within areas designated as Hillside Management (HM) that have slopes of 25 percent or greater. All earthwork activities associated with the grading and export of soil would occur in accordance with County requirements. The majority of the Off-Site Infrastructure Improvement Areas is located in the City of Santa Clarita, and therefore are not subject to the County's Hillside Management Area ordinance. Any off-site improvements occurring within the County's jurisdiction (e.g., potential replacement power poles and roadway intersection improvements along Placerita Canyon Road) would comply with the Hillside Management Area Ordinance, as applicable. Construction-related impacts would be less than significant.	No mitigation is proposed or required.	Less Than Significant
B. FLOOD HAZARDS		
Hydrology and Drainage		
Construction		
Project grading activities would alter the topography of the on-site areas and may have the potential to cause short-term erosion. Construction of the Off-Site Infrastructure Improvement Areas would occur on mostly flat, previously disturbed areas and activities would progress quickly, thus the topography of these areas would not be altered nor would short-term erosion result. Nonetheless, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented, along with various best management practices (BMPs) some of which are detailed in PDF B-3, to provide for temporary storm water management. Additionally, steps would be taken during construction to stabilize the slopes within Placerita Creek. Further, the proposed drainage system would be designed so as to maintain historic drainage patterns and peak flow rates. The LACDPW has reviewed and approved the initial Drainage Concept/LID Plan/SUSMP Plan for the Project and will review the final Hydrology and Hydaulic Study based on the final Project design in compliance with County codes and	**PDF B-3**: In compliance with County of Los Angeles Department of Public Works requirements, a variety of construction and operational best management practices shall be specified in the Project's Stormwater Pollution Prevention Plan and Standard Urban Stormwater Mitigation Plan and implemented to allow infiltration and treat stormwater runoff, including the following: • Cut and fill slopes shall be constructed no steeper than 1:2 (vertical:horizontal) unless steeper slopes are approved at specific locations by the County of Los Angeles Department of Public Works. All slopes shall be stabilized in accordance with Los Angeles	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
LACDPW policies. Therefore, construction-related impacts would be less than significant. Nonetheless, MM B-1 and MM B-2 are proposed to ensure that impacts remain less than significant.	County Standard Erosion Control Policy. • Design pollution prevention best management practices, such as concentrated flow conveyance systems, protection/velocity dissipation devices, and slope surface protection, shall be employed. • New slopes shall be treated with erosion control materials such as native grasses, jute mesh, and soil stabilizers upon completion of grading. • Retaining walls shall be incorporated into the Project's design to reduce the steepness of slopes and/or to shorten slopes. • Existing slopes shall be disturbed only when necessary. • Cut and fill areas shall be minimized to reduce slope lengths. • Benches or terraces shall be provided on high cut and fill slopes to reduce the concentration of flows. • Slopes shall be rounded and shaped to reduce concentrated flows. • Hard surfaces (slope paving) shall be constructed beneath the proposed permanent single-span bridge as a slope stabilization feature; buried soil cement shall be used along the creek banks to allow revegetation of the stabilized slopes. The bridge shall be designed to limit work within flowing streams and minimize construction impacts to surface waters. The proposed bridge shall span	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	Placerita Creek, with no bridge footings or other permanent impermeable surfaces within areas of the creek subject to the jurisdiction of the U.S. Army Corps of Engineers. • The Project shall contain two drainage line outlets with headwalls or flared-end sections with rock slope protection, as required by the County of Los Angeles Department of Public Works. These devices generally shall be located along the Placerita Creek embankments to maintain historic drainage patterns. The final number of outlets and proposed improvements (e.g., headwalls or flared-end sections with rock slope protection) shall be determined in the final Hydrology and Hydraulics Study approved by the County of Los Angeles Department of Public Works for the final Project design. • Downspout Connection—The proposed building downspouts shall direct stormwater to the streets and storm drain system, which shall discharge into the on-site detention basins that would have infiltration capacity (thus reducing stormwater loads during precipitation events). • Vegetated Swales—These engineered densely vegetated depressions shall be implemented where appropriate to retain and filter the first flush of runoff from impervious surfaces such as parking lots or streets. • Riparian Buffers—The existing riparian buffer adjacent to Placerita Creek shall be expanded	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	as part of the Project after stabilization of the fill pad slopes. • Concentrated flow conveyance systems—Other new conveyance systems shall include curb and gutter, a storm drain system, catch basins, manholes, asphalt-lined dikes, detention basin surface ponds, underground detention/infiltration chamber devices, and debris basins. • Routine non-structural source control best management practices shall include the following: – Educational materials for Property Owners, Tenants and Occupants regarding stormwater protection and pollution prevention; – Activity Restrictions; – Spill Contingency Plans; – Employee Training Programs regarding stormwater protection and pollution prevention; – Road Sweeping; and – Catch Basin Inspections. • Routine structural source control best management practices shall include the following: – Landscape Planning and Design; – Roof Runoff Controls; – Efficient Irrigation; – Protection of Slopes and Channels;	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	– Storm Drain Signage; – Inlet Trash Racks; – Energy Dissipators; and – Trash Storage Areas and Litter Control. • Erosion Control—Measures shall be employed to prevent the movement of soil by wind or water during construction and might include watering and erecting physical barriers to the movement of soil particles. Also refer to **PDFs D-1 though D-4** in Section V.D, Water Quality. **MM B-1:** Prior to the issuance of a grading permit, the Applicant shall submit to the County of Los Angeles Department of Public Works for review and approval the final Hydrology and Hydraulic Study based on final Project designs in compliance with the County's codes and policies, including the County of Los Angeles Department of Public Works Hydraulic Design Manual, Sedimentation Manual, Low Impact Development Standards Manual, and consistent with the approved Drainage Concept/LID Plan/ SUSMP Plan contained in Appendix C of the Draft EIR. The final Hydrology and Hydraulic Study shall demonstrate that relevant Project impacts remain less than significant. **MM B-2:** Project design and construction shall comply with applicable County codes and policies and the final Hydrology and Hydraulic Study.	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Operation		
The volume and rate of storm water runoff generated from the Project would be expected to increase due to the increase in imperviousness. However, the proposed on-site drainage system would be designed and sized to ensure that post-development peak flow rates would not exceed pre-development peak flow rates, while maintaining existing drainage patterns, as indicated in PDF B-1 and PDF B-2. Therefore, no significant impacts would result. There would be no change in drainage patterns associated with the Off-Site Infrastructure Improvement Areas since the improvements would be located primarily on previously disturbed areas and would not affect stormwater flows or infiltration of stormwater to groundwater. Therefore, no impacts would result in the Off-Site Infrastructure Improvement Areas. Nonetheless, PDFs are proposed to ensure that impacts remain less than significant.	**PDF B-1**: The Project's storm drain system shall be designed and sized to ensure that post-development peak flow rates will not exceed pre-development peak flow rates to prevent off-site downstream flooding caused by the Project. **PDF B-2**: Flows from on- and off-site drainage systems shall be routed to the same creek outlets so as to minimize the number of outlets and disturbance to the Placerita Creek banks. No mitigation is proposed or required; refer to **MM B-1 and MM B-2** above.	Less Than Significant
Flooding		
Construction		
Project grading within the Development Area would alter the floodplain boundary to ensure all new buildings would be located outside of the 100-year flood zone. The Applicant would obtain a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency (FEMA) for the proposed change to Zone A (the 100-year flood zone), which would be provided to the satisfaction of LACDPW pursuant to a CUP condition of approval and condition of the vesting tentative tract map. Following Project grading, the portion of the floodplain located within the Development Area would be generally contained within Placerita Creek. A portion of the northern Conditional Parking Area would be within the 100-year flood zone, while all but the northernmost tip of the southern Conditional Parking Area would be outside the proposed 100-year flood zone; both lots would be located outside the County floodway, in accordance with LACDPW requirements. A floodway map revision would also be required for proposed alteration to the County adopted floodplain	No mitigation is proposed or required; refer to **MM B-1 and MM B-2** above.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
and floodway. The Potential Mobile Home Relocation Areas, Water Tank Area, and Trail Area would not be located within the current or proposed 100-year flood zone. A portion of the Off-Site Infrastructure Improvement Areas, generally corresponding to Placerita Creek, falls within Flood Zone A. However, due to the temporary nature and timing of the off-site construction activities, it is not anticipated the Project would create a significant flood hazard due to off-site construction activities. Further, Project construction would not subject any adjacent properties to flooding since all floodplain changes would occur within the Ranch, with no effect on downstream floodplain contours. New on-site storm drain facilities would be constructed to support the development and would be in place and functioning as development progresses to serve their respective drainages. Therefore, no significant flood impacts would result during Project construction.		
Operation		
Following Project grading, no structures would be placed within the 100-year floodplain. Therefore, no significant on-site impacts associated with flooding would result from buildout of the Project. With respect to downstream flooding, impacts would be less than significant since the Project's drainage systems for the conveyance of both on- and off-site (i.e., from the Water Tank Area and Trail Area) generated flows would ensure post-development peak flow rates would not exceed pre-development peak flow rates. Additionally, increases in streambed elevation associated with hydromodification to Placerita Creek would not impact the creek's capacity. Therefore, no significant impacts associated with hydromodification or associated downstream flooding would result. There would be no change in drainage patterns associated with the Off-Site Infrastructure Improvement Areas. In the event Alternative B for the off-site water line alignment is implemented, the associated water booster pump would either be placed in a location outside of the limits of FEMA Zone A and the County adopted floodplain, or the finished grade of	No mitigation is proposed or required; refer to **MM B-1 and MM B-2** above.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
that location would be raised to elevate the structure outside of the floodplain. Therefore, no impacts associated with flooding would occur.		
Levee or Dam Failure, Seiche, Tsunami, and Mudlows		
There are no major levees or dams near the Ranch that could expose people or structures to a significant risk of loss associated with flooding due to structure failure. Similarly, the Ranch is not located near any body of water large enough to potentially create seiches during seismic activity, nor is the Pacific Ocean close enough to pose a tsunami risk. With regard to the potential for mudflows, the Project vicinity may be subject to inundation by mudflows due to the existing topography. However, the two debris basins proposed in the southern portion of the Development Area would be designed and sized to accommodate both surface water and debris flows generated on the hillsides immediately south of Placerita Canyon Road. The basin capacities would be more than sufficient for the projected volume of debris. Additionally, a debris desilting inlet may be required on the southern side of Placerita Canyon Road to intercept the tributary debris flows. As a result, impacts related to mudflows would be less than significant.	No mitigation is proposed or required; refer to **MM B-1 and MM B-2** above.	Less Than Significant
C. NOISE		
On-Site Impacts		
Construction		
The construction-related noise levels at all off-site sensitive receptors would be below the significance threshold and existing ambient noise levels. The short-term intermittent maximum noise levels from pile driving at receptor R2, the closest receptor to the proposed construction activities on the Ranch, would also be less than the 60 dBA threshold and would be similar to existing daytime ambient noise levels at receptor R2. Noise impacts associated with on-site construction activities would be less than significant. Additionally, noise associated with construction of the trail	**PDF C-1:** The majority of Project construction-related truck trips shall be scheduled outside of the A.M. peak (7:00 A.M. to 9:00 A.M.) and P.M. peak (4:00 P.M. to 6:00 P.M.) traffic hours. **PDF C-2**: To expedite soil export activities, a second work shift from approximately 7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M. may occur. Activities scheduled during this night shift	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
(which would occur during a different timeframe than the Project's earthwork within the other areas of the Ranch) would be below the significance threshold, and impacts would be less than significant. Delivery/haul trucks and construction workers would require access to the Development Area during various construction stages. Construction trucks would generally enter/leave the site via Placerita Canyon Road to access SR-14. The nearest noise sensitive receptor to the Ranch portions of the Project site is receptor R2, which is approximately 2,000 feet from the haul route. The haul trucks noise at receptor R2 would be approximately 37 dBA (hourly L_{eq}), which would be well below the existing daytime ambient noise level of 55 dBA (hourly L_{eq}) at this receptor location. Thus, potential impacts associated with construction traffic noise at off-site receptors in the Ranch vicinity would be less than significant. Residential uses located outside of the Project vicinity along SR-14 have the potential to be exposed to noise from Project-related haul trucks traveling on the freeway. When accounting for the existing traffic volumes on SR-14, the Project-related haul trucks along SR-14 would result in an increase of less than 1 dBA (hourly L_{eq}) at the residential uses along SR-14. Therefore, daytime noise impacts associated with Project- related off-site construction traffic outside of the Project vicinity would be less than significant. Construction of the Project may include nighttime hauling for soil export activities, which would reduce the overall duration of the earthwork phase by up to two months. The haul truck noise contribution at receptor R2 would be approximately 38 dBA (hourly L_{eq}), which would be well below the lowest nighttime ambient noise level of 49 dBA (hourly L_{eq}), as measured between 2:00 and 3:00 A.M. at this location. Based on the resulting noise increase of less than 0.5 dBA at Receptor R2, the haul truck traffic noise activities would comply with the Noise ordinance and impacts would be less than significant. Nighttime impacts to residential uses located outside of the Project vicinity due to haul truck travel along SR-14 would be the same as daytime impacts and would be less than	shall be limited to loading trucks with soil and hauling and shall ensure no noise disturbance at any residential property line due to these hauling activities. The Applicant shall obtain an exemption from the County Engineer, as applicable, before any soil export activities can occur for the second work shift. No mitigation is required; nonetheless, the following measures are proposed. **MM C-1:** With the exception of short-term nighttime hauling activities during the grading phase (if an exemption is obtained from the County Engineer, as applicable) and work by Caltrans and Southern California Edison, exterior noise-generating construction activities shall be limited to Monday through Friday from 7:00 A.M. to 7:00 P.M., and from 8:00 A.M. to 6:00 P.M. on Saturdays. No construction activities shall occur on Sundays or any legal holidays. **MM C-2:** Power construction equipment shall be equipped with noise shielding and muffling devices. All equipment shall be properly maintained in accordance with manufacturers' specifications to assure that no additional noise, due to worn or improperly maintained parts is generated.	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
significant. As such, noise impacts from potential nighttime hauling activities would be less than significant.		
Operation		
Operational noise levels from each of the noise-generating uses within the Ranch portions of the Project site, including the electrical substation, the soundstages and mills, parking uses, loading dock facilities and trash compactors, would be below existing ambient noise levels at the nearest sensitive receptor (R2), due to the provision of appropriate PDFs and/or sound attenuation due to distance. In compliance with Code requirements, implementation of MM C-4 would ensure that the central utility plant would be designed and constructed such that exterior noise levels would not exceed 82 dBA at a distance of 50 feet in order to meet the existing nighttime ambient noise level of 49 dBA at receptor R2. With implementation of the PDFs and MM C-4, impacts associated with the operation of on-site facilities would be less than significant. Additionally, the composite noise level (all Project-related noise sources) at the nearest sensitive receptor (R2) would meet the County's noise standard. As such, composite noise impacts associated with operation of the Project would be less than significant.	**PDF C-3:** Building mechanical/electrical equipment shall be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Santa Clarita Municipal Code Section 11.44.040, as applicable. **PDF C-4:** Mechanical equipment buildings (e.g., the central plant) shall be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control. **MM C-4:** The central utility plant shall be designed and constructed such that exterior noise levels do not exceed 82 dBA at a distance of 50 feet from the utility plant in compliance with County noise standards.	Less Than Significant with Mitigation
Off-Site Traffic Noise Associated with On-Site Operations		
Project-related traffic would increase the traffic volumes along the analyzed roadway segments when compared with future conditions without the Project. The incremental change in Project-related traffic noise level would be below both the 3 dBA (CNEL) and 5 dBA (CNEL) "substantial noise increase" significance thresholds. Therefore, off-site traffic noise impacts due to the Project would be less than significant. Cumulative traffic volumes would result in a maximum increase of 8.5 dBA (CNEL) along Placerita Canyon Road (west of Sierra Highway). While significant cumulative noise impacts would result along this segment of	No feasible mitigation is available.	Significant and Unavoidable (cumulative impact)

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Placerita Canyon Road, the Project's contribution to the cumulative impacts along this roadway segment would be less than 1.0 dBA. Noise mitigation such as sound walls would not be feasible along Placerita Canyon Road, as the homes front the street and the addition of a sound wall would interfere with access to the properties.		
Off-Site Impacts		
Construction		
Construction of the proposed sewer line (Oak Orchard Alignment) would expose residential uses that are approximately 25 feet from the construction zone to noise levels up to 86 dBA during peak construction periods when the construction activities take place directly in front of these residential properties. Thus, the estimated construction noise levels for the sewer improvements would exceed the County's significance threshold of 75 dBA (for activities less than 10 days, since construction of the utility line would last fewer than 10 days along any given roadway segment). Therefore, short-term significant noise impacts on residential receptors are expected from construction of the sewer improvements. Under the two water alignment options, construction of the water lines would generate noise levels of up to 76 dBA and 62 dBA, respectively, when the construction activities take place near adjacent residential properties. Thus, the County's significant threshold of 75 dBA would be exceeded under the first water alignment option, but not the second option. Construction of the associated water booster pump under either option would result in noise levels that exceed the County's significance threshold of 60 dBA (for construction activities lasting more than 10 days, since construction of the booster pump would likely last longer than 10 days) and would result in a significant impact. Despite proposed mitigation, such impacts would remain significant and unavoidable, although temporary in nature. Maximum construction noise levels associated with replacement of the	**MM C-3:** At least 72 hours prior to the construction of the off-site water and sewer improvements, the Applicant shall provide written notification to residences within a 100-foot radius of the construction zone of these improvements. **MM C-6:** For construction of segments of the proposed off-site utility lines located within the jurisdiction of the County of Los Angeles or the City of Santa Clarita, construction shall be permitted from 7:00 A.M. to 7:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday. For segments under Caltrans' jurisdiction, construction hours shall be from 11:00 P.M. to 5:00 A.M. Monday through Friday. Also refer to **MM C-1 and MM C-2** above.	Significant and Unavoidable (including cumulative impacts)

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
SCE power poles are estimated to be 62 dBA (L_{eq}) at the nearest residential use located northeast of Sierra Highway and Golden Valley Road. This estimated construction noise level would exceed the significance threshold of 60 dBA (L_{eq}) for construction activities lasting more than 10 days; however, it would not exceed the significance threshold of 75 dBA (Leq) for construction activities lasting less than 10 days. In addition, this noise level would be lower than the existing daytime ambient noise level at nearby receptor R5. Therefore, noise impacts associated with replacement of the off-site SCE power poles during daytime hours would be less than significant. Should the power pole replacements occur during nighttime hours, the resulting noise levels would exceed the nighttime noise thresholds and the nighttime ambient, thus significant noise impacts would be expected. However, these noise impacts would be temporary, as replacement of the power poles would require a maximum of a few weeks (and could be as short as several days at any given location). Despite proposed mitigation, such impacts would remain significant and unavoidable, although temporary in nature. Construction noise levels associated with the roadway improvements are estimated to be a maximum of 48 dBA (L_{eq}) at the nearest receptor R2, and less at more distant receptors. This estimated noise level would be below the significance threshold of 60 dBA (for construction activities lasting more than 10 days) and below the lowest measured daytime ambient noise level at R2 of 55 dBA (L_{eq}). When added to the existing ambient noise level of 55 dBA, the estimated construction noise would result in a maximum increase of 0.8 dBA. Therefore, noise impacts associated with construction of the proposed roadway infrastructure improvements would be less than significant during daytime hours. Based on nighttime construction (since three of the four intersections are located within Caltrans' jurisdiction), the resulting estimated construction noise level of 48 dBA (L_{eq}) at receptor R2 generated by the construction activities would be below the County's nighttime noise standard for stationary equipment (i.e., for activities lasting more than 10 days) of 50 dBA. In addition, when added to the existing nighttime ambient noise level, the		

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
estimated construction noise would result in a maximum increase of 2.5 dBA during nighttime hours, which would not constitute a substantial permanent increase (i.e., 3 dBA). As such, noise impacts associated with nighttime construction of the proposed roadway infrastructure improvements would also be less than significant. In addition, construction of the off-site improvements in conjunction with the Related Projects would result in cumulative construction noise impacts that would be significant and unavoidable.		
Operation		
The majority of the Off-Site Infrastructure Improvements would not result in operational noise as the improvements are not associated with any noise-producing uses. In addition, the off-site roadway intersection improvements would not represent a change in use from existing conditions. With implementation of MM C-5, the booster pump station would be designed so as to not exceed 55 dBA at a distance of 50 feet (assuming that the booster pump station is located approximately 150 from the nearest residence). Implementation of MM C-5 would ensure that potential impacts associated with operation of the booster pump station would be less than significant.	**MM C-5:** The booster pump station associated with the water infrastructure improvements shall be designed and constructed such that noise levels at the nearest residential receptor do not exceed the City of Santa Clarita's ambient noise limits of 55 dBA during nighttime hours (between 10:00 P.M. and 7:00 A.M) and 65 dBA during daytime hours (between the 7:00 A.M. and 10:00 P.M.) or the lowest measured ambient noise level.	Less Than Significant with Mitigation
Vibration		
Construction		
The nearest off-site structure, the SR-14 overpass, would be exposed to a maximum vibration level of 0.067 inch per second peak particle velocity (PPV) during the Project's pile driving activities. The nearest off-site residential receptors would be exposed to a maximum vibration level of 0.002 inch per second (PPV). These vibration values are below the 0.2 and 0.5 inch per second (PPV) significance thresholds. Therefore, vibration impacts associated with the Project's on-site construction would be less than significant. With respect to the off-site utility improvements, there are residential	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
buildings located approximately 25 feet from proposed construction activities. Construction of these improvements would generate vibration levels of up to 0.089 inch per second (PPV) at a 25-foot distance. The estimated vibration levels would be below the 0.2 inch per second (PPV) significance threshold. Thus, such impacts would be less than significant.		
Operation		
Project operations would include typical commercial-grade stationary mechanical and electrical equipment which would produce vibration, in addition to transient vibration from passenger vehicular circulation. Since the nearest off-site residential uses (R2) is approximately 2,400 from the Development Area, the potential vibration impacts from all Project sources would be below the significance threshold of 0.01 inches per second root-mean-square (RMS) velocity for perceptibility. As such, vibration impacts associated with operation of the Project would be below the significance threshold and vibration impacts during operation would be less than significant. Implementation of the Off-Site Infrastructure Improvements Areas would not result in noticeable vibration levels. Therefore, no impacts would result.	No mitigation is proposed or required.	Less Than Significant
D. WATER QUALITY		
Construction		
Construction activities could potentially contribute to pollutant loading in stormwater runoff. However, the Project would be required to obtain coverage under the Construction General Permit and would prepare and implement a site-specific SWPPP, which would specify BMPs to be used during construction. Additionally, the County would monitor compliance with these requirements as part of the project approval process. As such, impacts to surface water quality associated with Project construction would be less than significant. The Off-Site Infrastructure Improvements would involve temporary	**PDF D-1:** The Applicant shall prepare and implement a Stormwater Pollution Prevention Plan in compliance with the National Pollutant Discharge Elimination System Construction General Permit prior to and during construction activities. Also refer to **PDFs B-1 though B-3** in Section V.B, Flood Hazards.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
trenching within roadways and minimal excavation, as well as grading associated with the proposed roadway improvements, which could generate stormwater pollutants. However, with compliance with NPDES and County requirements, impacts to surface water quality associated with construction in the Off-Site Infrastructure Improvement Areas would be less than significant.	No mitigation is proposed or required.	
Operation		
Stormwater runoff from the Project site would have the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system. The addition of impervious surface area and the associated increase in peak runoff volumes could also contribute to a potentially adverse impact on surface water quality. Implementation of the SUSMP measures would ensure the quality of stormwater runoff leaving the on-site areas would meet all regulatory standards and would maintain the beneficial uses of Placerita Creek and its downstream waters. The County, as part of its project approval and construction practice, would monitor compliance with these requirements. As such, no significant impact on water quality is anticipated due to long-term operation of the Project. With respect to the Off-Site Infrastructure Improvements, the water and sewer improvements would not affect long-term water quality after construction of the Project, and operation of the new power poles and improved intersections would not represent a change in use from existing conditions . Therefore, no impacts to water quality would result.	**PDF D-2:** The Applicant shall prepare and implement a Standard Urban Stormwater Mitigation Plan to address water quality issues during ongoing operation of the Project, consistent with the approved Drainage Concept/LID Plan/SUSMP Plan contained in Appendix C of the Draft EIR. **PDF D-4:** The following best management practices shall also be implemented as part of the Project's Standard Urban Stormwater Mitigation Plan: • Treatment Control best management practices—In accordance with National Pollutant Discharge Elimination System requirements, the following treatment control best management practices shall be implemented to infiltrate or treat the first 0.75-inch of stormwater runoff from the first flush storm event: – Vegetated swales—Vegetated swales shall be used to remove pollutants, reduce stormwater volumes and flow velocity, and convey stormwater runoff.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	– Detention basins—Detention basins shall serve as the main treatment control best management practice for the Project. They shall be designed to manage the increase in stormwater runoff and to detain and slowly release the design volume of urban runoff, allowing particles and associated pollutants to settle and be removed. These detention basins shall be composed of a vegetated aboveground portion and an underground detention system. The vegetated portions shall allow infiltration, and turf management in the basin shall ensure that pesticides would not contribute to water pollution. The surface detention system overflow outlet shall drain to Placerita Creek, while the underground detention systems shall capture and detain stormwater flows and provide first flush mitigation before either infiltrating back into the local groundwater basin or draining via outlets to Placerita Creek. Energy dissipaters shall be required to minimize erosion. Cleanup shall be conducted semiannually, especially during and after major rainfall events. The Applicant and/or its successor or assignee shall be responsible for cleanup and documenting maintenance. • Operation and maintenance requirements for best management practices—In order to minimize the potential for pollutants to enter receiving waters in stormwater runoff	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	following Project construction, the following best management practices shall be implemented to separate stormwater from potential pollutants: – Parking lot and roadway cleaning—Parking lots and internal roadways shall be routinely maintained to effectively minimize nuisances and to keep internal roads and parking lots in safe condition. Cleaning shall include vacuuming or sweeping of all parking lots, and internal roadways. – Parking lot runoff—Parking lot drainage points shall be equipped with oil/water separators which would be maintained according to manufacturers' specifications. – Landscape planning—Landscaping, buffers, and other vegetated areas shall require weekly maintenance to control optimum height and prevent drain blockage. Pesticide and fertilizer use shall occur in accordance with product instructions and be applied by a certified applicator. – Irrigation system—Maintenance of the irrigation system(s) within the Project site shall comply with County requirements regarding water conservation. Systems shall be periodically inspected to address overspray, broken sprinklers, or other system failures. – Trash storage areas—Trash areas shall be paved with impervious surfaces and designed to prevent runoff from percolating.	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	Trash storage areas shall be maintained routinely to effectively minimize nuisances. – Roof runoff control—Roof drain downspouts shall drain to concrete gutters or shall be directly connected to the proposed on-site underground drain pipe system. – Storm drain inspection—All storm drain facilities, including catch basins, pipes, drain inlets, and channels, shall be inspected and cleaned just prior to the rainy season. – Detention basins—Cleanup and inspection shall occur before, during, and after major rainfall events. Basins shall be serviced semiannually or following an extreme storm. Service shall include cleaning the basins and maintaining the outlet structures. • Other reasonable Best management practices—The Applicant shall implement other good housekeeping and storage measures, as needed, to keep pollutants out of stormwater, as outlined in the Standard Urban Stormwater Mitigation Plan. Also refer to **PDFs B-1 though B-3** in Section V.B, Flood Hazards. No mitigation is proposed or required.	
Los Angeles County Low Impact Development Ordinance		
In accordance with the County's Low Impact Development (LID) Manual,	**PDF D-3:** In accordance with the County's Low	No Impact

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
the Project would implement LID BMPs on-site to promote infiltration and complement, or be a part of, the SUSMP BMPs. As such, the Project would not conflict with the County's LID ordinance and would result in no impacts. The majority of the Off-Site Infrastructure Improvement Areas is located in the City of Santa Clarita. Therefore, the County's LID ordinance would not apply for most of the improvements, while LID BMPs would be implemented for those improvements located within the County. As such, the Project would not conflict with the County's LID ordinance, and there would be no impacts.	Impact Development Manual, low impact development best management practices shall be implemented to promote infiltration and to complement, or be a part of, the Standard Urban Stormwater Mitigation Plan best management practices. No mitigation is proposed or required.	
On-Site Wastewater Treatment Systems		
The new structures within the Development Area would be connected to the Santa Clarita Valley Sanitation District of Los Angeles County public sewer system. The existing Ranch foreman's mobile home would be relocated from the Development Area to one of the Potential Mobile Home Relocation Areas and would require installation of a new septic tank. The Potential Mobile Home Relocation Areas are not located in close proximity to Placerita Creek and are outside of the creek floodway and floodplain. In addition, the Applicant would submit a feasibility report in conformance with the requirements outlined in the "Onsite Wastewater Treatment System (OWTS) Guidelines" of the County Department of Public Health. Impacts would be less than significant; nonetheless, mitigation is proposed. No septic tanks or other private sewage disposal system would be used as part of the Off-Site Infrastructure Improvements. As such, no impacts would result.	**MM D-1:** Prior to the issuance of any building permit/installation of any on-site wastewater treatment system, the Applicant shall submit a feasibility report in conformance with the requirements outlined in the County of Los Angeles Department of Public Health's guidelines "Onsite Wastewater Treatment System (OWTS) Guidelines" to the Environmental Health section of the County of Los Angeles Department of Public Health for review and approval and demonstrate that the Potential Mobile Home Relocation Areas are capable of supporting the installation of an on-site wastewater treatment system. **MM D-2:** The design and installation of the on-site wastewater treatment system shall conform to the rules, regulations and requirements of the County of Los Angeles Department of Public Health and other applicable regulatory agencies, including the	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	Regional Water Quality Control Board, as applicable.	
E.1 AIR RESOURCES—AIR QUALITY		
Sensitive Receptors		
Although the proposed on-site development and the Off-Site Infrastructure Improvements are located adjacent to or in close proximity to SR-14, the Project does not involve school, hospital, or park uses and would not introduce new sensitive uses. Therefore, there would be no impact regarding the exposure of sensitive receptors to substantial pollutant concentrations due to location near a freeway or heavy industrial use.	No mitigation is proposed or required.	No Impact
Construction		
Regional Emissions		
Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment, vehicle trips generated from construction workers, and fugitive dust emissions. Construction-related daily maximum regional construction emissions would exceed the SCAQMD daily significance thresholds for VOC and NO_X. Therefore, regional construction emissions resulting from the Project would result in a significant short-term impact. Construction-related daily maximum regional construction emissions associated with the Off-Site Infrastructure Improvements would not exceed the SCAQMD daily significance thresholds. Therefore, impacts from regional construction emissions resulting from the Off-Site Infrastructure Improvements would be less than significant. Construction-related daily maximum regional construction emissions associated with combined on- and off-site construction activities would exceed the SCAQMD daily significance thresholds for VOC and NO_X. Therefore, regional construction emissions resulting from the Project would result in a significant short-term impact even with implementation of	**PDF E.1-1:** During construction, the Project shall comply with the South Coast Air Quality Management District's Rule 403 regarding fugitive dust control. The following control measures shall be implemented to control fugitive dust: • Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind. • Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use. • Securing loads by trimming, watering or other appropriate means to prevent spillage and	Significant and Unavoidable (including cumulative impacts)

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
mitigation measures. In addition, the Project would have a cumulative impact due to construction-related regional NO_X and VOC emissions.	dust. • Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation. • Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour; • Covering all haul trucks or maintaining at least 6 inches of freeboard; • Minimizing track-out emissions using the methods provided for in Rule 403; and • Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads. **MM E.1-1:** All equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. Verification documentation shall be provided to the County of Los Angeles Department of Regional Planning upon request within five business days. **MM E.1-2:** During construction, trucks and vehicles in loading and unloading queues shall have their engines turned off after 5 minutes when not in use, to reduce vehicle emissions. **MM E.1-3:** Outdoor construction activities shall be discontinued during second-stage smog alerts.	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	MM E.1-4: After mass grading of the Project site is completed, construction activity shall utilize electricity from power poles on or adjacent to the Ranch rather than temporary diesel power generators and/or gasoline power generators when electricity with adequate circuit capacity is available from power poles in proximity to construction areas. **MM E.1-5:** The selected contractor shall use a mix of equipment that includes Tier 3 or Tier 4 equipment for off-road construction equipment, as defined by the United States Environmental Protection Agency, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. Verification documentation shall be provided to the County of Los Angeles Department of Regional Planning upon request within five business days. **MM E.1-6:** Project buildings shall be designed to minimize the need for the application of architectural coatings. Where the application of architectural coatings is necessary on-site, the Applicant shall comply with the South Coast Air Quality Management District's Rule 1113 regarding the use of low and zero volatile organic compound coatings. **MM E.1-7:** Mass grading shall be limited to 10 acres per day. **MM E.1-8:** Construction of the proposed Placerita Canyon Connector Trail shall be	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	scheduled so as not to occur concurrently with Project-related grading activities within the Ranch.	
Local Emissions		
Maximum construction emissions would not exceed SCAQMD recommended localized significance thresholds for PM_{10}, $PM_{2.5}$, CO, and NO_2 concentrations. As such, localized air quality impacts during construction would be less than significant. Construction-related daily maximum localized construction emissions from the off-site infrastructure improvements would not exceed the SCAQMD localized significance thresholds. Therefore, these localized construction emissions would result in a less than significant impact. Maximum construction pollutant concentrations associated with combined on- and off-site construction activities would not exceed SCAQMD recommended localized significance thresholds for PM_{10}, $PM_{2.5}$, CO, and NO_2 concentrations. As such, localized air quality impacts during construction of on-site development concurrent with the off-site infrastructure improvements would be less than significant. Cumulative impacts associated with localized emissions would likewise be less than significant.	No mitigation is proposed or required.	Less Than Significant
Toxic Air Contaminants		
Neither construction of the Project within the Ranch nor in the Off-Site Infrastructure Improvement Areas would result in a long-term (i.e., 70 years) substantial source of toxic air contaminants (TAC) emissions. In addition, there would be no residual emissions after construction and no corresponding individual cancer risk. As such, Project-related toxic emission impacts during construction would be less than significant. Construction of the combined on- and off-site development also would not result in a long-term substantial source of TAC emissions. As such,	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
potential TAC impacts during construction would be less than significant.		
Odors		
Although odors from architectural coatings and solvents could be a source of nuisance to adjacent uses, they would be temporary and intermittent in nature. As construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. This is particularly true since the Development Area is located more than 500 feet away from off-site sensitive uses. Therefore, impacts associated with objectionable odors during Project construction would be less than significant.	No mitigation is proposed or required.	Less Than Significant
Operation		
Regional Emissions		
Regional air pollutant emissions associated with Project operations would be generated by the consumption of electricity and natural gas and by the operation of on-road vehicles. Regional emissions resulting from operation of the Project are not expected to exceed the SCAQMD daily thresholds. Air quality impacts from Project operational emissions would therefore be less than significant. Operation of the off-site infrastructure improvements would not result in a long-term source of emissions. As such, regional operational emissions resulting from the Off-Site Infrastructure Improvements Areas would be less than significant. Regional emissions resulting from operation of the combined on- and off-site development are not expected to exceed the SCAQMD daily thresholds. The regional air quality impact from Project operational emissions would be less than significant.	No mitigation is proposed or required.	Less Than Significant
Local Emissions		
Project-generated traffic volumes are forecasted to result in less than a 0.1 ppm increase in the projected 1-hour and 8-hour CO concentrations at	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
each of the two intersection locations analyzed. Since no significant impacts would occur at the intersections operating at the highest LOS and V/C ratio, no significant impacts would occur at any other analyzed roadway intersection as a result of Project-generated traffic volumes. Thus, the Project would not cause any new or exacerbate any existing CO hotspots, and, as a result, impacts related to localized mobile-source CO emissions would be less than significant. The Project would include the installation and operation of diesel-fired generators for emergency power generation within the Development Area and installation of a central utility plant. Compliance with SCAQMD Rules and Regulations regarding stationary-source combustion equipment would ensure contributions to localized PM_{10} and $PM_{2.5}$ concentrations remain below the 2.5 µg/m^3 operational significance threshold. As such, potential impacts would be less than significant. The Off-Site Infrastructure Improvements would not result in any vehicular trip generation. Thus, for the same reasons discussed above for on-site impacts, the Off-Site Infrastructure Improvements would not cause any new or exacerbate any existing CO hotspots, and, as a result, impacts related to localized mobile-source CO emissions would be less than significant. Pollutant concentrations for localized CO hotspot impacts accounted for both on- and off-site improvements (i.e., traffic volumes associated with development within the Ranch and intersection changes related to the Off-Site Infrastructure Improvements). Thus, impacts related to localized mobile-source CO emissions would be less than significant.		
Toxic Air Contaminants		
The Project is not considered to be a substantial source of diesel particular matter warranting a refined Health Risk Assessment or quantification of mobile source diesel emissions. Additionally, operation of the off-site utility and roadway improvements would not result in a new long-term source of TACs. Therefore, the potential TAC impacts associated with on-site development would be indicative of potential impacts associated with	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
combined on- and off-site activities. Potential air toxic impacts to on- and off-site receptors from Project TAC emissions would be less than significant.		
Odors		
The Project does not include any uses identified by the SCAQMD as being associated with odors. Garbage collection areas within the Development Area would be covered and situated away from the Ranch property line and sensitive uses. Good housekeeping practices would be sufficient to prevent nuisance odors. Therefore, potential odor impacts associated with Project operations would be less than significant.	No mitigation is proposed or required.	Less Than Significant
E.2 AIR RESOURCES—GLOBAL CLIMATE CHANGE		
Construction		
Construction emissions associated with combined on- and off-site development would generate a total of 6,958 metric tons of CO_2e. As recommended by the SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project and incorporated into the operational analysis, summarized below.	No mitigation is proposed or required.	Less Than Significant
Operation		
The net increase in GHG emissions associated with the Project is approximately 0.0015 and 0.0016 percent of the 2006 emission level for the Soundstage Option and the Studio Office Option, respectively. Off-site improvements would only generate GHG emissions during construction. The Project, with incorporation of PDFs and State mandates, would achieve a 17 percent reduction from "business-as-usual" for each option. Therefore, the Project's global climate change impacts with regard to GHG emissions would be less than significant.	**PDF E.2-1:** The Project shall comply with the County's Green Building ordinance, Low Impact Development ordinance, and Drought-Tolerant Landscaping ordinance. **PDF E.2-2:** The Project shall comply with the 2010 California Green Building Standards Code, which contains requirements for construction site selection, stormwater control during construction, construction solid waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	conservation. No mitigation is proposed or required.	
F. BIOLOGICAL RESOURCES		
Wildlife Species		
On-Site Impacts		
The Project's primary potential impacts on wildlife resources involve the removal and disruption of habitat and the loss and displacement of wildlife, resulting in a less diverse and less abundant local faunal population. However, these impacts by themselves would not be expected to reduce general wildlife populations below self-sustaining levels within the region, and as such, impacts to common wildlife species would be less than significant. The northern portion of the Development Area clips designated critical habitat for the coastal California gnatcatcher, and the Water Tank Area and Trail Area are within designated critical habitat for the coastal California gnatcatcher. However, no coastal California gnatcatchers were observed or otherwise detected during the focused surveys in these areas. The Project grading footprint within the Development Area would not occur within critical habitat. In addition, the limited marginally suitable habitat that exists in the Water Tank Area and Trail Area is considered to be of low quality and is not expected to support the coastal California gnatcatcher. The Conditional Parking Areas and the Potential Mobile Home Relocation Areas are not within designated critical habitat. Several other sensitive wildlife species have the potential to occur within the Development Area, Water Tank Area, and Trail Area. None of these species were detected during the surveys conducted on-site. The Potential Mobile Home Relocation Areas and Conditional Parking Areas do not support habitat for special-status wildlife species. Given the limited scale at which habitat impacts would occur as compared to available	**MM F-2:** Project construction-related activities likely to have the potential of disturbing suitable bird nesting habitat shall be prohibited from February 1 through August 31, unless a biological monitor acceptable to the Director of the County of Los Angeles Department of Regional Planning surveys the project area prior to disturbance to confirm that disturbance to habitat will not result in the failure of active nests on-site or immediately adjacent to the area of disturbance. Disturbance shall be defined as any activity that physically removes and/or damages vegetation or habitat, any action that may cause disruption of nesting behavior such as noise exceeding 90dB from equipment, or direct artificial night lighting. Surveys shall be conducted on the subject property within 500 feet of disturbance areas no earlier than three days prior to the commencement of disturbance. If ground disturbance activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than three days will have elapsed between the survey and ground disturbance activities. The Applicant or the Project's Construction Manager shall provide	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
habitat elsewhere within the Ranch, the marginal suitability of the disturbed/developed areas that make up much of the Project areas, total population sizes and regional range of the species, etc., and the fact that the Project would restore and expand riparian areas and coast live oak woodland within the Ranch, Project impacts would not be expected to reduce wildlife populations below self-sustaining levels within the region. Therefore, the Project would not have a potentially significant impact. In addition, although the golden eagle is protected, it was not observed at the Ranch during the surveys and is not expected to use the Development Area or other areas of the Project site for nesting activities. Project implementation would not threaten the regional population since only potential foraging habitat would be affected; therefore, the Project would not have a potentially significant impact on this species. Indirect or secondary impacts to sensitive wildlife are potentially associated with construction noise and lighting in the short-term, as well as operational noise and lighting in the long-term. In general, at distances of 100 to 200 feet from construction noise sources, noise levels would be comparable to those that currently occur on-site (including during potential nighttime hauling). Similarly, operational noise would be comparable to existing noise levels at distances of 300 feet or less. Given the short range of increased noise from construction activities, the opportunity for wildlife to move into adjacent undeveloped areas, and the range of existing ambient noise levels of up to 72 dBA, both construction and operational impacts to wildlife species, including special-status species, located within, adjacent to, and off-site from the Ranch would be less than significant. In addition, Project mitigation regarding nesting birds, detailed in MM F-2, would involve the use of designated buffers around bird nests, as necessary, in accordance with the federal Migratory Bird Treaty Act (MBTA), thus reducing construction-related impacts. With respect to operational lighting, due to the minimal light encroachment that would occur, minimal light encroachment levels, and measures employed to minimize light pollution, the long-term impacts related to	the biologist with plans detailing the extent of proposed ground disturbance prior to the survey effort. If active nests are found, clearing and construction shall be postponed or halted within a buffer area established by the biological monitor that is suitable to the particular location of the nest (typically 300 feet for most birds and 500 feet for raptors) and acceptable to the Director of the County of Los Angeles Department of Regional Planning, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with highly visible construction fencing, and construction personnel shall be instructed on the sensitivity of nest areas. Occupied nests within the buffer established by the biological monitor and adjacent to the construction site shall also be avoided to ensure nesting success. A qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests occur. The results of the surveys, including graphics showing the locations of any active nests detected, and documentation of any avoidance measures taken, shall be submitted to the County of Los Angeles Department of Regional Planning and California Department of Fish and Game within 14 days of completion of the pre-	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Project lighting would be less than significant. Similarly, night lighting would be required for nighttime hauling, if implemented during construction, and would be similar in nature to that currently used within the Ranch for filming activities. MM F-6 would ensure that night lighting, if needed, would be placed and directed away from sensitive habitat, including the creek and any retained oak woodlands. The Ranch portions of the Project site have the potential to support raptor and songbird nests due to the presence of trees, shrubs, and ground cover. Disturbing or destroying active nests is a violation of the MBTA. In addition, nests and eggs are protected under Fish and Game Code Section 3503. MM F-2 would be required during Project construction to limit vegetation removal during the nesting season and/or establish appropriate buffers around active nests. As such, impacts to nesting birds would be reduced to a less than significant level.	construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds. **MM F-6:** Nighttime construction lighting, if needed, shall be situated at least 50 feet away from Placerita Creek and any retained oak woodlands, shielded, and directed towards the interior of the Development Area, away from native habitat. **MM F-7:** Prior to issuance of a grading permit, a qualified biologist shall be retained by the Applicant as the biological monitor, subject to the approval of the County of Los Angeles Department of Regional Planning. The biological monitor shall ensure that impacts to biological resources (inclusive of special-status plants) are minimized and shall conduct pre-grading field surveys for special-status plant and animal species that may be affected and/or eliminated as a result of grading and/or site preparation activities. During earthmoving activities, the biological monitor shall be present to relocate any vertebrate species potentially impacted by Project construction to an appropriate off-site location of similar habitat. The biological monitor shall be authorized to stop specific grading activities if he or she suspects violations of Mitigation Measures MM F-1 through MM F-9 or any local, state, or federal laws regarding biological resources. **MM F-8:** Work areas shall be surveyed for	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	special-status reptile species prior to and during construction activities. Any special-status reptiles occurring within the work area prior to the start of work shall be collected and relocated to areas outside of the designated work zones. If ongoing biological monitoring of construction activities reveals the presence of any special-status reptiles within an active work area, then work shall be temporarily halted within that area until the animals can be collected and relocated to areas outside of the designated work zone(s).	
Off-Site Impacts		
Off-site impacts to wildlife resources would not be expected to reduce general wildlife populations below self-sustaining levels within the region, and as such, impacts to common wildlife species would be less than significant. Sensitive species are not expected to occur within the Off-Site Infrastructure Improvement Areas due to lack of suitable habitat. Additionally, the Off-Site Infrastructure Improvement Areas are not within designated critical habitat for the coastal California gnatcatcher or any other species. Therefore, the Project would have a less than significant impact on sensitive wildlife species. Indirect or secondary impacts to sensitive wildlife may potentially be associated with short-term construction noise and lighting within the Off-Site Infrastructure Improvement Areas. Like on-site impacts, construction noise levels would dissipate with distance from the source and be comparable to existing noise levels in the area. Further, construction noise would be temporary as construction of the water and sewer lines would move quickly along each alignment at approximately 75 to 100 linear feet per day, with construction in any given location along the pipeline route lasting only a few days. Similarly, replacement of the power	Refer to **MM F-2 and MM C-5** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
poles is expected to last a maximum of several weeks. With regard to the SR-14 interchange improvements, construction activities would be located more than 300 feet away from the culvert that is used for local-scale wildlife movement by urban-tolerant species and noise levels would be comparable to those that currently exist. Given the low sensitivity and limited presence of the special-status wildlife receptors and the temporary and intermittent nature of anticipated maximum noise levels associated with construction equipment, the Project's potential indirect construction noise impacts on wildlife in the area surrounding the construction zone within the Off-Site Infrastructure Improvement Areas would be less than significant. The effects of night lighting during construction are also expected to be less than significant due to the limited use of lighting, the temporary use of lighting during construction, and existing night light levels from street lights and automobile headlights. Further, the construction zones are located almost entirely within paved rights-of-way, which offer little if any habitat for sensitive wildlife species. Impacts on wildlife would be less than significant. In addition, Project mitigation regarding nesting birds, detailed in MM F-2, would reduce construction-related impacts. Implementation of the Off-Site Infrastructure Improvements would not result in long-term increases in noise as the majority of the improvements are not associated with any noise-producing uses. With implementation of with MM C-5, noise levels associated with the booster pump station would be comparable to existing noise levels in the area. The Off-Site Infrastructure Improvement Areas would not include new signs, lights (other than limited emergency lighting), or other light-generating facilities. Therefore, there would also be no impacts related to lighting from the off-site Project components.		
Natural Communities		
During construction, the Project would temporarily impact a total of 20.29 acres of coastal sage scrub, disturbed coastal sage scrub, coastal sage	**PDF F-1:** In accordance with the County's Drought-Tolerant Landscaping ordinance, at	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
scrub/chamise chaparral, disturbed coastal sage scrub/chamise chaparral, buckwheat scrub/chamise chaparral, disturbed buckwheat scrub, chamise chaparral, non-native grassland, and disturbed/developed areas, which occur within the Ranch and the Off-Site Infrastructure Improvement Areas. The Project would result in permanent impacts totaling 58.44 acres of the following plant communities within the Project site: coastal sage scrub, coastal sage scrub/chamise chaparral, disturbed coastal sage scrub/chamise chaparral, buckwheat scrub/chamise chaparral, disturbed buckwheat scrub/chamise chaparral, chamise chaparral, disturbed buckwheat scrub, non-native grassland, agricultural land, and ornamental areas, plus disturbed/developed areas which make up over half of the permanently impacted areas. These communities/areas are not CNDDB sensitive plant communities; therefore, impacts to these plant communities/areas are considered less than significant. With respect to sensitive plant communities, the Project would temporarily impact 2.03 acres of mixed willow riparian woodland, 0.02 acre of coast live oak woodland, and 0.33 acre of disturbed coast live oak woodland. The Project would permanently impact 0.75 acre of southern willow scrub and 0.08 acre of mixed willow riparian woodland within Placerita Creek, as well as 4.39 acres of coast live oak woodland and 0.05 acre of disturbed coast live oak woodland. These impacts would occur within the Ranch and a portion of the Off-Site Infrastructure Improvement Areas and are considered potentially significant. With implementation of MM F-1, MM F-3, and MM F-9, impacts to sensitive plant communities would be less than significant. While several sensitive plant species have the potential to occur within the general Ranch vicinity, only one has a low potential to occur on-site. As there are no special-status plants with a moderate or greater potential to occur within the Ranch portions of the Project site, impacts on sensitive plant species would be less than significant.	least 75 percent of the Project's landscaped area shall contain plants from the Los Angeles County Drought-Tolerant Plant List. **MM F-1:** The Project shall implement the requirements of the final approved Habitat Mitigation and Monitoring Program, consistent with the preliminary Habitat Mitigation and Monitoring Program contained in Appendix F.11 of the Draft EIR, to mitigate impacts to U.S. Army Corps of Engineers/Regional Water Quality Control Board "waters of the U.S./waters of the State" and California Department of Fish and Game jurisdictional streambeds. As part of the Habitat Mitigation and Monitoring Program, which shall restore and expand the riparian habitat along Placerita Creek following temporary impacts to stabilize the fill pad slopes, the Project shall mitigate for the impact to the southern willow scrub community and the mixed willow riparian woodland in the Development Area at a minimum of a 1:1 mitigation-to-impact ratio. The Habitat Mitigation and Monitoring Program restoration efforts shall include the grading and recontouring of the existing fill pad slopes along Placerita Creek within the Development Area and the revegetation with native riparian species by planting and seeding. The Habitat Mitigation and Monitoring Program shall identify appropriate mitigation objectives, performance standards, planting and monitoring/reporting requirements to ensure successful restoration	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	and enhancement of the mitigation area. The Habitat Mitigation and Monitoring Program shall also contain contingency measures identifying corrective actions required in the event that the performance standards are not met. A minimum of 4.04 acres of riparian habitat shall be established, restored, enhanced, and/or preserved, resulting in a net gain in California Department of Fish and Game jurisdictional area. Maintenance (i.e., weeding, pest control, irrigation system maintenance, trash removal, etc.) and monitoring of the mitigation area shall be conducted for five years or until such time as the Habitat Mitigation and Monitoring Program performance standards are achieved to ensure success of the plan. The final Habitat Mitigation and Monitoring Program shall be submitted to and approved by the County of Los Angeles Department of Regional Planning, the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Game, in compliance with Clean Water Act Sections 401 and 404 and California Fish and Game Code 1602 and supporting regulations, prior to issuance of a grading permit. **MM F-3:** The Project shall implement the requirements of the approved Oak Tree and Woodland Mitigation and Monitoring Program to mitigate impacts to oak trees protected under the Los Angeles County Oak Tree Ordinance and impacts to oak woodlands protected under California Public Resources Code 21083.4. As	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	part of the Oak Tree and Woodland Mitigation and Monitoring Program, which shall restore and expand existing oak woodlands on the project site, the Project shall mitigate for the impact to oak woodlands with at least a 2.4 acre to 1 acre mitigation-to-impact ratio. The Project's Oak Tree and Woodland Mitigation and Monitoring Program shall include the following components: • Planting of at least 1,600 oak trees within or adjacent to existing oak woodlands on the Ranch shall be completed prior to the issuance of a building permit; • Minimization of impacts by avoiding approximately 95 percent of the oak trees and oak woodlands on the Ranch; • Restoration of fire-damaged oak woodlands through oak tree seedling planting; • Enhancement of oak woodland regeneration through oak seedling planting in areas with limited natural recruitment; • Increased habitat connectivity through oak tree planting in areas between existing woodlands and along Placerita Creek; • Planting of native understory species within oak woodland restoration areas in order to provide a more complete suite of oak woodland values apart from those provided by trees alone; and • Implementation of a seven-year monitoring,	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	documentation, and reporting program. In addition, prior to the issuance of a building permit, the Applicant shall record a use restriction which shall run with the land in perpetuity over the planted mitigation areas in which oak woodland planting, restoration, and enhancement occurs to protect these areas for purposes of oak woodland conservation, restoration and enhancement. The use restriction shall recognize the Applicant's ability to allow filming within these areas, provided the oaks are protected. The use restriction language shall be submitted to the County of Los Angeles Department of Regional Planning for review and approval prior to recordation with the Los Angeles County Registrar-Recorder/County Clerk. **MM F-9:** The Applicant shall submit the Project landscape plan to the County of Los Angeles Department of Regional Planning for review and approval prior to issuance of a building permit. The landscape plan shall show the size, type and location of all plants and watering facilities, consistent with the County's established codes and procedures. Where feasible, native plants shall be used for landscaping. The landscape plan shall also specify the type and location of eight-foot high decorative fencing to be installed along those portions of the Project site perimeter visible to the public along SR-14 and Placerita Canyon Road.	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Jurisdictional Drainage Courses		
Construction activities would temporarily impact 0.13 acre of ACOE/ RWQCB jurisdictional "waters of the U.S./waters of the State" and 1.96 acres of CDFG jurisdictional streambed within the Development Area and the Off-Site Infrastructure Improvement Areas. The Project would permanently impact 0.08 acre of ACOE/RWQCB jurisdictional area and 0.63 acre of CDFG jurisdictional streambed and associated riparian habitat within the Development Area and Water Tank Area. Such impacts are considered potentially significant. However, implementation of MM F-1 and F-5 would reduce on- and off-site jurisdictional impacts to a less than significant level. No ephemeral tributaries to Placerita Creek have been delineated within the Potential Mobile Home Relocation Areas or the Conditional Parking Areas.	**MM F-5:** Prior to issuance of a grading permit, the Project Applicant shall prepare and submit to the U.S. Army Corps of Engineers for verification a "Preliminary Delineation Report for Waters of the U.S." and a Streambed Alteration Notification package to the California Department of Fish and Game for alterations to Placerita Creek and its on-site jurisdictional tributaries. A Clean Water Act Section 404 permit shall be obtained from the U.S. Army Corps of Engineers, and the Applicant shall comply with the permit conditions. A Streambed Alteration Agreement shall be entered into with the California Department of Fish and Game under Section 1602 of the California Fish and Game Code, and the Applicant shall comply with the associated conditions. A Clean Water Act Section 401 Water Quality Certification shall be obtained from the Regional Water Quality Control Board, and the Applicant shall comply with the certification conditions. Mitigation for unavoidable impacts shall be provided through conservation or restoration of U.S. Army Corps of Engineers and California Department of Fish and Game jurisdictional features (on- and off-site) at a minimum of a 1:1 mitigation-to-impact ratio. Also refer to **MM F-1** above.	Less Than Significant with Mitigation
Wildlife Movement		
Although the Project site may provide an area of local-level wildlife	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
movement and live-in habitat for a variety of species, including habitat that may contribute to widespread regional movement, it does not function as a main wildlife corridor for the region. Since SR-14 acts as a barrier to wildlife movement in the area, linkages are closely associated with undercrossings under the freeway. Placerita Creek would continue to provide opportunities for foraging/watering and local wildlife movement upon Project implementation. Improvements within the creek, including slope stabilization and establishment of native vegetation along the slopes (thus increasing the total area of native vegetation), would ultimately improve the functions of the creek for local wildlife. Further, while the existing oak woodland at the southern end of the Development Area may provide cover for wildlife to move from the undeveloped areas to the south into Placerita Creek for foraging/watering, portions of the Ranch east of the Development Area have a higher permeability ranking and would continue to provide opportunities for local wildlife movement.. In this context, on-site and off-site impacts to local and regional movement would be less than significant.		
Regulated Trees		
The Project would require the removal of 158 County ordinance-protected oak trees, including 16 heritage oaks, and encroachment upon an additional 82 oak trees, including 3 heritage trees. The 158 trees to be removed provide an estimated 184,260 square feet (4.33 acres) of canopy coverage, much of which is located within oak woodlands. As such, the Project would result in a potentially significant impact to both oak trees and coast live oak woodlands. Accordingly, the Applicant would be required to plant 444 new oak trees (284 for the 142 jurisdictional trees and 160 for the 16 heritage trees) that must reach minimum size requirements and survive for a seven-year monitoring period. Additionally, the replacement trees over a 20-year growth period would ultimately replace the habitat and environmental benefits of the impacted oak woodland. An Oak Tree and Woodland Mitigation and Monitoring Plan (OTWMMP) is proposed under MM F-3. (Refer to Section V.F, Biological Resources, for discussion of	**MM F-4:** During project construction, the Applicant shall implement all measures to protect the oak trees that are encroached upon, as indicated in the approved Oak Tree and Woodland Mitigation and Monitoring Program. Also refer to **MM F-3** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
oak tree plantings that have already occurred on-site to proactively initiate mitigation efforts.) With implementation of MM F-3, impacts to jurisdictional oak trees and coast live oak woodlands would be less than significant. In addition, MM F-4 would be implemented to protect the retained trees that would be encroached upon by Project construction activities. Trenching for the Oak Orchard sewer alignment would require temporary encroachment into the protected zones of 86 oak trees, including 31 heritage oak trees, all of which are protected under the City's Oak Tree ordinance. As such, the Project could result in a potentially significant impact to regulated oak trees within the Off-Site Infrastructure Improvement Areas. Implementation of appropriate protective measures, as determined and implemented by the City based on the City Oak Tree Report (Appendix F.5), would reduce impacts to oak trees within the Off-Site Infrastructure Improvement Areas to a less than significant level.		
Significant Ecological Area		
The existing Significant Ecological Area (SEA) overlay maps, which are a part of the County's General Plan, do not overlap with the Project site. As such, existing County policies regarding SEAs do not currently apply to the Project. However, the County is in the process of updating the SEA overlay maps for the Santa Clarita Valley, which are part of the Draft 2012 Santa Clarita Valley Area Plan. In the updated maps, portions of the Development Area (the hillside above the northern fill pad), Placerita Creek, the Water Tank Area, and the Trail Area have been proposed for designation within the Santa Clara River SEA (SEA 20). As currently drafted, the Draft 2012 Area Plan allows complete project applications filed prior to the effective date of the Draft 2012 Area Plan to be reviewed for consistency under the current 1990 Area Plan. The County deemed complete the entitlement applications for the Project on May 4, 2010. Accordingly, the Project is not anticipated to be subject to the Draft 2012 Area Plan and the associated SEA regulations. Furthermore, the Project would enhance the proposed SEA area around the Development Area by	No mitigation is proposed or required.	Less Than Significant Impact

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
improving Placerita Creek and planting native vegetation. Therefore, the Project would not have a significant impact on the proposed SEA 20.		
G. CULTURAL AND PALEONTOLOGICAL RESOURCES		
Historic Resources		
There are no historic resources within or adjacent to the Project site. Therefore, the Project would result in no impact to historical resources and no mitigation measures are required.	No mitigation is proposed or required.	No Impact
Archaeological Resources		
No archaeological resources were identified during the pedestrian surveys of the Project site. Given the composition of the fill pads, the negative results of the survey, and the disturbance from previous development that likely would have displaced any resources, the potential to encounter buried archaeological resources within the fill pad areas of the Development Area is considered low and no archaeological monitoring is recommended in these areas. However, archaeological monitoring during grading is recommended within native soils along the Placerita Creek floodplain within the Development Area, at the selected of the two Potential Mobile Home Relocation Areas, and within the two Conditional Parking Areas, if developed, as provided for in Mitigation Measures (MM) G-1 through MM G-3. Given the known prehistoric and historic occupation of the Project site and based on recent correspondence with local Native American tribes, the potential to find archaeological resources exists. With implementation of MM G-1 through MM G-5, potential impacts on archaeological resources would be reduced to a less than significant level.	**MM G-1:** A qualified archaeologist shall monitor all stripping and other earthmoving activities within native soils along the Placerita Creek floodplain within the Development Area. If an archaeological site is discovered during monitoring, construction activity in that part of the Development Area shall cease until the site can be studied by a qualified archaeologist. **MM G-2:** A qualified archaeologist shall monitor the grading and excavations for light poles and electrical conduits at the two Conditional Parking Areas, if developed. **MM G-3:** A qualified archaeologist shall monitor the grading and septic tank excavation at the selected of the two Potential Mobile Home Relocation Areas. **MM G-4:** In the event archaeological resources are encountered during Project construction, all ground-disturbing activities within the vicinity of the find shall cease and a qualified archaeologist shall be notified of the find. The	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	archaeologist shall record all recovered archaeological resources on the appropriate California Department of Parks and Recreation Site Forms to be filed with the California Historical Resources Information System–South Central Coastal Information Center, evaluate the significance of the find, and if significant, determine and implement the appropriate mitigation in accordance with the U.S. Secretary of the Interior and California Office of Historic Preservation guidelines, including but not limited to a Phase III data recovery and associated documentation. The archaeologist shall prepare a final report about the find to be filed with the Applicant, the County of Los Angeles Department of Regional Planning, and the California Historical Resources Information System–South Central Coastal Information Center, as required by the California Office of Historic Preservation. The report shall include documentation of the resources recovered, a full evaluation of the eligibility with respect to the California Register of Historical Resources, and treatment of the resources recovered. In the event of a find, archaeological and Native American monitoring shall be provided thereafter for any ground-disturbing activities in the area of the find. **MM G-5:** In the event human remains are encountered during construction activities, all ground-disturbing activities within the area of the human remains shall cease and the County coroner shall be notified. In the event the	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	remains are determined to be of Native American descent, the coroner shall notify the California Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person(s) thought to be the Most Likely Descendant of the deceased Native American, who shall have 48 hours from notification by the Native American Heritage Commission to inspect the site of the discovery of Native American remains and to recommend to the Applicant or landowner means for the treatment and disposition of the human remains and any associated grave goods. The Applicant or landowner shall reinter the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance. In the event Native American remains are found, Native American monitoring shall be provided thereafter for any ground-disturbing activities in the area of the remains.	
Paleontological Resources		
No paleontological resources were identified on the surface during the pedestrian survey of the Project site. Based on extensive prior disturbance, the potential to encounter buried paleontological resources is considered low in the pad area portions of the Development Area, as well as the Potential Mobile Home Relocation Areas and Conditional Parking Areas. However, shallow grading activities are planned for the undisturbed northern portion of the Development Area, the Water Tank Area, and the Trail Area, which are underlain with the fossiliferous older Quaternary deposits and the Saugus Formation. Surface exposure of the	**MM G-6:** A qualified paleontologist shall be retained by the Applicant prior to the implementation of the Project to develop and execute a paleontological monitoring plan for the grading activities planned for the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Saugus Formation also occurs near the eastern Potential Mobile Home Relocation Area, and could possibly be affected by the limited grading that may occur there. As a result, the Project has the potential to result in significant impacts associated with buried intact paleontological resources in these areas. With implementation of MM G-6 through MM G-12, potential impacts would be reduced to less than significant levels.	Improvement Areas within the Saugus Formation. The qualified paleontologist shall meet the qualifications established by the Society of Vertebrate Paleontologists. **MM G-7:** The paleontologist shall attend a pre-grade meeting in order to become familiar with the proposed depths and patterns of grading for grading activities planned for the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation to provide a basis to the development of a monitoring program. **MM G-8:** The paleontologist shall establish a curation agreement with an accredited facility prior to the initiation of ground-disturbing activities. **MM G-9:** A paleontological monitor, supervised by the paleontologist, shall monitor all ground-disturbing activities associated with grading activities in the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation. If fossils are found during ground-disturbing activities, the paleontological monitor shall be authorized to halt the ground-disturbing activities within 25 feet of the find in order to allow evaluation of the	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	find and determination of appropriate treatment in accordance with Society of Vertebrate Paleontology guidelines for identification, evaluation, disclosure, avoidance or recovery, and curation, as appropriate. **MM G-10:** The paleontological monitor and/or the paleontologist shall collect all significant fossils encountered. All significant fossils shall be stabilized and prepared to a point of identification and permanent preservation. **MM G-11:** Some fossils from the Saugus Formation are very small specimens that can typically be missed in monitoring for large construction projects. Therefore, the paleontological monitor shall collect sediment samples and process them to determine the potential for small fossils in these deposits obtained during grading activities in the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation. **MM G-12:** The paleontologist shall prepare a final report on the monitoring. If fossils are identified, the report shall contain an appropriate description of the fossils, treatment, and curation. A copy of the report shall be filed with the Applicant, County of Los Angeles Department of Regional Planning, and the Natural History Museum of Los Angeles, and	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	shall accompany any curated fossils.	
H. AGRICULTURAL AND FORESTRY RESOURCES		
Farmland and Forest Land Conversion		
Construction		
Project construction would not have a direct impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance since no such lands are designated within the Project site. However, construction activities would generate fugitive dust emissions that may cause indirect impacts to agricultural uses elsewhere within the Ranch or at off-site locations. The PDF to control fugitive dust emissions provided in Section V.E.1, Air Resources—Air Quality, would minimize any potential impact to nearby agricultural resources or uses. As such, construction impacts are considered to be less than significant. Although Project construction would result in the continued use of designated forest land for non-forest uses, it would not convert land used for forest uses to a non-forest use and would have a negligible effect on any forest activities in Angeles National Forest. Therefore, construction impacts would be less than significant. Construction within the Off-Site Infrastructure Improvement Areas would not have a direct impact on agricultural land or forest land since construction activities would not occur on land designated as Farmland or forest land. As discussed above, mitigation measures to control fugitive dust emissions would minimize any potential impact to nearby agricultural resources or uses associated with off-site improvements. As such, construction impacts would be less than significant.	No mitigation is proposed or required; refer to **PDF E.1-1**.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Operation		
Given that the Project site does not include any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, Project operations would not have an impact on such lands, including conversion to non-agricultural use. Although Project implementation would result in the continued use of designated of forest land for non-forest uses, it would not convert land used for forest uses to a non-forest use and would have a negligible effect on any forest activities. The Potential Mobile Home Relocation Areas and the southern Conditional Parking Area would continue to be designated Open Space/National Forest. Impacts to forest land would therefore be less than significant.	No mitigation is proposed or required.	Less Than Significant
Zoning for Agricultural Use		
With approval of the proposed zone change and plan amendment for a portion of the Development Area, discussed in greater detail in Section V.N, Land Use, of this Draft EIR, the Project would be entirely consistent with the zoning and land use designations of the tract map area, the Development Area, and the remainder of the Ranch, and no conflicts with zoning for agricultural uses would occur. As such, on-site agricultural impacts related to zoning conflicts would be less than significant. The Off-Site Infrastructure Improvements Areas are not zoned for agricultural use. Therefore, no off-site impacts to areas zoned for agriculture would result. The Project would not conflict with Williamson Act contracted land since there are no existing Williamson Act contracts covering the Ranch, the Off-Site Infrastructure Improvement Areas, or adjacent lands. Thus, no impact to Williamson Act contracts would occur on- or off-site.	No mitigation is proposed or required.	Less Than Significant
Zoning for Forest Use		
The Project site areas within the Ranch that fall within Angeles National Forest are zoned A-2-2 (Heavy Agricultural—Two Acres Minimum Required Area) and would remain zoned A-2-2, and the uses proposed	No mitigation is proposed or required.	No Impact

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
within those areas would be consistent with that designation. None of the forest land within the Ranch is zoned as forest land, no timberland exists on-site, and the Off-Site Infrastructure Improvement Areas are not zoned as forest land or timberland. Therefore, no impacts would occur.		
I. VISUAL QUALITIES		
Scenic Views		
The Project would not block views of the surrounding hillsides, and perimeter landscaping along SR-14 and portions of Placerita Canyon Road would largely obscure views of the new structures from the adjacent roadways. Project implementation also would not affect views along a designated scenic highway as none exist in the vicinity. Public views, including views from public trails, would continue to feature a largely rural environment with a background of rolling hills, pockets of trees and landscaping, and from some vantages large-scale infrastructure such as LADWP's electrical transmission towers, water storage tanks, and oil pumps. Therefore, impacts would be less than significant. Development of the improvements proposed within the Off-Site Infrastructure Improvement Areas would not substantially affect views nor specifically views of nearby ridgelines, as the improvements would occur primarily within existing roadways. Therefore, off-site impacts on a scenic vista or from regional trails would be less than significant.	**PDF I-1:** Project buildings shall have a maximum building height of 60 feet. **PDF I-2:** A vegetation barrier heavily planted with trees and shrubs shall be introduced along portions of Placerita Canyon Road and State Route 14 adjacent to the Development Area. No mitigation is proposed or required.	Less Than Significant
Aesthetics/Visual Quality		
Construction		
Construction activities can disrupt the general order and aesthetic character of an area. However, temporary green screen construction fencing would be placed around the periphery of the Development Area to screen much of the construction activity from view at the street level. While the removal of some existing trees and vegetation along Placerita Canyon Road would reduce the visual quality along the roadway during	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Project construction, such impacts would be temporary given that a cohesive landscape plan would be implemented. Therefore, the Project's construction activities would not substantially degrade the existing visual character of the Project site or the surrounding area, and visual quality impacts would be less than significant. Construction activities associated with the Off-site Infrastructure Improvement Areas would be short-term and would occur on already disturbed areas. In addition, Off-Site Infrastructure Improvements would be limited both in scale and geographic extent, and would be nearly entirely underground after installation. Therefore, impacts would be less than significant.		
Operation		
Adherence to the conceptual Design Guidelines would ensure the Project would provide for a visually appealing, high quality environment. The Project would not substantially and irreversibly damage existing scenic resources or substantially degrade the existing visual character or quality of the Development Area and its surroundings, and impacts would therefore be less than significant. With regard to the Off-Site Infrastructure Improvement Areas, these improvements would be limited both in scale and geographic extent, and would be almost entirely underground after installation. Therefore, these Project components also would not change the visual character of the off-site areas, and impacts would be less than significant.	**PDF I-3:** The proposed water tank shall be painted a neutral color that is predominant in the surrounding area so as to blend with the surrounding landscape. The water tank color shall be submitted to the County of Los Angeles Department of Regional Planning for approval prior to issuance of a building permit. In addition, the area disturbed during construction immediately surrounding the water tank's ring road and fencing shall be revegetated with native plants, upon approval of plant selection(s) from the County of Los Angeles Department of Regional Planning, Los Angeles County Fire Department, Newhall County Water District, and California Department of Fish and Game. Also refer to **PDF I-1 and PDF I-2** above. No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Light and Glare		
Construction		
Substantial lighting is not anticipated during construction within the Project site areas located within the Ranch, as construction activities would typically occur during daylight hours. If needed for potential nighttime hauling for soil export activities, night lighting would be similar in nature to that currently used within the Ranch for filming activities. Any required security lighting would focus on construction equipment or materials and not on surrounding light-sensitive areas. Additionally, temporary green screen construction fencing would be placed around the periphery of the Development Area to screen much of the construction activity from view at the street level. As such, the Project's potential on-site short-term lighting impacts during construction would be less than significant. Any glare from reflective construction materials would be highly transitory and short-term, given the movement of construction equipment and materials within the construction area and the temporary nature of specific construction activities. The potential for nighttime glare associated with construction activities is unlikely as most construction activities would occur during the day, and any nighttime construction work would be temporary. Further, the placement of green screen construction fencing around the Development Area would reduce any glare effects. As such, the Project would not result in a significant impact related to construction glare. Construction associated with roadway improvements and the off-site utilities located within Caltrans' jurisdiction would require lighting due to nighttime construction hours; however, those areas currently experience lighting from street lights and passing vehicles and would, therefore, not be expected to introduce substantial glare, and such activities would be temporary. Therefore, there would be less than significant impacts related to light and glare from off-site Project components during construction.	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Operation		
Project lighting would have little impact beyond the limits of the Development Area and therefore would not be expected to affect off-site light-sensitive areas or uses, including motorists on Placerita Canyon Road and SR-14. Almost no light (i.e., less than 0.1 foot candle) would fall within Placerita Creek, and very little light would spill over into the remaining stands of oak trees in the southern portion of the Development Area. Therefore, impacts related to Project lighting would be less than significant. Nonetheless, mitigation measures are proposed to ensure that impacts remain less than significant. The Project would not create substantial glare effects. All exterior windows, glass, and metal used on building surfaces would be non-reflective or treated with a standard low-reflective or non-reflective glazing. Reflective glare would not be expected due to the respective positions of the sun. While surface parking within the Development Area, and potentially within the Conditional Parking Areas, if developed, could present the potential for sunlight to reflect off of automobiles, these areas are sometimes used for vehicle parking under existing conditions, in addition to nighttime filming that occasionally uses bright light sources. Surface parking areas would be largely shielded from off-site sensitive uses and would include perimeter landscaping. Therefore, glare impacts would be less than significant. Development within the Off-Site Infrastructure Improvement Areas would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and both lighting and glare impacts would be less than significant.	**MM I-1:** Prior to issuance of a building permit, the Applicant shall submit the Project's final design drawings, including a lighting plan to the County of Los Angeles Department of Regional Planning for review and approval, consistent with the County's established codes and procedures. **MM I-2:** The Applicant shall submit detailed lighting plans including fixture types and locations to the County of Los Angeles Department of Regional Planning for review and approval consistent with the County's established codes and procedures prior to issuance of a building permit. **MM I-3:** To ensure minimal light trespass on sensitive habitat within Placerita Creek, bridges shall be lit by low focused light located on the side walls or railings and aimed at the road. The lighting along the creek-side of Project buildings shall be located primarily on outdoor decks and consist of surface-mounted fixtures facing down with full light cutoff to confine light to the balconies and prevent spillover of light onto habitat areas. Lighting in these areas shall be consistent with the approved lighting plan.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
J. TRAFFIC, ACCESS, AND PARKING		
Traffic		
Construction		
Construction of the Project would generate traffic from construction worker trips as well as truck trips, including haul trucks for soil export, construction materials, and equipment. The arrival and departure of all construction workers is not expected to occur simultaneously and these trips would generally occur outside of the A.M. and P.M. peak traffic periods based on the Project's typical construction hours of 7:00 A.M. to 3:30 P.M. During site preparation, the demolition of existing uses within the Development Area would result in limited trips, which would have a negligible effect on local roadways. Even if all construction worker trips were assumed to occur during peak hours, impacts related to construction worker traffic would be less than significant, as would demolition trips. The projected level of truck traffic associated with soil export is conservatively assumed to result in a temporary, short-term adverse impact. However, with implementation of the proposed mitigation measures, haul truck traffic is not expected to result in a significant impact. Similarly, the projected level of truck traffic associated with construction delivery trucks, with implementation of MM J-1, is not expected to result in a significant traffic impact on the street system. The Project includes off-site utility improvements that would involve construction activities and lane closures on several segments of local roadways. With implementation of MM J-1, Construction Traffic Management Plans would be implemented during construction of the off-site infrastructure improvements to provide for temporary traffic controls to improve traffic flow on public roadways. Thus, any potential traffic impacts from Project-related off-site construction would be reduced to a less than significant level. The Project would include off-site roadway improvements as part of the	**MM J-1:** Prior to any construction activities and/or issuance of required encroachment permits from Los Angeles County, the City of Santa Clarita and Caltrans, detailed Construction Traffic Management Plans shall be submitted to the relevant agency or agencies for review and approval, consistent with each agency's established codes and procedures. The Construction Traffic Management Plans shall include the following, as required by the applicable public agency or agencies: • Provisions to configure construction parking to minimize traffic interference; • Provisions for traffic control during all phases of construction activities to improve traffic flow on public roadways (e.g., flag person); • Provision of adequate emergency access to all residences and businesses adjacent to the roadways impacted by the utility construction activities during all phases of construction activities; • Scheduling construction activities to reduce the effect on traffic flow on arterial streets; • With the exception of travel on Placerita Canyon Road, rerouting construction trucks along parallel routes with less congestion, to	Less Than Significant with Mitigation (Project impacts) Significant and Unavoidable (cumulative impacts)

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Project and as mitigation. Such activities would be expected to involve a limited number of construction workers and haul truck trips. Based on the construction hours permitted with Caltrans' jurisdiction, as well as the Project's typical construction hours, construction worker trips would occur outside the peak commuter periods and therefore would be expected to result in limited impacts on area roadways. Additionally, all roadway construction activity would require the implementation of construction management plans in accordance with County, City, and/or Caltrans standards to ensure appropriate traffic controls are implemented to maintain traffic flows, freeway access, and emergency access. Thus, any potential traffic impacts from the construction of Project-related off-site roadway improvements would be less than significant. Cumulative construction traffic impacts would be significant and unavoidable to the extent that haul trips associated with the Project coincide with those of the Kellstrom Project (Related Project No. 3).	reduce travel on congested streets; • Provision of dedicated turn lanes for movement of construction trucks and equipment on- and off-site in accordance with the Construction Traffic Management Plans approved by the County of Los Angeles Department of Public Works and/or other public agency; • With the exception of off-site infrastructure improvements, prohibition against parking of construction-related vehicles on streets in predominantly residentially-zoned areas; • Provision of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers on streets impacted by Project construction; • Requirement that contractors participate in a common carpool registry during all periods of contract performance, with the registry monitored and maintained by the general contractor; • Scheduling of the majority of construction-related deliveries, other than concrete and earthwork-related deliveries, during off-peak travel periods; • The Applicant shall submit the detailed Construction Traffic Management Plans to the public agency or agencies having jurisdiction, including the County of Los Angeles Department of Public Works, Caltrans, and	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	the City of Santa Clarita, including the Sheriff and Fire Departments of the County of Los Angeles, the Police and Fire Departments of the City of Santa Clarita, and/or the California Highway Patrol, at least 14 days in advance of any construction activities that may affect emergency response in the areas over which the public agency has or public agencies have jurisdiction. • All measures identified in the detailed Construction Traffic Management Plans, as approved by the public agency or agencies, shall be implemented during construction to ensure that adequate and safe access remains available on-site and within the Off-Site Infrastructure Improvement Areas. **MM J-2:** The Applicant shall obtain the required permits for truck haul routes from the County of Los Angeles Department of Public Works and/or any other public agency prior to the issuance of a grading permit for the Project. **MM J-3:** The Applicant shall obtain a Caltrans transportation permit prior to the use of oversized transport vehicles on Caltrans facilities. **MM J-4:** Prior to issuance of a grading permit, Applicant shall document and submit all required information and/or material pertaining to the pavement of County roadways along the Project haul route, including the formula for calculating the Project's fair share of any repair and/or	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	reconstruction of County roadways along the Project haul route, to the satisfaction of the County of Los Angeles Department of Public Works. The Applicant shall reimburse the County of Los Angeles for the cost of any repairs and/or reconstruction of County roadways along the Project haul route attributable to the Project as agreed to by the County of Los Angeles Department of Public Works. A bond (amount to be reasonably determined by the County of Los Angeles Department of Public Works once a specific haul route is designated) shall also be put in place to cover any structural impacts to the roadways along the haul route attributable to the Project's truck trips during hauling. The timing of any necessary repairs and/or reconstruction of County Roadways by the Applicant shall be determined by the County of Los Angeles Department of Public Works.	
Operation		
The Project would create significant impacts at the Sierra Highway and SR-14 Southbound Ramps intersection during both peak hours and at the Sierra Highway and Placerita Canyon Road intersection during the P.M. peak hour. However, MM J-5 and MM J-6 would be implemented to reduce potential impacts to these two study intersections to a less than significant level. Implementation of the off-site infrastructure improvements would not result in uses that would generate traffic on a regular basis. Additionally, the roadway improvements would serve to enhance local circulation and access. Therefore, no impacts would occur.	**PDF J-1:** To encourage the use of alternative modes of transportation, the Project shall incorporate the following features: • The provision of information on transportation alternatives (transit schedules, maps, etc.); • A carpool matching program; • Preferred parking for low-emitting (Zero Emission) and fuel-efficient vehicles; • Preferred parking for carpool/vanpool vehicles;	Less Than Significant with Mitigation (both Project and cumulative impacts)

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
In addition, impacts at Sierra Highway and SR-14 Southbound Ramps would be cumulatively significant during both peak hours, and impacts at Sierra Highway and Placerita Canyon Road would be cumulatively significant during the P.M. peak hour prior to cumulative mitigation.	• Video conferencing facilities within the Project; • On-site secure, bicycle storage areas; and • Non-dedicated walkways, bicycle access, and paved surfaces throughout the Development Area to minimize use of automobiles and trucks traveling throughout the Development Area. **MM J-5:** Sierra Highway/SR-14 Southbound Ramps: Prior to issuance of the first certificate of occupancy, the Project Applicant shall install a traffic signal at this intersection with protected left-turn phasing for southbound Sierra Highway. Northbound Sierra Highway shall be widened to provide a separate right-turn only lane onto the SR-14 southbound on-ramp. These improvements shall be the sole responsibility of the Project. Detailed striping/signing and traffic signal plans shall be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation. **MM J-6:** Sierra Highway/Placerita Canyon Road: Prior to issuance of the first certificate of occupancy, the Project Applicant shall widen the Placerita Canyon Road westbound approach to provide a free-flow right-turn lane onto northbound Sierra Highway, facilitating traffic flow to the SR-14 southbound on-ramp. These improvements shall be the sole responsibility of the Project. A detailed striping/signing plan shall be submitted to the County of Los Angeles	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	Department of Public Works for review and approval prior to implementation. **MM J-9:** Sierra Highway/SR-14 Southbound Ramps: Prior to issuance of the first certificate of occupancy, the Project Applicant shall pay its pro rata share (20.9 percent) of the cost for the widening of southbound Sierra Highway to provide a second left-turn only lane onto the SR-14 southbound on-ramp. **MM J-10:** Sierra Highway/Placerita Canyon Road: Prior to issuance of the first certificate of occupancy, the Project Applicant shall pay its pro rata share (16.2 percent) of the cost for the widening of Sierra Highway northbound approach to provide a separate right-turn only lane onto eastbound Placerita Canyon Road. **MM J-11:** The Project shall pay its share of the applicable Eastside Bridge and Major Thoroughfare District fees in effect at the time of final map recordation.	
Traffic Hazards		
Construction		
The temporary crossing of Placerita Creek constructed during Project construction would be removed and this portion of the creek would be restored after the completion of grading and slope stabilization. Installation of the water and sewer lines and construction of the roadway improvements would require temporary lane closures along segments of certain roadways. All lane closures would be conducted per the Construction Traffic Management Plans described above in MM J-1. Where necessary, temporary traffic control in the form of a flag person	Refer to **MM J-1** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
would be provided during construction activities to ensure safe traffic operations. Implementation of the proposed improvements would meet all required design and safety standards and would not increase hazards due to a design feature. Additionally, Project construction activities would not introduce incompatible uses. Therefore, impacts associated with traffic hazards would be less than significant		
Operation		
To improve access to the Development Area and the Ranch as a whole, the Applicant proposes to reconfigure and signalize the SR-14 northbound off-ramp at Placerita Canyon Road. Additional improvements along Placerita Canyon Road at the Project site driveways would also be implemented. These improvements would meet all required design and safety standards and would not increase hazards due to a design feature. Therefore, impacts would be less than significant.	Refer to **MM J-7 and MM J-8**.	Less Than Significant
Access		
Construction		
As outlined in MM J-1, Construction Traffic Management Plans would be implemented during construction to provide for temporary traffic controls to ensure adequate emergency access to all residences and businesses adjacent to the roadways impacted by utility construction activities. Thus, any potential access impacts from Project-related construction would be reduced to a less than significant level.	Refer to **MM J-1** above.	Less Than Significant with Mitigation
Operation		
The Project would not exceed the vehicular capacity at either proposed entrance and therefore would not result in a significant access impact associated with queuing. MM J-7, combined with the proposed improvements at the intersection of SR-14 Northbound Ramp/Placerita Canyon Road (MM J-8), would improve traffic operations within the Project area as well as ingress/egress to the Development Area.	**MM J-7:** Current Ranch main entrance/ Placerita Canyon Road (Easterly Driveway): Prior to issuance of the first certificate of occupancy, the Project Applicant shall install a traffic signal at this intersection. The eastbound approach of Placerita Canyon Road at the intersection shall be striped to provide for a	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
A sight distance analysis was also conducted for the proposed access locations and the emergency access driveway along Placerita Canyon Road. The access locations would be designed to provide the required sight distances. Therefore, impacts would be less than significant.	left-turn only lane to improve access to the Ranch. This intersection's southbound approach exiting the Development Area shall be striped to provide one left-turn lane and one right-turn lane. These improvements shall be the sole responsibility of the Project. Detailed striping/signing and traffic signal plans shall be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation. **MM J-8:** Placerita Canyon Road (new Ranch main entrance)/SR-14 Northbound Off-Ramp: The Project shall provide a direct entrance, if approved by Caltrans, to the Development Area from the SR-14 northbound off-ramp to allow immediate access to the Project. This intersection shall be signalized and the off-ramp widened to provide three lanes (one left-turn lane, one optional through and left-turn lane, and one right-turn lane). Eastbound to northbound left-turns shall be prohibited, and southbound movement out of the Development Area shall be limited to right-turns only. These improvements shall be the sole responsibility of the Project.	
CMP Intersections and Freeways		
The Congestion Management Plan (CMP) arterial monitoring stations closest to the Ranch are the intersections of Sierra Highway/Placerita Canyon Road, Sierra Highway/Soledad Canyon Road and Sierra Highway/Newhall Avenue. The Project is not expected to add 50 or more trips through these latter two stations during either the A.M. or P.M. weekday peak hours. A potentially significant CMP impact would occur at	Refer to **MM J-6** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
the intersection of Sierra Highway and Placerita Canyon Road during the P.M. peak hour. This impact would be reduced to a less than significant level with implementation of MM J-6, discussed above. Regarding freeway operating conditions, none of the impacted freeway segments is projected to operate at LOS F in the impacted direction and peak hour, and, therefore, the Project would not create a significant impact. Thus, the Project would not create a significant impact at any of the CMP freeway monitoring locations during the A.M. or P.M. peak hours. Regarding regulatory consistency, based on the lack of impacts to the nearest CMP freeway monitoring locations and mitigation of the one significantly impacted CMP intersection, impacts with respect to consistency with the CMP would be less than significant. Implementation of the off-site infrastructure improvements would not result in uses that generate traffic on a regular basis. Therefore, negligible, if any, impacts would occur.		
Alternative Transportation Policies, Plans, Programs, and Facilities		
The Project, by virtue of its construction and operational characteristics as well as its PDFs and roadway improvements (proposed as part of the Project and as mitigation), would support many of the transportation goals and policies contained within the General Plan as well as the 1990 Area Plan. The Project would also encourage the use of alternative transportation through the implementation of various programs including a carpool matching program, preferred parking for low-emitting (Zero Emission) and fuel-efficient vehicles as well as carpool/vanpool vehicles; on-site secure, bicycle storage areas; etc. Thus, the Project would be consistent with the intent of the County General Plan Circulation Element, and impacts related to alternative transportation policies would be less than significant.	No mitigation is proposed or required.	Less than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Parking		
Construction		
During Project construction, an adequate number of parking spaces for construction workers would be available at all times within or immediately adjacent to the Development Area on the Ranch. Construction of the off-site infrastructure improvements would involve limited parking needs that would typically occur within the work zone. Therefore, Project construction would result in a less than significant impact with regard to the availability of parking spaces for construction workers, and traffic conditions would not be adversely affected.	No mitigation is proposed or required.	Less than Significant
Operation		
The majority of the Project's parking supply would be provided within surface lots adjacent to the soundstages and buildings on both the northern and southern pads, with additional parking provided in two surface lots located within the LADWP transmission corridor. Two Conditional Parking Areas located east of the Development Area have also been proposed for use if LADWP were to revoke the parking license agreement for parking within the transmission corridor. Thus, all Code-required parking could be supplied on the Ranch. The additional parking beneath the utility lines of the LADWP transmission corridor would provide surplus parking to meet worst-case demand requirements and give the Project flexibility regarding parking around the soundstages and office buildings. Furthermore, a limited number of parking spaces would be provided at the trailhead/staging area for the Placerita Canyon Connector Trail, as required by the County Department of Parks and Recreation. As a sufficient number of parking spaces would be provided within the Ranch, impacts would be less than significant. Operation of off-site infrastructure improvements would not result in uses that require parking, nor would any existing parking be removed. Therefore, no impacts would occur.	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
K.1 PUBLIC SERVICES—LAW ENFORCEMENT		
Construction		
Temporary lane closures, utility line and roadway construction, and the generation of short-term traffic due to the movement of construction equipment and hauling of soil and materials could slow or impede emergency access on-site and off-site. However, the Project would implement Construction Traffic Management Plans during construction to ensure emergency access to the Project site and surrounding vicinity is maintained. As such, impacts with respect to emergency access would be less than significant. During construction, equipment and building materials could be temporarily stored on-site, which could lead to theft. This could require Sheriff Department involvement unless adequate safety and security measures are implemented to secure the Development Area. With implementation of the PDFs such as perimeter fencing, construction-related impacts on law enforcement services would be less than significant.	**PDF K.1-1:** During construction, fencing shall be placed around the Development Area to prevent public entry and theft, and periodic and random private security patrols shall be conducted on the Development Area and the Ranch. **PDF K.1-2:** The Applicant shall notify the County of Los Angeles Sheriff's Department and California Highway Patrol a minimum of five business days prior to any Project-related lane closures or other road construction and ensure that emergency access remains clear and unobstructed. No mitigation is proposed or required; refer to **MM J-1** above.	Less Than Significant
Operation		
The Sheriff's Department has indicated that since the Project consists of non-residential uses, increased staffing or equipment at the Santa Clarita Valley Station would not be necessary to provide service to the Development Area, and impacts would be less than significant. With respect to emergency access during Project operations, the analysis provided in Section V.J, Traffic, Access, and Parking, of this Draft EIR demonstrates that Project development would result in a less than significant impact on access and local traffic conditions following mitigation. As such, impacts to CHP services are also expected to be less than significant.	**PDF K.1-3:** The Project's design shall incorporate state-of-the-art security features to provide for the safety of on-site employees and visitors including the provision of 24-hours per day, 7 days per week on-site private security guards with a guard kiosk positioned at the main vehicular entrance, closed circuit television cameras to monitor the Development Area and the Ranch, fencing around portions of the Development Area bordering SR-14 and Placerita Canyon Road, and alarm systems for all Project buildings with motion sensors and	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	video surveillance. **PDF K.1-4:** Upon Project completion and prior to issuance of the first certificate of occupancy, the Applicant shall provide the County of Los Angeles Sheriff's Department Santa Clarita Valley Station Commander with a diagram of each portion of the Development Area, including access routes. **PDF K.1-5:** The Project's design shall incorporate a Knox Box entry system and lighted building address numbers to facilitate emergency response. No mitigation is proposed or required	
Special Law Enforcement Problems		
The Project site is not located within an area of special law enforcement problems. Therefore, the Project would have no impacts associated with special law enforcement problems.	No mitigation is proposed or required.	No Impact
K.2 PUBLIC SERVICES—FIRE PROTECTION		
Construction		
The demand for fire protection and emergency medical services may be increased during Project construction. However, construction managers and supervisory personnel would be trained in emergency response and fire safety operations, as mandated by OSHA and Fire and Building Code requirements. Therefore, construction impacts on fire protection and emergency medical services would be less than significant. Temporary lane closures, utility line construction, as well as the generation of traffic due to the movement of construction equipment and hauling of soil and materials could slow or impede emergency access within and	**PDF K.2-1:** The Applicant shall notify the County of Los Angeles Fire Department a minimum of five business days prior to any Project-related lane closures or other road construction and ensure that emergency access remains clear and unobstructed. **PDF K.2-2:** In accordance with County of Los Angeles Fire Department requirements, all required fire hydrants shall be installed, tested,	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
around the Project site. However, the Project would implement Construction Traffic Management Plans during construction to ensure emergency access to the Project site and the surrounding vicinity is maintained, consistent with County Fire Department requirements. As such, impacts with respect to emergency access would be less than significant.	and accepted prior to combustible building construction, and vehicular access to such hydrants shall be maintained during construction. **PDF K.2-3:** The Applicant shall submit a fire exhibit that depicts detailed design requirements to the County of Los Angeles Fire Department for review and approval prior to the recordation of the final map or the approval of a building permit. **PDF K.2-6:** All Project construction managers and supervisory personnel shall be trained in emergency response and fire safety operations and a log documenting such training shall be made available for inspection within five business days upon request by the County of Los Angeles Fire Department and County of Los Angeles Department of Regional Planning. **PDF K.2-7:** Fire suppression equipment specific to Project construction activities shall be maintained on the construction site in accordance with Occupational Safety and Health Administration and County of Los Angeles Fire Code requirements. No mitigation is proposed or required; refer to **MM J-1** above.	
Operation		
The Project's daytime population would increase the demand for County Fire Department protection and emergency medical services. However, the Project would not, in and of itself, be expected to require new or	**PDF K.2-4:** Following construction and prior to the issuance of the first certificate of occupancy, the Applicant shall submit an emergency	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
physically altered facilities. The proposed water storage and distribution system would be designed to meet the fire flow requirements established by the County Fire Department, and the existing 500,000 gallon water tank located within the eastern portion of the Ranch would remain operational. Regarding emergency access, Section V.J, Traffic, Access, and Parking, of this Draft EIR, demonstrates Project development would result in a less than significant impact with mitigation on access. Further, the Project would include an array of fire safety design features and through the fire exhibit approval process, additional design features would be specified and incorporated into the Project, as necessary, to ensure adequate fire protection. As such, impacts related to fire protection would be less than significant. Implementation of the off-site utility and roadway improvements would not include habitable structures or introduce a new population and as such would not contribute to the demand for fire protection services. Therefore, the Project would have no operational impacts on fire protection services associated with the Off-Site Infrastructure Improvement Areas.	response plan for approval by the County of Los Angeles Fire Department. The emergency response plan shall include, but not be limited to, the following: mapping of site access and emergency exits, evacuation routes for vehicles and pedestrians, and locations of the nearest hospitals and fire stations. **PDF K.2-8:** The Project shall incorporate building design features that comply with applicable Los Angeles County Code fire safety requirements. Fire safety design features shall include, but shall not be limited to, the following: use of fire-resistant building materials where appropriate, smoke detection and fire alarm systems throughout most buildings, automatic sprinkler systems where necessary, portable fire extinguishers, and emergency exit signage in all buildings. **PDF K.2-9:** The Project shall provide approved street signs, building access numbers, and all-weather emergency access to and within the Development Area. Secondary emergency access shall be provided via a gated driveway on Placerita Canyon Road, between the new main entrance and the current Ranch main entrance. With the exception of the access drive to the proposed electrical substation and the proposed water tank, none of the Project's driveways shall be of a single access design. No mitigation is proposed or required.	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Special Fire Protection		
Given the Development Area's location within a Very High Fire Hazard Severity (VHFHS) Zone, the Project would comply with all applicable Fire Code and County ordinance requirements regarding construction, access, water mains, fire hydrants, fire flows, and brush clearance for this zone. The final fuel modification plan would provide for appropriate setbacks, landscaping, irrigation, and vegetation thinning to create adequate defensible space around all potentially combustible structures and to ensure safe ingress/egress for Fire Department vehicles and personnel. Through compliance with applicable Fire Code and County Fire Department requirements, as well as approval and implementation of the fuel modification plan, impacts with respect to wildfire risk would be less than significant.	**PDF K.2-5:** The Applicant shall submit a final fuel modification plan, consistent with the approved Preliminary Fuel Modification Plan contained in Appendix F.8 of the Draft EIR, to be reviewed and approved by the County of Los Angeles Fire Department in accordance with its Fuel Modification Plan Guidelines prior to the issuance of building permits. No mitigation is proposed or required.	Less Than Significant
L.1 UTILITIES AND SERVICE SYSTEMS—WATER SUPPLY		
Water System Capacity		
Construction		
The Project would require the installation of an on-site water distribution system that would connect to off-site improvements. All improvements would be designed in accordance with the County Code, including the Fire Code, and would be constructed to the satisfaction of the LACDPW, NCWD, and/or the County Fire Department, as applicable. Therefore, the Project's construction impacts associated with installation of the proposed water improvements would be less than significant. The off-site water improvements would require trenching which would necessitate temporary lane closures. All improvements would be designed in accordance with the County Code and the City of Santa Clarita Municipal Code, as applicable, including their respective Fire Codes, and would be constructed under the oversight of each jurisdiction's Department of Public Works, NCWD, and/or the County Fire Department, as applicable. All lane closures would be conducted per Construction Traffic	**PDF L.1-1:** The Project shall include the construction of a 2,000,000 gallon water tank and associated water line to be located on the Ranch south of Placerita Canyon Road (i.e., within the Water Tank Area). No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Management Plans detailed in MM J-1. Vehicle access impacts would be temporary and would cease once the water lines were completed and connected. Therefore, the Project's construction impacts would be less than significant.		
Operation		
The Project would increase the overall demand for domestic and fire water within the Development Area. However, the Applicant would construct the necessary infrastructure improvements to accommodate Project demand, including a two million gallon water tank that would provide 1.3 million gallons of supplemental capacity for NCWD, and water system capacity problems would not occur. Therefore, the Project's operational impacts on the existing water system would be less than significant. Implementation of the off-site infrastructure improvements would not include uses that generate a demand for water. Therefore, impacts would be less than significant.	No mitigation is proposed or required.	Less Than Significant
Water Supply		
Construction		
A short-term demand for water would occur during Project construction. These activities would occur incrementally through Project buildout and would be temporary in nature. The amount of water used during construction is not expected to be substantial, and an adequate supply of water would be available for construction purposes from the on-site well. Construction dewatering would not be required and construction impacts to groundwater would not occur. Therefore, potential construction-related impacts related to water supply would be less than significant. A short-term demand for water would also occur during construction of the off-site infrastructure improvements. The amount of water used during construction would vary but is not expected to be substantial. Potential construction-related off-site impacts related to water supply would also be	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
less than significant.		
Operation		
NCWD's total projected water supplies available during the next 20 years will meet the projected water demands associated with the Project and existing and other planned uses within NCWD's service area. Therefore, water supply impacts would be less than significant. In addition, impacts with respect to the existing private well water system would be less than significant. Operation of the off-site infrastructure improvements is not anticipated to generate water demand. As such, water supply impacts associated with the off-site infrastructure improvements would be less than significant.	**PDF L.1-2:** The Project shall incorporate water conservation features pursuant to Title 20 Section 1605 of the California Code, which shall reduce the Project's water demand by at least 20 percent. **PDF L.1-3:** The Project shall incorporate water conservation features that shall reduce the Project's landscaping water demand by at least 50 percent. No mitigation is proposed or required.	Less Than Significant
Fire Flow and Fire Water Supply		
The Project's on- and off-site water infrastructure would be designed to meet or exceed fire flow requirements established by the County Fire Department. Therefore, impacts associated with fire water supply and fire flow would be less than significant.	No mitigation is proposed or required.	Less Than Significant
L.2 UTILITIES AND SERVICE SYSTEMS—WASTEWATER/SEWAGE DISPOSAL		
Wastewater Treatment Requirements		
The Project is not anticipated to generate sewage flows containing constituents that would jeopardize the ability of the Santa Clarita Valley Joint Sewerage System (SCVJSS) to operate within its established wastewater treatment requirements. Further, wastewater from the Project would be treated according to the treatment requirements enforced by the NPDES permit authorized by the LARWQCB. Implementation of the off-site infrastructure improvements would not include uses that generate wastewater. Therefore, the Project would not exceed any wastewater	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
treatment requirements, and impacts would be less than significant.		
Wastewater System Capacity		
Construction		
Wastewater generated from Project construction is not anticipated to enter the local conveyance system and therefore would not affect existing sewer line capacities in the area. As such, Project construction impacts to the wastewater system would be less than significant. The Project's proposed on- and off-site wastewater improvements would be designed in accordance with applicable standards and constructed to the satisfaction of the County Sanitation Districts, LACDPW, and the City of Santa Clarita Department of Public Works, as appropriate. Temporary lane closures would be necessary along segments of certain roadways and would be conducted per the Construction Traffic Management Plans (see MM J-1). Vehicle access impacts would be temporary and would cease once the improvements were completed and connected. Therefore, the Project's construction impacts would be less than significant. Upon compliance with Los Angeles County Department of Public Health Environmental Protection Bureau conditions, the Project would not result in any adverse impact with respect to replacement of the existing septic tank. The existing private septic sewer systems that serve the other residential and office buildings on the Ranch would not be affected by the Project.	**PDF L.2-2:** The sewer line proposed as part of the Project within the City of Santa Clarita shall be encased where it crosses the City of Los Angeles Department of Water and Power aqueduct (constructed above ground) and Placerita Creek (two crossings below ground). No mitigation is proposed or required.	Less Than Significant
Operation		
Development of the Project would result in an increase in wastewater flows during Project operations. The Project's proposed wastewater collection system would be sized to account for Project wastewater as well as potential wastewater flows generated by future downstream development. Additionally, based on the approved Sewer Area Study, the Project would not require any upgrades to the City's existing downstream system. As such, Project operations would not cause any wastewater system capacity problems or result in a significant impact associated with new or expanded	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
wastewater facilities. Therefore, impacts would be less than significant. Implementation of the off-site infrastructure improvements would not include uses that would generate wastewater. As such, impacts would be less than significant.		
Wastewater Treatment Facilities		
Construction		
Wastewater generated from Project construction activities would not enter the local conveyance system and therefore would not require treatment. Therefore, Project construction impacts on wastewater treatment facilities would be less than significant.	No mitigation is proposed or required.	Less Than Significant
Operation		
Wastewater generated by the Project would not require additional treatment beyond that typically provided for domestic wastewater flows from restrooms and kitchens. Wastewater generated within the Development Area would ultimately be conveyed for treatment at one of the water reclamation plants within the SCVJSS, which has adequate capacity to accommodate Project flows. The Off-Site Infrastructure Improvement Areas would not include uses that would generate wastewater. Therefore, operational impacts on wastewater treatment facilities would be less than significant.	**PDF L.2-1:** In compliance with the requirements of the County Sanitation Districts of Los Angeles County, kitchen drains shall be provided with oil separators to treat wastewater prior to discharge to the on-site sewer system. No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
L.3 UTILITIES AND SERVICE SYSTEMS—SOLID WASTE		
Construction		
Construction of the Project would require earthwork, the demolition of an existing building, and the construction of new buildings in the Development Area. Project construction would therefore generate construction and demolition waste, approximately 75 percent of which would be recycled, resulting in approximately 305.5 tons for disposal, in addition to approximately 350,000 cubic yards of soil export.[7] As indicated in the 2009 CoIWMP, unclassified landfills have adequate capacity and generally do not face capacity shortages. Thus, the County's unclassified landfills would have adequate capacity to accommodate Project-generated construction and debris waste, and construction-related impacts regarding solid waste would be less than significant. Construction of the off-site infrastructure improvements would require earthwork, which would generate soil for export that would be sent to the County's unclassified landfills. Impacts from the off-site infrastructure improvements related to landfill capacity in the region would be less than significant.	**PDF L.3-2:** The Project shall establish a Solid Waste Diversion Program of 75 percent for Project construction. **PDF L.3-3:** The Applicant shall ensure that the construction contractor shall only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as required per the Los Angeles County Code and demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits. No mitigation is proposed or required.	Less Than Significant
Operation		
The Project would dispose approximately 1,364 tons of solid waste per year at County's Class III landfills, which would represent approximately 0.0009 percent of the 2009 estimated remaining capacity at the County's	**PDF L.3-1:** The Project shall establish a Solid Waste Diversion Program of 50 percent for Project operations.	Less Than Significant

[7] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated herein.*

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Class III landfills and 0.02 percent of the solid waste disposed at Class III landfills in the County of Los Angeles in 2009. At least 50 percent of the solid waste generated by the Project would be diverted through implementation of the PDFs. The off-site improvements do not include habitable structures that would generate solid waste. Thus, the available capacity of the existing and/or planned landfills would not be exceeded, and impacts on solid waste generation from operation of the Project and off-site infrastructure improvements would be less than significant.	**PDF L.3-4:** The Applicant shall provide readily accessible areas around the Project site for the deposit, storage, and collection of non-hazardous materials for recycling. No mitigation is proposed or required.	
Compliance with Solid Waste Regulations		
As discussed above, 75 percent of Project construction waste would be recycled, and at least 50 percent of the Project operational waste would be diverted through implementation of the PDFs. In addition, the Project would comply with County requirements related to recycling. The off-site infrastructure improvements do not include habitable structures that would generate solid waste. Therefore, construction and operational activities would comply with solid waste regulations, and the Project would result in less than significant impacts.	No mitigation is proposed or required.	Less Than Significant
L.4 UTILITIES AND SERVICE SYSTEMS—ENERGY		
Compliance with Los Angeles County Green Building and Drought-Tolerant Landscaping Ordinances		
The Project would incorporate relevant sustainability features set forth in the County's Green Building ordinance and would comply with the County's Green Building Standards, including achievement of various levels of LEED™ Certification, as applicable, as detailed in PDF L.4-2. PDF F-1 would ensure that at least 75 percent of the Project's landscaped area would contain plants from the Los Angeles County Drought-Tolerant Plant List, in accordance with the Drought-Tolerant Landscaping ordinance. As such, impacts related to the Project's compliance with Los Angeles County Green Building and Drought-Tolerant Landscaping ordinances would be less than significant.	**PDF L.4-2:** As part of the Project, the proposed soundstages, production offices, and the administration building shall comply with the County's Green Building ordinance and achieve Leadership in Energy and Environmental Design (LEED™) Silver Certification. The commissary shall comply with the County's Green Building ordinance and achieve LEED™ Certification. The writers/producers bungalows shall comply with the County's Green Building ordinance. While the mills and the warehouse are exempt	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
The off-site infrastructure improvements do not include habitable structures requiring building permits and would not be subject to the County's Green Building or Drought-Tolerant Landscaping ordinances. No impact relative to compliance would occur.	from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they shall comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant would be exempt from the County's Green Building ordinance. No mitigation is proposed or required.	
Inefficient use of Energy Resources		
The Project would, in conjunction with LEED™ design elements, include a variety of conservation features intended to reduce energy usage by at least 15 percent below the equivalent of Title 24 (2008) standards. The off-site infrastructure improvements do not include habitable structures that would require the use of energy resources. Therefore, the Project would not involve the inefficient use of energy resources, and impacts would be less than significant.	**PDF L.4-1:** The Project shall incorporate energy conservation features to reduce energy usage by at least 15 percent below the equivalent of Title 24 (2008) standards. No mitigation is proposed or required.	Less Than Significant
Electricity		
Construction		
Overall, construction activities would require limited electricity consumption not expected to have an adverse impact on available electricity supplies or infrastructure. With the exception of an estimated nine SCE power poles to be replaced off-site, construction of the improvements related to the Project's power needs would occur within Ranch property and are not anticipated to affect surrounding uses or existing electricity infrastructure. The Project's on-site construction activities would not create electrical system capacity problems, create problems with the provision of electrical service, or result in a significant impact associated with the construction of	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
new or expanded electricity facilities. As such, impacts would be less than significant. Overall, off-site construction activities would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies or infrastructure. The replacement of the estimated nine existing overhead distribution poles would be scheduled so as to minimize disruption of service to other users in the area. Therefore, impacts would be less than significant.		
Operation		
The Project would account for approximately 0.01 percent of future electricity usage throughout SCE's planning area. While the availability of electricity depends upon adequate generating capacity and fuel supplies, SCE has indicated it can supply the Project's estimated power requirement. The incorporation of a variety of energy conservation measures beyond those required under Title 24 also would ensure considerable reductions in energy usage. The off-site infrastructure improvements do not include habitable structures that would require the use of electricity. The booster pump needed for the proposed off-site water line would have limited energy needs of approximately 200 to 300 amperes (roughly equivalent to that of a single-family residence), similar to other water infrastructure that already exists in the area (e.g., near Deputy Jake Drive where multiple water tanks exist). As such, operational impacts associated with electricity supplies, infrastructure, and energy conservation requirements would be less than significant.	No mitigation is proposed or required.	Less Than Significant
Natural Gas		
Construction		
The construction of new buildings and infrastructure typically does not involve the consumption of natural gas. Therefore, natural gas would not be supplied to support Project construction activities and there would be no demand generated by the construction of new on-site facilities or the	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
off-site utility improvements. Construction of the central utility plant and an on-site natural gas distribution system would occur within Ranch property and is not anticipated to affect surrounding uses or existing gas infrastructure. In addition, The Gas Company would be notified in advance of proposed ground disturbance activities to ensure avoidance of natural gas lines and disruption of gas service. Therefore, Project impacts on natural gas associated with on-site and off-site short-term construction activities would be less than significant.		
Operation		
The Project's natural gas consumption would represent approximately 0.001 percent of The Gas Company's total 2008 natural gas deliveries and roughly 0.001 percent of total demand in the service area in 2020. The Gas Company has concluded existing and planned natural gas supplies would be sufficient to support the Project's natural gas consumption. The Gas Company has also indicated that it has the necessary facilities to serve the Project without impacting existing service in the area. The off-site infrastructure improvements do not include habitable structures that would require the use of natural gas. As such, operational impacts associated with natural gas supplies, infrastructure, and energy conservation requirements would be less than significant..	No mitigation is proposed or required.	Less Than Significant
M. ENVIRONMENTAL SAFETY/FIRE HAZARDS		
Hazardous Materials Use, Storage, and Management		
Construction		
During grading and building construction, common construction-related hazardous materials could be used, handled, and/or stored on-site, which could increase the potential for hazardous materials releases and, subsequently, the exposure of people and the environment to hazardous materials. However, implementation of PDF M-1 would ensure all potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance	**PDF M-1:** All hazardous materials within the Project site shall be acquired, handled, used, stored, transported, and disposed of in accordance with all applicable federal, State, and local requirements. No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
with applicable standards and regulations, which would prevent or minimize the potential for accidental releases. Any associated risk would be adequately reduced to a less than significant level. As such, on-site construction would not create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials or use of pressurized tanks. In addition, on-site construction activities would not handle hazardous materials, substances, or waste within 0.25 mile of a sensitive land use or an existing or proposed school. For similar reasons, impacts from construction of the off-site infrastructure improvements would be reduced to a less than significant level through regulatory compliance. Further, none of the construction activities would pose a potentially dangerous fire hazard beyond that associated with the typical use of fuels and oils, and the construction activities within the Off-Site Infrastructure Improvement Areas would not be expected to emit hazardous emissions or utilize acutely hazardous materials. As such, despite the proximity of sensitive uses, construction within the Off-Site Infrastructure Improvement Areas would not create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials or use of pressurized tanks.		
Operation		
Through the development of new facilities, both the number of hazardous materials users and the quantity of hazardous materials being used would increase. With implementation of hazardous materials management on-site and implementation of PDF M-1, operational impacts associated with the on-site use, storage, transport, and management of hazardous materials would be less than significant. On-site operations would not involve the use or generation of hazardous materials, substances, or waste within 0.25 mile of a sensitive land use or an existing or proposed school.	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
In addition, it is anticipated that hazardous waste generating activities would also increase. However, implementation of source reduction measures required under the Hazardous Waste Source Reduction and Management Review Act (SB 14) are anticipated to reduce the generation of operational hazardous waste streams. Due to these required on-site waste reduction efforts and the fact that the majority of typical/operational hazardous waste would be conveyed to licensed treatment, disposal and resource recovery facilities, it is not anticipated that the Project would result in a significant increase in demand for hazardous waste landfill capacity. Compliance with applicable regulations related to the handling, storage and disposal of hazardous waste would be effective in reducing the potential for a release of hazardous substances from the proposed uses, including the proposed central utility plant. In the event of an accidental release of hazardous materials, the Applicant would follow appropriate emergency response procedures, as detailed in Section V.M, Environmental Safety/Fire Hazards. Thus, a less than significant impact would result. The Off-Site Infrastructure Improvement Areas would not include uses that would result in a corresponding increase in the acquisition, use, handling and storage of hazardous materials. With compliance with regulatory requirements, off-site operational impacts associated with the use, storage, transport, and management of hazardous materials and waste would be less than significant.		
Upset and Accident Conditions		
Construction		
Asbestos containing materials (ACMs) and lead-based paint (LBP) could be encountered during demolition activities, which could expose workers to hazardous materials and result in a potentially significant impact. However, implementation of PDF M-1, MM M-4 and MM M-5 would ensure that any potential ACMS or LBPs found during construction would be managed in accordance with all applicable laws and regulations. Thus, impacts would	**MM M-1:** If previously unidentified soil contamination is observed by sight or smell or indicated by testing by a qualified professional using a portable volatile organic compound analyzer during excavation and grading activities, excavation and grading within such an	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
be less than significant. Given the current and previous use of the Ranch portions of the Project site, it is not likely that Polychlorinated Biphenyls (PCBs) are present. Nonetheless, in the event that PCBs are found and may have contaminated soils, MM M-1 through MM M-3 would be implemented in accordance with SCAQMD's Rule 1166, to make the area suitable for grading activities to resume. Therefore, potential impacts would be reduced to less than significant levels. No USTs are known to exist on the Ranch. As such, Project construction would not be expected to uncover or disturb USTs. Construction within the Development Area would not occur near or otherwise disturb the existing ASTs located on the Project site. Implementation of MM M-1 through MM M-3 would address the potential discovery of contaminated soil during construction, excavation and grading activities. As such, Project construction would not result in a significant impact related to USTs or ASTs. Two plugged and abandoned oil wells have been mapped within the westernmost portion of the Development Area. The Applicant would coordinate with the County to ensure County and California Department of Conservation Division of Oil, Gas and Geothermal Resources (DOGGR) requirements regarding development in proximity to active and abandoned oil wells would be met, as ensured via implementation of MM M-6 and MM M-7. Therefore, impacts associated with development in proximity to abandoned wells or with any previously unidentified abandoned oil wells would be less than significant. Active oil production occurs at the southwest corner of the Ranch (near the Water Tank Area). With the exception of the proposed water tank, water line, associated infrastructure, and portions of the trail, no Project construction would occur in this area. The potential also exists for unknown abandoned wells to be located in the area. Thus, the Applicant would coordinate with the County to ensure County and DOGGR	area shall be temporarily halted and redirected around the area until the appropriate evaluation and follow-up measures are implemented, as contained in the South Coast Air Quality Management District's Rule 1166, to make the area suitable for grading activities to resume. The contaminated soil shall be evaluated and excavated/disposed of, treated in-situ (in-place), or otherwise managed and disposed of in accordance with all applicable federal, State, and local laws and regulations. **MM M-2:** During grading for construction of the proposed water tank and associated water line in the southwest corner of the Ranch and construction in the westernmost portion of the Development Area containing abandoned oil wells, a qualified professional shall observe by sight or smell and test using a portable volatile organic compound analyzer the surrounding soil for the presence of potential contaminants. Any soil found to be contaminated shall be excavated/disposed of, treated in-situ (in-place), or otherwise managed and disposed of in full compliance with all applicable federal, State, and local laws and regulations, including the South Coast Air Quality Management District's Rule 1166. **MM M-3:** Prior to the issuance of any grading permit, a qualified professional shall conduct soil testing for pesticides, petroleum hydrocarbons, and vapors in the following areas where agricultural operations and oil production	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
requirements regarding development in proximity to active or abandoned oil wells would be met, as ensured via implementation of MM M-6 and MM M-7. Therefore, impacts associated with proximity to existing and abandoned oil wells and the potential uncovering of abandoned oil wells would be less than significant. Construction in the Off-Site Infrastructure Improvement Areas would not involve the demolition of any structures and therefore would not present any potential for the release of ACMs, LBP, or PCBs. Additionally, no USTs or ASTs are known to exist within the proposed improvement areas. However, oil production uses do occur throughout the vicinity and associated wells may exist on private properties near the Off-Site Infrastructure Improvement Areas, but do not exist within the public rights-of-way within which the vast majority of improvements would be located. Additionally, the Oak Orchard Alignment for the proposed sewer line would traverse The AES Corporation's property, which has been identified in the Envirofacts database as a small generator of hazardous waste. As such, construction of the Off-Site Infrastructure Improvements would comply with County and DOGGR requirements regarding development in proximity to active and abandoned oil wells, if any are found. Similarly, the Applicant (and the City of Santa Clarita, who would be responsible for construction of the City portions of the Oak Orchard Alignment) would coordinate with the County Fire Department and any other appropriate regulatory agency in the event USTs or ASTs are discovered within the construction zone. With implementation of these required procedures, rules and regulations, as well as mitigation if needed, impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.	activities have occurred but testing has not been previously conducted: the portion of the Development Area located east of the southern fill pad, the Water Tank Area, and the Conditional Parking Areas, if developed. Any soil found to be contaminated shall be evaluated, managed, treated or disposed in full compliance with all applicable federal, State, and local laws and regulations prior to construction in the affected area. **MM M-4:** Prior to the issuance of any demolition permit for an existing building within the Project site with asbestos-containing materials, the Applicant shall provide a copy of the qualifications/license of the asbestos abatement contractor that will perform the abatement or removal of asbestos to the County of Los Angeles Department of Public Works Building and Safety Division and the County of Los Angeles Fire Department Health Hazardous Materials Division. If required, the Applicant shall submit a Hazardous Building Materials Demolition Assessment and Management Plan to the County of Los Angeles Department of Public Works and the County of Los Angeles Fire Department for review and approval to ensure compliance with all applicable federal, State, and local laws and regulations. **MM M-5:** Prior to the issuance of any demolition permit for any existing building within the Project site containing lead-based paint, the Applicant shall provide a copy of the qualifications/license	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	of the lead-based paint abatement contractor that will perform the abatement or removal of lead-based paint to the County of Los Angeles Department of Public Works Building and Safety Division and the County of Los Angeles Fire Department Health Hazardous Materials Division. If required, the Applicant shall submit a Hazardous Building Materials Demolition Assessment and Management Plan to the County of Los Angeles Department of Public Works and the County of Los Angeles Fire Department for review and approval to ensure compliance with all applicable federal, State, and local laws and regulations. **MM M-6:** In accordance with Section 110.4 of the County of Los Angeles Building Code, the Project development plans shall comply with the required setbacks from oil and gas wells, as determined by the California Department of Conservation Division of Oil, Gas and Geothermal Resources and the County of Los Angeles Department of Public Works. As part of these requirements, buildings or structures to be located between 25 to 200 feet of active, abandoned or idle oil or gas wells shall be designed according to recommendations prepared by a licensed Civil Engineer and approved by the County Building Official. **MM M-7:** Prior to issuance of a grading permit, the Applicant shall submit documentation to the County of Los Angeles Fire Department to verify that all oil wells within 200 feet of Project	

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
	buildings or structures have been properly abandoned according to required standards. If the wells were not abandoned properly, as determined by the California Department of Conservation Division of Oil, Gas and Geothermal Resources, the wells shall be re-abandoned in accordance with the requirements of the California Department of Conservation Division of Oil, Gas and Geothermal Resources. Also refer to **PDF M-1**.	
Operation		
Building materials would include commercially sold materials that are not anticipated to increase the occurrence of friable asbestos, ACMs, or LBPs at the Ranch. With compliance with existing laws and regulations, operation of the Project would not expose people to substantial risk resulting from the release or explosion of a hazardous material, or from exposure to a health hazard, in excess of regulatory standards. Therefore, no significant impacts associated with asbestos, ACMs, and LBPs are anticipated from operation of the Project. No known sources of PCBs are located within the Project site and modern electrical facilities and fixtures are no longer permitted to contain. As such, the development and maintenance of electrical systems associated with the Project would not expose persons to PCBs. All operations on the Ranch would continue to comply with applicable laws in the future. Therefore, no significant impacts associated with human exposure to PCBs are anticipated from Project operation. There are no known USTs within the Ranch, and Project development would not disturb the existing ASTs located on the Project site. No modifications to the existing ASTs or the development of new USTs or ASTs are proposed by the Project. In addition, compliance with applicable regulations related to the handling, storage and disposal of hazardous	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
waste would be effective in reducing the potential for a release of hazardous substances from the proposed uses. Therefore, no impact associated with USTs or ASTs and hazardous waste would result. Oil production within the southwest corner of the Ranch would be unaffected by the Project. The Project also would not affect access to the known abandoned wells located within the westernmost portion of the Development Area adjacent to SR-14. Furthermore, the Project would comply with all regulatory requirements associated with proximity to active and abandoned wells (see MM M-6 and MM M-7 above). As a result, Project operations would have a less than significant impact on active or known abandoned wells and oil wells. Other than limited aboveground infrastructure such as a booster pump station and a sewer crossing of the LADWP aqueduct, which would be located on public property, the utility improvements would involve underground pipelines that would not be visible following installation and repaving of the roadways. The off-site roadway intersection improvements would occur within or immediately adjacent to existing roadways (within existing right-of-way) and would not represent a change in use from existing conditions. The off-site infrastructure improvements would not include any habitable structures that could expose people to ACMs, LBPs, or PCBs, nor would they involve any USTs or ASTs. As such, no impacts relative to upset and accident conditions involving the release of hazardous materials would occur.		
Emergency Response Plan		
Construction Management Plans (MM J-1) would be implemented during construction to ensure adequate emergency access to and within the Ranch and in the surrounding vicinity is maintained. Therefore, construction of the Project is not anticipated to significantly affect emergency access nor impair implementation of, or physically interfere with, any adopted or on-site emergency response or evacuation plans or a local, state, or federal agency's emergency evacuation plan. Impacts	Refer to **MM J-1, MM J-5 through MM J-8, and PDF K.2-4** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
would be less than significant. As part of the Project, an emergency response and/or evacuation plan for the proposed studio development would be submitted to the County Fire Department and the County Department of Public Works, as appropriate, as specified in PDF K.2-4. The Project's roadway impacts would be reduced to a less than significant level with the traffic mitigation measures specified in Section V.J, Traffic, Access, and Parking, of this Draft EIR. Adequate routes for emergency response and evacuation would be provided to and throughout the Project site. Therefore, the Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.		
Fire Hazards		
Given the Project site's location within a VHFHS Zone, the Project would comply with all applicable Fire Code and County ordinance requirements regarding construction, access, water mains, fire hydrants, fire flows, and brush clearance for this zone. A final fuel modification plan would be submitted for review and approval to the Forestry Division of the County Fire Department before the issuance of building permits. In addition, the Project would implement Construction Traffic Management Plans during construction to ensure emergency access, as previously discussed. Further, the Project's roadway impacts would be reduced with mitigation as outlined in Section V.J., Traffic, Access, and Parking, of this Draft EIR. Regarding fire flow, with the incorporation of the on- and off-site water improvements, adequate fire flow would be available for the Project. Additionally, the existing 500,000 gallon water tank located within the eastern portion of the Ranch would remain operational and would continue to be available to fight off-site fires. No known potentially dangerous fire hazard uses have been identified in close proximity to the Project site. With respect to the Off-Site Infrastructure Improvement Areas, while small generators of hazardous waste exist in close proximity, such uses do not represent dangerous fire hazards beyond those hazards already	No mitigation is proposed or required; refer to **MM J-1 and PDF K.2-5** above.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
addressed above. Therefore, impacts with respect to fire hazards would be less than significant.		
Soil Toxicity and Groundwater		
Subsurface soil contamination was found at the Project site at very low concentrations that are not anticipated to represent an environmental hazard to humans. Thus, the potential for grading activities to expose workers to unidentified subsurface soil contamination or result in the release of hazardous materials into the environment would be low. Nonetheless, in the unanticipated event that subsurface soil contamination was found during grading, implementation of MM M-1 and MM M-2 would ensure proper treatment. There are also numerous active and abandoned wells within the southwest corner of the Ranch. While no inhabited structures are proposed on this portion of the Ranch, the Project's proposed water delivery infrastructure would include construction within this area of the Ranch. Thus, there is the potential for unknown subsurface soil contamination to be present in this area and although not anticipated, the construction of the proposed water infrastructure has the potential to expose workers to subsurface soil contamination or result in the release of hazardous materials into the environment. Implementation of MM M-1 through MM M-3 would ensure potential impacts would be less than significant. These mitigation measures also would be used in the area of the abandoned wells within the westernmost portion of the Development Area adjacent to SR-14, as well as within the Off-Site Infrastructure Improvement Areas, as necessary, should any contaminated soils be discovered to ensure potential impacts would be less than significant. Groundwater contamination sources are not known to be located within two miles upstream of the Project site. Further, implementation of the Off-Site Infrastructure Improvements would not affect local groundwater resources. As such, impacts associated with groundwater contamination in the vicinity of the Project would be less than significant.	Refer to **MM M-1 through MM M-3** above.	Less Than Significant with Mitigation

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
Other Environmental Safety Factors		
In accordance with LADWP requirements, all habitable Project structures would be located a minimum of 100 feet from the dripline of the transmission lines within the LADWP transmission corridor. No other environmental safety factors that may affect or be caused by the Project exist in the area. No impact would occur.	No mitigation is proposed or required.	Less Than Significant
N. LAND USE		
Physical Division of an Established Community		
The Ranch is not part of an established community. The proposed facilities would not represent a departure from current uses within the Ranch and thus would not introduce new uses that may disrupt or divide any adjacent uses. Further, other than off-site utility and roadway improvements, all proposed development would be contained within the Ranch. With respect to the Project's general land use compatibility with nearby open space, national forest, and park lands, proposed development would be concentrated within a previously disturbed area in the westernmost portion of the Ranch, adjacent to SR-14. The vast majority of the Ranch would be maintained in its current, mostly undeveloped condition, with the exception of oak tree mitigation planting, which would further enhance the natural qualities and biotic value of the existing areas of the Ranch east of the Development Area. The Project would also be compatible with the natural resources and rural character of the area. With regard to the Project's physical operations, while operations could occur 24 hours per day, the majority of proposed studio and production uses would occur indoors, with little impact in terms of noise or light spillover onto off-site areas. Furthermore, the existing outdoor filming activities, which would continue under the Project, are currently permitted to occur 24 hours per day, and thus proposed operations would not change from current conditions. The Project would not substantially or	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
adversely change the existing relationships between the land uses or properties in surrounding neighborhoods or communities, nor would it have the long-term effect of adversely altering a neighborhood or community through ongoing disruption, division, or isolation. Land use impacts on surrounding uses would therefore be less than significant. Development within the Off-Site Infrastructure Improvement Areas would occur primarily in existing road rights-of-way that pass through various residential areas, including the subdivisions to the west and southwest of the Ranch. While construction of the improvements may temporarily affect nearby residences, no permanent physical improvements that could disrupt or divide an established community would occur. Limited aboveground utility facilities (e.g., a booster pump station and an encased portion of the sewer line crossing the LADWP aqueduct) would be constructed and would not be of a size, nature, or in a location that would disrupt or divide an established community, particularly given the amount of industrial, utility and other infrastructure that presently exist throughout the area. In addition, the proposed roadway improvements would involve the reconfiguration of existing intersections where conditions are developed and disturbed, and operation of the improved intersections would not represent a change in use from existing conditions. Therefore, development within the Off-Site Infrastructure Improvement Areas would not divide an established community, and impacts would be less than significant.		
Land Use Consistency		
As discussed in further detail in Section V.N, Land Use, of this Draft EIR, the Project would be consistent with the land use designations established or proposed for the Project site. With approval of the requested local plan amendment, the Project would be consistent with the designation set forth in the current 1990 Area Plan and, even though the current 1990 Area Plan applies to the Project, the Project would be consistent with the proposed designation set forth in the new Draft 2012 Area Plan. Additionally, the Project would not conflict with applicable goals and	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
policies of the County's General Plan, the Santa Clarita Valley Area Plan, or the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and Compass Blueprint. As such, on-site impacts related to consistency with applicable plans and the plan designations would be less than significant. The Off-Site Infrastructure Improvement Areas are located almost entirely in existing paved roadways within the City of Santa Clarita. Once implemented, the off-site infrastructure improvements would be almost entirely underground, and the Off-Site Infrastructure Improvement Areas would be returned to their existing uses. Similarly, replacement of the SCE power poles would occur in approximately the same locations as the existing power poles as would the proposed roadway improvements, and those areas would be returned to their current condition. As such, the off-site improvements would not result in a change in existing land use patterns which would be inconsistent with land use policies. Therefore, off-site impacts related to consistency with applicable plan designations would be less than significant.		
Zoning Designation Consistency		
The Ranch, including the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas, is zoned the A-2-1 (Heavy Agricultural—One Acre Minimum Required Area) and A-2-2 (Heavy Agricultural—Two Acres Minimum Required Area). Pursuant to Zoning Code Section 22.16.070, the Project would involve a zone change of the 44.28-acre tract map area from A-2-1 to C-M-DP (Commercial Manufacturing—Development Program). The zone change would allow the development of indoor studios on the westernmost portion of the Ranch. Further, the zone change would be consistent with the IO land use designation within the Draft 2012 Area Plan. The remaining approximately 846 acres of the Ranch would remain zoned A-2-1 and A-2-2. Within the Water Tank Area, Trail Area, Conditional Parking Areas, and Potential Mobile Home Relocation Areas, the proposed uses would be permitted in the A-2-1 and A-2-2 zones based on County	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
review and/or permit, similar to the existing conditionally-permitted filming uses within the Ranch. In particular, construction and use of the proposed water tank and the electrical distribution station and relocation of the Ranch foreman's mobile home would require a CUP. The Project would include a development program to provide specific development standards for the proposed soundstages and ancillary facilities within the 44.28-acre tract map area. The development program would ensure the re-zoned area of the Ranch is developed in harmony with the remaining areas of the Ranch and the surrounding area. The Project would comply with applicable Zoning Code requirements related to yards, walls, fences, loading facilities, landscaping, and other development features. With approval of the requested zone change and the associated conditional use permit, the Project would be consistent with the Los Angeles County Planning and Zoning Code. The Off-Site Infrastructure Improvement Areas are located primarily in existing paved roadways or right-of-way within the City of Santa Clarita. Once implemented, the off-site improvements would be almost entirely underground and the Off-Site Infrastructure Improvement Areas would be returned to their existing uses. As such, the off-site improvements would not result in inconsistency with existing zoning, and off-site impacts would be less than significant.		
Hillside Management Criteria, SEA Conformance Criteria, or Any Other Applicable Land Use Criteria Conflict		
The 1990 Area Plan designates the southern portion of the Development Area, the northern tip of the Development Area, and the entire Water Tank Area and Trail Area as Hillside Management (HM). The proposed studio and production uses are a natural extension of the existing filming uses within the Ranch and therefore would be considered appropriate to the site. As prescribed under the Hillside Management ordinance, a conditional use permit in the hillside management area would not be required because the Project would not include residential uses. As such, on-site impacts related to conflict with the Hillside Management ordinance	No mitigation is proposed or required.	Less Than Significant

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
would be less than significant. The existing SEA overlay maps, which are a part of the County's General Plan, do not overlap with the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, or the Conditional Parking Areas. As such, existing County policies regarding SEAs do not currently apply to the Project. The County, however, is in the process of updating the SEA overlay maps for the Santa Clarita Valley as part of the One Valley One Vision Plan, which is the Draft 2012 Area Plan. In the updated SEA overlay maps, portions of the Development Area, in particular, the hillside above the northern fill pad, Placerita Creek, and the Water Tank Area and Trail Area have been proposed for designation within the Santa Clara River SEA (SEA 20). This proposed designation excludes most of the Ranch floor and the two large, mostly barren fill pads within the Development Area. Because the Project applications were deemed complete on May 4, 2010, the Project is not anticipated to be subject to the Draft 2012 Area Plan and associated SEA regulations. Nevertheless, the Project would enhance the SEA area around the Development Area by improving Placerita Creek and planting native vegetation throughout the Project site. As previously analyzed, the Project would comply with the County's Green Building Program, including the Green Building ordinance, Drought-Tolerant Landscaping ordinance, and Low Impact Development Standards ordinance. As part of the Project, the segment of Delden Road that traverses the Development Area would be vacated. As this road does not exist in physical form, no impact would result. Also as part of the Project, the Applicant would dedicate a variable-width, 12- to 20-foot-wide easement for a proposed trail, referred to as the Placerita Canyon Connector Trail, which would be constructed as a public, multi-use trail for hiking, mountain-biking, and equestrian use and would connect to existing trails within Angeles National Forest. The trail would		

Table II-1 (Continued)
Summary of Environmental Impacts, Project Design Features, Mitigation Measures, and Resulting Levels of Significance

Environmental Impact Summary	Project Design Features and Mitigation Measures	Resulting Level of Significance
replace a County proposed Placerita Creek Connector Trail, which is designated within the Santa Clarita Valley Area Plan's Trails Plan as well as the new draft Conservation and Open Space Element and aligned along Placerita Creek. As previously described, the Off-Site Infrastructure Improvement Areas are generally flat and do not include any hillside areas. Within the Off-Site Infrastructure Improvement Areas, portions of the areas adjacent to some of the roadways where the improvements would occur are also designated as a Mineral Oil Conservation Area (MOCA), which is used to designate areas that have significant mineral aggregate resource areas (SMARA) and/or oil fields. Development of the utility and roadway improvements proposed within the Off-Site Infrastructure Improvement Areas would not interfere with the continuation of mineral/oil uses since the improvements would occur primarily within existing roadways. In addition, the existing SEA overlay maps, which are a part of the County's General Plan, do not overlap with the Off-Site Infrastructure Improvement Areas. Off-site impacts related to conflicts with Hillside Management Criteria, SEA Conformance Criteria, or any other applicable land use criteria would be less than significant.		

Source: Matrix Environmental, 2012.

III. Environmental Setting

III. ENVIRONMENTAL SETTING

A. INTRODUCTION

This section of the Draft EIR addresses the existing physical and regulatory conditions for the Project site, the Ranch, and the surrounding vicinity as required by CEQA Guidelines Section 15125. Detailed environmental setting information is provided in each of the environmental issue analyses provided in Section V, Environmental Impact Analysis, of this Draft EIR. The Project site consists of areas referred to herein as the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, and the Off-Site Infrastructure Improvement Areas.[1]

B. PROJECT LOCATION AND ENVIRONMENTAL SETTING

1. Regional Setting

The Ranch comprises approximately 890 acres located in the unincorporated Santa Clarita Valley area of the County.[2] The Ranch is located within the "Thirty Mile Zone," the area within a 30-mile radius of the intersection of Beverly and La Cienega Boulevards in the City of Los Angeles, which is home to the greatest concentration of studio-related activities in California. The Santa Clarita Valley, part of which lies within the Thirty Mile Zone, has become an established location for filming and is one of the most filmed areas in southern California due to its location, varied topography, and abundance of settings. The Santa Clarita Valley area is home to a number of filming ranches, including the Ranch. The film industry is an important contributor to the local and regional economy.

---

[1] *Refer to Figures IV-4 and IV-5 in Section IV, Project Description, for a depiction of each of the Project site areas within the Ranch and outside of the Ranch, respectively.*

[2] *The western portion of the 890-acre Ranch includes an approximately 30-acre, 330-foot strip of land that traverses the Ranch in a generally northwest to southeast direction and is owned by the City of Los Angeles Department of Water and Power (referred to as the LADWP transmission corridor). The southwest corner of the Ranch also includes two smaller LADWP corridors totaling approximately four acres and used for transmission purposes. The Applicant holds an easement from LADWP to access and use the land within the LADWP transmission corridor.*

Within a regional context, the Ranch is located immediately east of SR-14. Placerita Canyon Road, a secondary highway, runs through the southern portion of the Ranch in an east-west direction. Within the area surrounding the Ranch, Placerita Canyon Road and SR-14 have been designated as Second Priority Scenic Routes in the October 1974 Scenic Highway Element of the County General Plan. Other major roadways in the Ranch vicinity include Sierra Highway, Newhall Avenue, and Interstate 5 (I-5). Primary access to the Ranch is along Placerita Canyon Road. Figure IV-1 in Section IV, Project Description, depicts the Project site in regional and local geographic context. Figure IV-2 therein is an aerial photograph showing current conditions of the Project site and the immediately surrounding environs.

2. Local Setting

The Ranch is situated at the bottom of Placerita Canyon with relatively steep hillsides and ridgelines to the north, east, and south measuring approximately 600 feet in height. The bottom of the canyon is relatively flat with topography descending gently toward the west. The eastern portion of the Ranch includes private in-holdings within Angeles National Forest. The Ranch includes two designated blue line streams: Placerita Creek, which traverses the property in an east-west direction and flows west through a 20-foot culvert under SR-14 into the City of Santa Clarita (City), and Heil Creek, which extends into the central northern portion of the Ranch and flows south to Placerita Creek. Several small ephemeral drainage courses are located within the southern portion of the Development Area and on the Ranch south of Placerita Canyon Road. Specifically, the Development Area contains a portion of Placerita Creek and one small ephemeral tributary, while two small ephemeral tributaries are located within the Water Tank Area and Trail Area (described below).

The Project vicinity includes a variety of uses. New development within the approved Golden Valley Ranch planned community is underway to the north of the Ranch within the County of Los Angeles. Upon completion, new uses within the 1,259-acre Golden Valley Ranch will ultimately include approximately 500 single-family residential units, approximately 610,000 square feet of community-serving commercial uses, a school, parks, and a fire station.[3] While these uses are located just north of the Ranch, steep ridgelines separate and preclude visibility of these uses from the Ranch. Residential subdivisions are located to the northwest of the Ranch on the other side of SR-14 within the City and are not visible from the Ranch due to distance and topography. To the south

[3] *Only that portion of the Golden Valley Ranch project that would be constructed by the proposed Project's buildout year of 2020 (i.e., the non-residential components) is accounted for in the related projects (Related Project No. 8).*

and southeast of the Ranch are U.S. Forest Service Land (Angeles National Forest) and State Park Land (Placerita Canyon State Park, known as Placerita Canyon Nature Center), with residential subdivisions further to the southwest. To the east of the Ranch are undeveloped areas and a small residential subdivision that is also separated from uses within the Ranch by steep ridgelines. This eastern residential subdivision is located approximately 1.25 miles from the Development Area. To the west of the Ranch and the Development Area across SR-14 in the City, there are oil production wells and industrial uses, with The Master's College and residential subdivisions further to the west.

The Ranch has been used over the past several decades for motion picture and television film production, agriculture, horse breeding, cattle ranching, and some oil production activities. Since before Walt Disney Productions purchased significant holdings within the Ranch in 1959, the property has been used for a variety of film production and agricultural uses, with some oil production. Specifically, within the 890-acre Ranch, approximately 225 acres are used for outdoor filming/movie ranch and intermittent agricultural uses. The remaining areas of the Ranch, which consist mostly of undeveloped hillsides, are used primarily as a filming backdrop, also with some intermittent agricultural and limited oil production uses.

Existing buildings within the Ranch include the Ranch manager's house, the Ranch foreman's mobile home, a guest house, uninhabited structures, a Ranch office, and various barns, stables and sheds. Collectively, these structures comprise approximately 19,800 square feet of floor area. One of the uninhabited structures and the Ranch foreman's mobile home are located within the Development Area. There are also several temporary filming sets on the Ranch, including a residential area, farm houses, cottages, mine entrances, and a rural bridge over a man-made water feature which is used as a set. The temporary sets are continually evolving to suit the Applicant's film production needs. The Applicant has planted many of the existing oaks within the Ranch over time as part of ongoing habitat enhancement efforts. For more than a decade, the Ranch has maintained a robust oak tree planting program to enhance the Ranch. The Ranch also includes a number of native scrub and woodland plant communities as well as both disturbed and non-native plant communities, described further below.

Much of the Development Area is comprised of two large, mostly barren fill pads created when the California Department of Transportation (Caltrans) deposited dirt and gravel from grading during the construction of SR-14 in the early 1970s. These two fill pads comprise approximately 23.6 acres and are separated by Placerita Creek. Specifically, the northern fill pad is approximately 12 acres in size, approximately 34 feet to greater than 61.5 feet in depth, and located approximately 10 to 20 feet below the elevated SR-14 to the northwest. The southern fill pad is approximately 11.6 acres in size, 21 feet to greater than 53 feet deep, and at its southern point is at approximately the same grade as

Placerita Canyon Road. Like the Ranch as a whole, the topography of the Development Area varies, with the lowest elevation at approximately 1,400 feet above mean sea level (MSL) within Placerita Creek near SR-14, and the highest elevation at approximately 1,567 feet above MSL within the northernmost portion of the Development Area. There is a 60-foot drop in elevation on the eastern slope of the southern fill pad, extending into the remaining southern area of the Development Area.

The Water Tank Area is located on the Ranch in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of an existing unpaved access road to 1,668 feet above MSL at the water tank pad. The footprint of the proposed water tank and access road improvements generally encompass areas previously disturbed by past and current oil drilling operations. These disturbances include prior clearing and grading to create level pads, which remain readily evident today and are largely devoid of native vegetation. South of the Water Tank Area, in the southernmost portion of the Ranch, oil production uses continue. Two small ephemeral tributaries to Placerita Creek have been delineated within the Water Tank Area, one of which flows within an incised drainage channel then sheet flows across the existing access road and reconnects to its historic channel. Additionally, the Water Tank Area is located within the designated critical habitat for the coastal California gnatcatcher.

Near the Water Tank Area, the Trail Area is also located in hilly terrain south of the Development Area and Placerita Canyon Road. The Trail Area extends from the SR-14 northbound off-ramp adjacent to Placerita Canyon Road to southeast of the Water Tank Area at the Ranch's southern property line and includes a trailhead/staging area of approximately 19,000 square feet at the base of the water tank access road. Elevations within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The Trail Area comprises generally undisturbed land containing native vegetation, including chamise chaparral, coastal sage scrub, and oak woodlands; the trailhead/staging area, however, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch and mostly contains non-native grasses. The Trail Area also includes portions of two small ephemeral tributaries to Placerita Creek and is located within the designated critical habitat for the coastal California gnatcatcher.

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed areas of the Ranch. These areas are generally flat with elevations ranging from 1,450 feet to about 1,470 feet above MSL within the southern lot (Conditional Lot 1) and an average elevation of approximately 1,440 feet above MSL within the northern lot (Conditional Lot 2). Conditional Lot 1 consists of a graded and compressed

earth lot that is currently used for surface parking and staging for existing Ranch and filming operations. A large tent structure on a temporary asphalt pad occupies the center of the lot. Conditional Lot 2 is used intermittently for agriculture, and an elevated earthen access road cuts through it.

The Potential Mobile Home Relocation Areas are situated in the southeast corner of the Ranch near an existing, developed area where the Ranch office, a barn, and a workshop are located. These areas are generally flat with elevations ranging from approximately 1,506 feet to 1,523 feet above MSL. The Potential Mobile Home Relocation Areas are undeveloped and have been used in the past for ranching and farming.

The majority of the Off-Site Infrastructure Improvement Areas is located within the City of Santa Clarita, west of the Ranch and SR-14. The improvements proposed within these areas, which include water and sewer infrastructure, the replacement of several existing power poles, and reconfiguration of several roadway intersections, are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential and commercial development. Placerita Creek also flows through a portion of the Off-Site Infrastructure Improvement Areas. These areas are generally flat with elevations ranging from approximately 1,290 feet above MSL at the lowest point along the proposed sewer line alignment (Oak Orchard Alignment) to approximately 1,550 feet above MSL at the highest point along the Dockweiler Drive water line alignment (Alternative A).[4] The improvements proposed in these areas would pass through or be adjacent to land designated and zoned for various Residential uses including Very Low (RVL), Low (RL), Suburban (RS), and Moderate (RM), as well as Community Commercial (CC), Business Park (BP), and Private Education (PE). Portions of the residentially designated areas are also designated as a Mineral Oil Conservation Area (MOCA), and some of the CC areas are zoned as a Planned Development (PD). Refer to Section V.N, Land Use, for further discussion of the various plan designations that apply to the Project site and surrounding properties.

3. Geotechnical Hazards

The Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, and Off-Site Infrastructure Improvement Areas, collectively referred to as the Project site, lie within the Transverse Ranges physiographic province of southern California. This province is characterized by a complex series of

[4] *The point of connection of these systems to the proposed on-site system is at an elevation of approximately 1,450 feet MSL.*

mountain ranges and valleys with dominant east-west trends. The east-west structural grain of the Transverse Ranges is the consequence of active faulting and folding driven by movement along the boundary between the North American and the Pacific crustal plates.

The Project site is located at the easternmost extent of the Ventura Basin, which contains a thick layer of marine sedimentary rocks deposited during the late Cenozoic era. The marine sediments are covered by non-marine sediments deposited during the late Pliocene epoch to recent time. The sides of Placerita Canyon, in which the Ranch is located, are underlain by the Pliocene-Pleistocene epoch Saugus Formation, which is composed of weakly hardened, non-marine, fluvial pebble-cobble conglomerates, sandstones, and siltstones. Overlying the Saugus Formation in Placerita Canyon in an unconformed manner is Holocene epoch alluvium that is composed of unconsolidated gravel, sand and clay. Artificial fill overlies these native deposits adjacent to SR-14 in the western portion of the Development Area.

No known active or sufficiently active and well-defined faults have been recognized as crossing the Project site, including the Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Areas, or the Off-Site Infrastructure Improvement Areas. In addition, the California Geological Service (CGS) does not delineate any part of the Project site as being within an Earthquake Fault Zone. The closest Earthquake Fault Zone to the Development Area is a portion of the San Gabriel Fault Zone, which is located approximately 2 miles northwest of the Development Area.

The Whitney fault, which crosses through the Development Area, is shown as a Quaternary fault on the Fault Activity Map of California and in accordance with the CGS Alquist-Priolo Earthquake Fault Zoning Act is regarded as a potentially active fault. No linear topographic features suggestive of surficial faulting were identified as passing through the Development Area. Thus, although the presence of the potentially active Whitney fault beneath the Development Area represents some potential for surface fault rupture, there is only a remote possibility that this fault would exhibit surface displacement during the lifetime of the Project.

The Project site, including the Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, and Off-Site Infrastructure Improvement Areas, could be subject to strong seismic groundshaking, typical of areas throughout southern California. In accordance with the Seismic Hazards Mapping Act, the CGS has produced Seismic Hazards Zone Maps (SHZM). The SHZM for the general area around the Project site shows that most of the Development Area, including the two fill pads, the remainder of the Ranch floor, including the Conditional Parking Areas and the Potential Mobile Home Relocation Areas, and portions of the

Off-Site Infrastructure Improvement Areas are within a potential liquefaction hazard zone. Furthermore, CGS records indicate a shallow historic perched groundwater table.

Although no potential free-face conditions were identified, the Development Area includes steep slopes near Placerita Creek, which may be underlain by liquefiable soils. However, the liquefiable soils were found to be discontinuous in both elevation and area across the Development Area. Thus, lateral spreading is not anticipated to pose a significant hazard to the Project. In addition, although oil production uses exist within the Ranch and surrounding area, significant quantities of water or petroleum are not presently being and have not historically been extracted beneath most of the Project site, including the Development Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, or the Off-Site Infrastructure Improvement Areas. A portion of the Water Tank Area overlaps with areas of substantial petroleum removal; however, due to the bedrock conditions and compliance with current State and federal regulations, the potential from subsidence hazards is considered low.

With the exception of relatively steep slopes within the Water Tank Area and Trail Area, the natural slopes within most of the Project site occupies relatively flat ground that would not be subject to landslides. Moderate natural slopes exist within the northern portion of the Development Area; man-made slopes include the SR-14 fill slope on the west side of the Development Area and fill pad slopes adjacent to Placerita Creek. There is no evidence of pre-existing slope instability in the existing slope areas. However, the SHZM indicates that other areas of the Ranch, including two small portions of the Development Area and portions of the Water Tank Area, lie within areas designated as either prone to future earthquake-induced landslides or in an area of previous landslide occurrence.

The surficial soils observed within the on-site fill pads, the colluvial soils developed on the Saugus Formation, and the alluvial soils immediately adjacent to Placerita Creek appear to consist primarily of coarse-grained soils that would not be susceptible to expansion. However, some clayey soils exist on the floodplain south of Placerita Creek.

4. Flood Hazards

The Ranch and the Project site, which includes the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, and the Off-Site Infrastructure Improvement Areas, including the locations of the SCE power pole replacements and off-site roadway intersection improvements, are located within the Placerita Canyon hydrologic region. Specifically, the Ranch is located within the southeastern part of the Upper Santa Clara River Watershed region, which consists of the portion of the Santa Clara River Watershed located within the County. The major bodies of water in the region include the Santa Clara River and its tributaries. The principal

tributaries are Castaic Creek, San Francisquito Creek, Bouquet Creek, and the South Fork of the Santa Clara River.

The Ranch is situated at the bottom of Placerita Canyon with relatively steep hillsides and ridgelines to the north, east, and south measuring approximately 600 feet in height. The Ranch contains two designated blue line streams, Placerita Creek, which traverses the Ranch in an east-west direction and flows west through a 20-foot culvert under SR-14 into the City of Santa Clarita, and Heil Creek, which extends into the central northern portion of the Ranch and flows south to Placerita Creek. Placerita Creek flows east to west and is an ephemeral creek that receives water from naturally occurring runoff. The existing tributary area of Placerita Creek upstream of SR-14, which includes the 890-acre Ranch, is a watershed of approximately six square miles. Several small ephemeral drainage courses are located within the southern portion of the Development Area and on the Ranch south of Placerita Canyon Road.

Based on the Federal Emergency Management Agency's (FEMA) most current Flood Insurance Rate Map (FIRM) for the general Project vicinity, portions of the Development Area and the Off-Site Infrastructure Improvement Areas, generally corresponding to Placerita Creek, fall within Zone A. Zone A is defined as areas with a one percent annual chance of flooding (i.e., the 100-year flood zone), which are considered high-risk areas. Within the Ranch, the floodplain extends generally south of the creek approximately 100 to 1,000 feet in width.[5] Approximately the northern third of the southern portion of the Development Area east of the southern fill pad falls within Zone A. The northern Conditional Parking Area and a portion of the southern Conditional Parking Area also fall within Zone A. The Potential Mobile Home Relocation Areas, the Water Tank Area, and the Trail Area, are located outside of Zone A. Within the Off-Site Infrastructure Improvement Areas, the land near Placerita Creek falls within Zone A. The SCE power pole replacement areas are along Sierra Highway and possibly Placerita Canyon Road within existing road rights-of-way and outside flood zones, floodways and floodplains. Similarly, the off-site roadway intersections to be improved are located outside flood zones, floodways and floodplains.

The County also adopted a floodplain and floodway for the Ranch area in October 2005.[6] The proposed areas to be developed within the Ranch are outside the County's

---

[5] *A floodplain is the flat land area adjacent to a stream, composed of unconsolidated sedimentary deposits (alluvium) and subject to periodic inundation by the stream.*

[6] *A floodway is the channel and adjacent shore areas under water during a flood, especially as determined for a flood of a given height.*

adopted floodway. However, approximately the northern third of the southern portion of the Development Area east of the southern fill pad, the northern Conditional Parking Area, and a portion of the southern Conditional Parking Area are within the County's adopted floodplain. The Potential Mobile Home Relocation Areas, the Water Tank Area, the Trail Area, and most of the Off-Site Infrastructure Improvement Areas (other than those areas along Placerita Creek) are outside the County's adopted floodplain.

The Ranch and the Project site are located within the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin). The Basin encompasses an area of approximately 103 square miles. It is bordered by the Piru Mountains on the north, by impervious rocks of the Modelo and lower Saugus Formations on the west, by the San Gabriel Mountains on the south and east, and by the Santa Susana Mountains on the south. It is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek.

Based on soil boring tests performed in the Development Area, perched alluvial groundwater was encountered at a depth of 71.5 feet below the northern fill pad, at depths of 61 to 79 feet below the southern fill pad, and at depths of 11.5 to 16 feet below ground surface in the low lying areas east of the southern fill pad. Comparable groundwater depths occur throughout the low-lying portions of the Ranch, including the Conditional Parking Areas and the Potential Mobile Home Relocation Areas. Given the higher elevation of the Water Tank Area and Trail Area, groundwater is anticipated to exist hundreds of feet below the ground surface. Deeper groundwater exists below the Ranch and is accessed by the existing private well; the approximate amount of such groundwater used each year is reported to the State Water Resources Control Board. Within the Off-Site Infrastructure Improvement Areas, including the SCE power pole replacement areas and off-site roadway intersections, groundwater depths vary to well over 100 feet below ground surface.

5. Noise

The existing noise environment in the Project vicinity is primarily comprised of auto traffic on local roadways including SR-14, Placerita Canyon Road, and Sierra Highway. Noise from the Ranch is also generated by agricultural operations, outdoor filming activities, and outdoor activities associated with the two residences on the Ranch.

The nearest existing noise sensitive receptor to the Ranch portions of the Project site is a single-family residential building located at 20821 Placerita Canyon Road, approximately 2,400 feet west of the Development Area and west of SR-14. Approximately 3,400 feet to the southwest of the Development Area is a single-family subdivision located south of Dockweiler Road and west of SR-14 and Sierra Highway. These single-family homes are shielded from the Ranch by existing natural landscape and topography as well

as SR-14. Approximately 6,300 feet east of the Development Area is a small, single-family subdivision located along Running Horse Road, north of Placerita Canyon Road. These single-family homes are shielded from the Ranch by existing hillsides and ridgelines. The Ranch also includes the Ranch manager's house, the Ranch foreman's mobile home, and a guest house.

Sensitive receptors in close proximity to the Off-Site Infrastructure Improvement Areas include residential uses along the proposed sewer alignment (Oak Orchard Alignment), which would be located within the public right-of-way along segments of Placerita Canyon Road, Placeritos Boulevard, Golden Oak Lane, Oak Orchard Road, and Quigley Canyon Road. The closest residential uses along this alignment would be approximately 25 feet from the construction zone. Other sensitive receptors near the Off-Site Infrastructure Improvement Areas include residential uses south of Dockweiler Road, which would be approximately 75 feet from the potential water line alignment, and residential uses located at the corner of Kirsch Street and Deputy Jake Drive, which would be approximately 300 feet from the associated water booster pump. Under the second water line alignment option, the nearest sensitive receptors would be residential uses along Placerita Canyon Road, which would be located approximately 500 feet west of the construction area. With respect to the off-site roadway intersections to be improved, the nearest sensitive receptors would also be the residential uses along Placerita Canyon Road, approximately 1,900 feet to the west. In addition, the nearest noise sensitive receptor to the SCE power pole replacements (assuming replacement may occur as far north as Golden Valley Road) is a single family use located at the northeast corner of Sierra Highway and Golden Valley Road, which is approximately 400 feet from the nearest SCE power pole replacement construction area.

Based on field observation and measured sound data, the existing noise environment in the vicinity of the Development Area is controlled primarily by auto traffic on adjacent roadways. The measured daytime ambient noise levels ranged from 40.2 dBA (L_{eq}) to 72.5 dBA (L_{eq}) at the locations of the representative sensitive receptors. In addition, the measured daytime ambient noise levels within the Development Area ranged from 49 dBA (L_{eq}) to 72 dBA (L_{eq}).

Based on field observations, currently the primary source of ground-borne vibration in the Project vicinity is vehicular travel on local roadways. According to the Federal Transit Administration (FTA) technical study, "Federal Transit Administration Transit Noise and Vibration Impacts Assessments," typical road traffic-induced vibration levels are unlikely to be perceptible by people. Therefore, based on FTA published vibration data the existing ground vibration environment in the Project vicinity would be below the perceptible level.

6. Water Quality

The Ranch and the Project site, which includes the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, and the Off-Site Infrastructure Improvement Areas, including the locations of the SCE power pole replacements and off-site roadway intersection improvements, are located within the Placerita Canyon hydrologic region and specifically within the southeastern part of the Upper Santa Clara River Watershed region, which consists of the portion of the Santa Clara River Watershed located within the County. The major bodies of water in the region are the Santa Clara River and its tributaries. The principal tributaries are Castaic Creek, San Francisquito Creek, Bouquet Creek, and the South Fork of the Santa Clara River.

The receiving waters for the Development Area and the remainder of the Ranch have been identified as Placerita Creek and ultimately the South Fork of the Santa Clara River, which flow into the Santa Clara River (Reach 6). As indicated in the Drainage Concept, Placerita Creek is not listed as an impaired waterway, but the Santa Clara River (Reach 6) is listed as impaired for Chloride, Chlorpyrifos, Coliform, Diazinon, and Toxicity on the most recent Clean Water Act Section 303(d) list of impaired water bodies.

The Ranch has been used over the past several decades for motion picture and television film production, agriculture, horse breeding, cattle ranching, and some oil production activities. Approximately 225 acres of the Ranch are used for outdoor filming with some intermittent agricultural uses. The remaining areas of the Ranch, which consist mostly of undeveloped hillsides, are used primarily as a filming backdrop with some intermittent agricultural and oil production uses. Within the Ranch, existing water wells are used for irrigation. While no known water quality issues exist within the Ranch, oil production and agricultural uses in general have historically been associated with degraded water quality conditions affecting both surface water runoff and groundwater. Existing oil production operations are confined to a 63-acre area within the southwest corner of the Ranch near the Water Tank Area.

The Development Area is comprised of approximately 58 acres in the westernmost portion of the Ranch, a substantial portion of which is located on two large, mostly barren fill pads, referred to herein as the northern and southern fill pads. The northern fill pad, which gradually slopes into Placerita Creek, is approximately 12 acres in size with an average elevation of 1,476 feet above mean sea level (MSL). The pad drains in a southwesterly direction toward a low point on the pad and then discharges to Placerita Creek via a concrete-lined v-ditch. The northern fill pad and the remaining northern portion of the Development Area are undeveloped with an imperviousness rate of approximately one percent. The existing discharge from the northern portion of the Development Area is estimated at 17 cubic feet per second (cfs). The southern fill pad drains to a low point at the southwest corner of the pad and is then conveyed by an underground 36-inch drain

pipe to Placerita Creek. The remaining southern portion of the Development Area (approximately 16 acres) drains as sheet flow northerly toward Placerita Creek. This southern area is mostly undeveloped, other than the Ranch Foreman's mobile home and an uninhabited structure, with an imperviousness rate of about one percent. The existing discharge from the southern portion of the Development Area is estimated at 48 cfs.

The previously described Potential Mobile Home Relocation Areas are situated in the southeast corner of the Ranch near an existing, generally flat, developed area with elevations ranging from approximately 1,506 feet to 1,523 feet above MSL. The Potential Mobile Home Relocation Areas are undeveloped and have been used in the past for ranching and farming. Drainage occurs through infiltration and sheet flow to Placerita Creek.

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed, generally flat areas of the Ranch with elevations ranging from 1,450 feet to about 1,470 feet above MSL within the southern lot (Conditional Lot 1) and an average elevation of approximately 1,440 feet above MSL within the northern lot (Conditional Lot 2). Conditional Lot 1 consists of a graded and compressed earth lot that is currently used for surface parking and staging for existing Ranch and filming operations. Conditional Lot 2 is used intermittently for agriculture, and an elevated earthen access road cuts through it. Drainage in these areas occurs through infiltration and sheet flow to Placerita Creek.

The Water Tank Area and Trail Area are located in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of the existing unpaved access road to 1,668 feet above MSL at the proposed water tank pad, while elevations within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The footprint of the proposed water tank and access road improvements generally encompass areas previously disturbed by past and current oil drilling operations. Two small ephemeral tributaries to Placerita Creek have been delineated within the Water Tank Area, one of which flows within an incised drainage channel then sheet flows across the existing access road and reconnects to its historic channel. The Trail Area comprises generally undisturbed land containing native vegetation, including chamise chaparral, coastal sage scrub, and oak woodlands; the associated trailhead/staging area, however, which would be located at the base of the water tank access road, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch and mostly contains non-native grasses. The Trail Area also includes portions of two small ephemeral tributaries to Placerita Creek.

7. Air Resources

a. Air Quality

The Project site is located within the South Coast Air Basin (Air Basin), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Air Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The regional climate within the Air Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Air Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

Air pollutant emissions within the Air Basin are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.

The Clean Air Act establishes federal air quality standards, known as National Ambient Air Quality Standards (NAAQS) and specifies future dates for achieving compliance. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The CAAQS include more stringent standards than the national ambient air quality standards. The Air Basin fails to meet national and state standards for O_3, PM_{10}, and $PM_{2.5}$ and, therefore, is considered a federal and state “non-attainment” area for these pollutants.

b. Global Climate Change

The six most globally important greenhouse gasses (GHGs) are carbon dioxide (CO_2), methane, nitrous oxide, sulfur hexafluoride, haloalkanes, and perfluorocarbons. CO_2 is the most abundant GHG in the atmosphere and does not pose a direct threat to

human health. These gases have different potentials for trapping heat in the atmosphere, called global warming potential. When dealing with an array of emissions, the gases are converted to their carbon dioxide equivalents (CO_{2e}) for comparison purposes and typically are measured in metric tons of CO2e units. For example, one pound of methane has 21 times more global warming potential than one pound of CO_2, and one pound of sulfur hexafluoride has 23,900 times more global warming potential than one pound of CO_2.

GHGs are the result of both natural and human-influenced activities. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooling are the primary sources of GHG emissions. Without human intervention, the Earth maintains an approximate balance between the emission of GHGs into the atmosphere and the storage of GHGs in oceans and terrestrial ecosystems. Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have contributed to the rapid increase in atmospheric levels of GHGs over the last 150 years. As reported by the California Energy Commission, California contributes 1.4 percent of global and 6.2 percent of national GHG emissions. Approximately 80 percent of GHGs in California are carbon dioxide produced from fossil fuel combustion. The current California GHG inventory compiles statewide anthropogenic GHG emissions and sinks (carbon storage) from years 2002 to 2008. It includes estimates for CO_2, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons.

8. Biological Resources

The Ranch is situated at the bottom of Placerita Canyon with relatively steep hillsides and ridgelines to the north, east, and south measuring approximately 600 feet in height. The bottom of the canyon is relatively flat with topography descending gently toward the west. The eastern portion of the Ranch includes private in-holdings within Angeles National Forest. The Ranch includes two blue line streams as shown on U.S. Geological Survey (USGS_ topographic maps, Placerita Creek, which traverses the property in an east-west direction, and Heil Creek, which connects with Placerita Creek and extends to the north. Several small ephemeral drainage courses are located within the southern portion of the Development Area and on the Ranch south of Placerita Canyon Road. The Development Area contains a portion of Placerita Creek and one small ephemeral tributary, while two small ephemeral tributaries are located within the Water Tank Area and Trail Area. Placerita Creek also flows just north of the northern Conditional Parking Area and through a portion of the Off-Site Infrastructure Improvement Areas.

Due to the heavy gravel content of the fill, minimal vegetation exists within the fill pad areas of the Development Area. The Development Area includes limited areas of coast live oak woodland, mixed willow riparian woodland, southern willow scrub, and an area of buckwheat scrub/chamise chaparral (including disturbed buckwheat scrub/chamise

chaparral). The remainder of the Development Area supports agricultural fields and disturbed/developed areas. The majority of the rest of the Project site, both within the Ranch and off-site, consists of disturbed common plant communities and disturbed/developed land. The Trail Area, however, comprises mostly undisturbed/undeveloped areas that include coast live oak woodland (including disturbed coast live oak woodland), chamise chaparral, coastal sage scrub/chamise chaparral (including disturbed coastal sage scrub/chamise chaparral), and disturbed buckwheat scrub.

a. Plant Communities

The Project site includes common and sensitive plant species, with a total of 16 plant communities identified during surveys. Four sensitive plant communities were identified within the Project site: mixed willow riparian woodland, southern willow scrub, coast live oak woodland, and disturbed coast live oak woodland.[7] No sensitive communities occur within the Conditional Parking Areas, Potential Mobile Home Relocation Areas, across from the current Ranch main entrance where a retaining wall is proposed, or the area where power pole replacements are proposed.

Several sensitive plant species were reported in the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) on-line inventory from the Mint Canyon and San Fernando USGS 7.5 minute quadrangles, in which the Project would be located, as well as the and ten surrounding quadrangles. Due to the highly disturbed conditions that exist over most of the area in which the Project would be located, including disturbed understories in oak woodlands, only limited focused plant surveys were conducted. Of the 43 sensitive plant species considered in the Addendum to the Biological Resources Assessment, 42 are not expected to occur in the Development Area, the Water Tank Area, the Trail Area, the Conditional Parking Areas, the Potential Mobile Home Relocation Areas or the Off-Site Infrastructure Improvement Areas due to a lack of suitable habitat or based on negative results from field investigations. One species, white rabbit-tobacco (*Pseudognaphalium leucocephalum*), has a low potential to occur due to the presence of suitable habitat but the lack of observation during field investigations. Neither the slender-horned spineflower nor the San Fernando Valley spineflower were observed within the area in which the Project would be located and they are not expected to occur

[7] *Coast live oak woodland is not designated as a sensitive plant community by CDFG or in the CNDDB, however, CEQA Section 21083.4 requires analysis of a project's impacts on oak woodlands and mitigation for significant impacts to oak woodlands. Therefore, oak woodlands are considered a sensitive community for purposes of compliance with CEQA.*

within this area given the lack of suitable habitat. The Project is not located within any known proposed or final critical habitat areas for listed plants.

b. Wildlife Inventory

Several sensitive wildlife species were reported in the CNDDB from the Mint Canyon, Newhall, Oat Mountain, and San Fernando quadrangles maps and are known to occur within the region. Focused surveys for the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, arroyo toad, and the western spadefoot toad were conducted between January 2010 and August 2010 in the Development Area and the Water Tank Area. None of these species were detected within the Development Area or the Water Tank Area (which overlaps with a portion of the Trail Area). These species are not expected to occur within the Conditional Parking Areas, the Potential Mobile Home Relocation Areas, the Off-Site Infrastructure Improvement Areas, or across from the current Ranch main entrance due to lack of suitable habitat. In addition, of the 47 sensitive wildlife species considered in the Addendum to the Biological Resources Assessment, 2 were observed on-site (Cooper's hawk and yellow warbler) and 17 additional species have the potential to occur on site, including 4 reptile species (coast horned lizard, silvery legless lizard, coastal western whiptail, and rosy boa), 3 raptor species (golden eagle, white-tailed kite, and prairie falcon), 3 passerine species (Bell's sage sparrow, loggerhead shrike, and Southern California rufous-crowned sparrow), and 7 mammal species (western mastiff bat, hoary bat, spotted bat, pallid bat, San Diego desert woodrat, Los Angeles pocket mouse, and American badger).

The northern tip of the Development Area contains a small area designated as critical habitat for the coastal California gnatcatcher (Unit 13: West Los Angeles and Ventura Counties). The Water Tank Area and Trail Area also are within designated critical habitat for the coastal California gnatcatcher. However, no coastal California gnatcatchers were observed or otherwise detected during the focused surveys. The Conditional Parking Areas, the Potential Mobile Home Relocation Areas and the Off-site Infrastructure Improvement Areas are not within designated critical habitat.

c. Wildlife Movement

From a regional perspective, the Project site is situated east of the Santa Susana Mountains, west of the San Gabriel Mountains, and south of the Castaic Ranges. Angeles National Forest is located to the south and east of the Development Area as well as further to the north with intervening development. The presence of SR-14 and urbanized areas to the west of the Development Area, including the Off-Site Infrastructure Improvement Areas, inhibit the movement of larger mammals that require large home range areas and dispersal distances or dense vegetative cover (e.g., mountain lion). However, several large culverted crossings under SR-14 in the area, including one at the western end of the

Development Area, provide wildlife the potential to cross under SR-14 and allow movement between the open space blocks.

A local wildlife movement analysis was conducted for eight consecutive weeks from May to June 2008 to determine how animals move between areas of open space within and surrounding the Development Area and the Ranch, including the predominantly developed/paved Off-Site Infrastructure Improvement Areas. The results of the wildlife movement analysis suggest the Ranch and Placerita Creek, in particular, support wildlife habitat for species on a local level that are less restricted in movement pathway requirements or are adapted to disturbed or urban areas (e.g., deer, raccoon, skunk, coyote, and birds). However, given the length of the culverted crossing, other physical obstructions, and nearby urban development, the Ranch is not likely to support preferential wildlife movement for larger mammals on a regional scale. More specifically, the wildlife movement analysis found Placerita Creek provides for local movement of wildlife for foraging/watering but does not function as an established regional wildlife movement corridor. In addition, there is an area of oak woodland at the southern end of the Development Area that is constrained by Placerita Canyon Road to the south, the fill pad to the west, and agricultural uses to the east. This oak woodland supports few native understory species and does not constitute a complete band of oak habitat through which species could move. This woodland area may provide cover for wildlife, including large-bodied human-tolerant animals such as deer and coyotes, to move from the undeveloped areas south of Placerita Canyon Road north to Placerita Creek for foraging/watering. The wildlife corridor analysis also identified portions of the Ranch located east of the Development Area to have a higher permeability ranking (97 percent). These portions of the Ranch would be unaffected by the Project and would continue to provide opportunities for wildlife movement.

d. Regulated Trees

A survey of oaks on the entire Ranch identified over 3,000 oak trees, including approximately 130 heritage oak trees, which qualify for protection under the County's Oak Tree Ordinance. A total of 563 oak trees of Ordinance-protected size exist and were inventoried, assessed, and mapped. All trees surveyed are native coast live oak. Of these 563 oak trees, 32 are heritage oaks (36-inch diameter at breast height [dbh] or larger). A total of 182 of these trees, including 19 heritage oaks, occur within the Development Area. An additional 63 of the inventoried trees (no heritage oaks) occur within the Water Tank Area; 4 trees including 2 heritage oaks occur near the southern Conditional Parking Area; 4 trees (no heritage oaks) occur across from the current Ranch main entrance; and the remaining 310 trees, including 11 heritage oaks, are located within the 200-foot buffer area. There are no oak trees within the northern Conditional Parking Area or the Potential Mobile Home Relocation Areas (although oaks are located near the latter). A number of oaks also occur within the Trail Area. Within the Off-Site Infrastructure Improvement Areas, which

are primarily within the City's jurisdiction (i.e., west of SR-14), a total of 86 oak trees of Ordinance-protected size were inventoried, assessed, and mapped. Of the 86 surveyed trees, 31 are heritage oaks.

e. Jurisdictional Delineation of Wetlands, Waters of the US, and Waters of the State

Placerita Creek and one small tributary have been delineated within the Development Area. Two small ephemeral tributaries to the creek have been delineated within the Water Tank Area and Trail Area. No ephemeral tributaries to the creek have been delineated within the Conditional Parking Areas or the Potential Mobile Home Relocation Areas. Only Placerita Creek has been delineated within the Off-Site Infrastructure Improvement Areas outside of the Ranch. Within the study area defined within Section V.F, Biological Resources, the delineated jurisdictional areas within the creek and its tributaries (Tributaries A and B, and associated Sub-Tributaries) total approximately 3,127 linear feet of streambed, with 0.40 acre of U.S. Army Corps of Engineers/Regional Water Quality Control Board jurisdictional "waters of the U.S./waters of the State", and 3.30 acres of California Department of Fish and Game jurisdictional streambed and associated riparian habitat. Refer to Section V.F, Biological Resources, for detailed discussion of the delineated jurisdictional areas. There are no federally jurisdictional wetlands within the Project site.

9. Cultural and Paleontological Resources

a. Historic Resources

There is one California State Historical Landmark within a 0.5-mile radius of the Ranch. The Oak of the Golden Dream, California State Historical Landmark Number 168, is located in the adjacent Placerita Canyon State and County Park. This Historical Landmark is more than 1 mile east of the Development Area and 0.5 mile east of the eastern Potential Mobile Home Relocation Area. There are no properties listed on the National Register of Historic Places (National Register), California Register of Historic Places (California Register), California Historic Resources Inventory (HRI), or California Points of Historical Interest (PHI) within a 0.5-mile radius of the Development Area or the Ranch.

b. Archaeological Resources

Results of the cultural resources records search indicate 24 studies have been conducted within a 1-mile radius of the Development Area. One prehistoric or Native American resource has been recorded previously within 1 mile of the Development Area. Seven historic-period resources are located within a 1-mile radius of the Development Area. These resources are located over 0.25 mile from the Development Area.

Results of the cultural resources records search indicate 79 studies have been conducted within a 1-mile radius of the Off-Site Infrastructure Improvement Areas. Three historic-period resources have been identified within the immediate vicinity of the Off-Site Infrastructure Improvement Areas. No resources listed in the PHI, California Historical Landmarks (CHL), California Register, National Register, HRI, or as a local historical landmark were identified within this area.

c. Paleontological Resources

The results of the paleontological resources records search through the Natural History Museum of Los Angeles County (LACM) files and review of geologic maps indicate that most of the Project site, including the majority of the Development Area, both Conditional Parking Areas, and much of the Off-Site Infrastructure Improvement Areas (lower lying portions) are situated upon surface deposits of younger Quaternary Alluvium, derived primarily as fluvial deposits from Placerita Creek which flows through the middle of the Ranch and Development Area and traverses a portion of the Off-Site Infrastructure Improvement Areas. The younger Quaternary Alluvium typically does not contain significant vertebrate fossils, at least in the uppermost layers, and there are no vertebrate fossil localities from these deposits near the Project site. However, the younger Quaternary deposits are likely underlain by older Quaternary or Tertiary deposits at a relatively shallow depth, which are known to have highly significant vertebrate fossils. According to the LACM and geologic maps of the area, the more elevated terrain in the northern portion of the Development Area, as well as the Water Tank Area, the Trail Area, part of the Potential Mobile Home Relocation Areas, and portions of the Off-Site Infrastructure Improvement Areas both north and south of the Ranch, contain exposures of the Pliocene Saugus Formation that may be overlain in part by older Quaternary high terrace deposits.

Based on the records search, the nearest vertebrate fossil localities in the older Quaternary deposits are located approximately 5 miles south of the Ranch around the Van Norman Reservoir. The next closest vertebrate fossil localities in the Saugus Formation are located approximately 6 miles northwest of the Development Area around Saugus and Castaic Creeks. Additional fossil localities occur farther northwest, near Val Verde, in addition to south-southwest of the Ranch and north of California Highway 118 and west of the Van Norman Reservoir. As the fossiliferous Saugus Formation currently underlies the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, part of the Potential Mobile Home Relocation Areas, and portions of the Off-Site Infrastructure Improvement Areas, the paleontological sensitivity of these areas are considered to be moderate to high.

10. Agricultural and Forestry Resources

Per the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the general area around the Ranch contains land designated as Grazing Land, Urban and Built-Up Land, and Other Land (e.g., low density rural development, brush, timber, wetlands, riparian areas, and vacant land). The Project site, including the Development Area, the Potential Mobile Home Relocation Areas, the Conditional Parking Areas, the Trail Area, and the Water Tank Area, as well as the remainder of the Ranch and neighboring properties are located in an area of the County that has traditionally contained land used for grazing, field and row crops, and orchards. However, no lands designated as Prime Farmland, Unique Farmland, and/or Farmland of Statewide Importance exist within the Ranch or in the surrounding vicinity. Based on the most recent 2010 FMMP, the Off-Site Infrastructure Improvement Areas are also designated as Other Land and Urban and Built-Up Land.

Portions of the Ranch have been cultivated with row crops and dry land crops by the Applicant and previous owners. More specifically, certain areas of the Ranch have been used over the past decades for intermittent agricultural production of grain hays and alfalfa, horse breeding, and cattle ranching, primarily for the Applicant's own use. Within the Development Area, there are approximately 10.5 acres of previously farmed agricultural fields located primarily in the southeastern corner of the Development Area. While some of this area is used periodically for the production of grain hays and alfalfa, it also is used frequently for the construction of filming sets and outdoor filming pursuant to the Ranch's current Conditional Use Permit (CUP) No. 04-089-(5). The farmed areas of the Ranch do not meet the definition of Prime Farmland, and the entire Ranch, including the Development Area, are designated as Grazing Land and Other Land per the 2010 FMMP.

The Ranch includes private in-holdings within Angeles National Forest, within which both of the Potential Mobile Home Relocation Areas and the southern Conditional Parking Area are located. However, these areas do not currently contain forest uses.

11. Visual Qualities

a. Aesthetics/Visual Quality

The Ranch has been used over the past several decades for motion picture and television film production and agriculture, horse breeding, cattle ranching, and some oil production activities. Currently, approximately 225 acres of the Ranch are used for outdoor filming/movie ranch uses with some intermittent agricultural uses. The remaining areas of the Ranch, which are mostly undeveloped hillsides, are used primarily as a filming backdrop with some intermittent agricultural and oil production uses. Overall, the Ranch has retained a largely undeveloped and rural nature.

Existing buildings within the Ranch include the Ranch manager's house, the Ranch foreman's mobile home, a guest house, uninhabited structures, a Ranch office, and various barns, stables, and sheds. Collectively, these structures comprise approximately 19,800 square feet of floor area. One of the uninhabited structures and the Ranch foreman's mobile home are located within the Development Area. There are several temporary filming sets on the Ranch, including a residential area, farm houses, cottages, mine entrances, and a rural bridge over a man-made water feature that is used as a set. The Ranch also includes another man-made water feature used for filming east of the Development Area, various agricultural uses, including fields intermittently planted with hay and alfalfa, open meadows, and mature stands of trees, including heritage oak trees.

Due to the heavy gravel content of the fill, minimal vegetation exists within the fill pad areas of the Development Area. Much of the remainder of the Development Area is characterized as disturbed and is either barren or vegetated with non-native species and buckwheat scrub/chamise chaparral plant communities. A small portion of the Development Area includes coast live oak woodland, mixed willow riparian woodland, and a southern willow scrub plant community.

Like the Ranch as a whole, the topography of the Development Area varies, with the lowest elevation at approximately 1,400 feet above MSL within Placerita Creek near SR-14 and the highest elevation at approximately 1,567 feet above MSL within the northernmost portion of the Development Area. There is a 60-foot drop in elevation on the eastern slope of the southern fill pad, extending into the remaining southern portion of the Development Area.

The Water Tank Area is located on the Ranch in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of an existing unpaved access road to 1,682 feet above MSL at the highest point of the water tank pad. South of the Water Tank Area, in the southernmost portion of the Ranch, oil production uses continue. Two small ephemeral tributaries to Placerita Creek have been delineated within the Water Tank Area, one of which flows within an incised drainage channel then sheet flows across the existing access road and reconnects to its historic channel. Additionally, the Water Tank Area is located within designated critical habitat for the coastal California gnatcatcher.

Near the Water Tank Area, the Trail Area is also located in hilly terrain south of the Development Area and Placerita Canyon Road. The Trail Area extends from the SR-14 northbound off-ramp adjacent to Placerita Canyon Road to southeast of the Water Tank Area at the Ranch's southern property line and includes a trailhead/staging area of approximately 19,000 square feet at the base of the water tank access road. Elevations

within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The Trail Area comprises generally undisturbed land containing native vegetation, including chamise chaparral, coastal sage scrub, and oak woodlands; the trailhead/staging area, however, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch and mostly contains non-native grasses. The Trail Area also includes portions of two small ephemeral tributaries to Placerita Creek and is located within the designated critical habitat for the coastal California gnatcatcher.

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed areas of the Ranch. These areas are generally flat with an average elevation of approximately 1,440 feet above MSL within the northern lot and ranging from 1,450 feet to about 1,470 feet above MSL within the southern lot. In addition, the Potential Mobile Home Relocation Areas are situated in the southeast corner of the Ranch near an existing, developed area where the Ranch office, a barn, and a workshop are located.

The majority of the Off-Site Infrastructure Improvement Areas is located within the City of Santa Clarita, west of the Ranch and SR-14. The utility alignments, off-site roadway improvements, and SCE power pole replacements proposed within these areas are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential and commercial development. Placerita Creek also flows through a portion of the Off-Site Infrastructure Improvement Areas.

Land uses surrounding the Project site include residential subdivisions combined with a variety of agricultural, oil production, and industrial uses, and established park lands. In general, the existing topography, ridgelines, and SR-14 separate the Ranch from surrounding uses. While many of the nearby properties exhibit a rural, semi-developed character that is enhanced by the nearby forest and parklands, the area immediately west of SR-14 presents an industrial quality characterized by the freeway, large water/storage tanks, working oil pumps, and electrical transmission towers.

b. Views

Given the varying topography of the Ranch and surrounding area, public views of the Project site and the hillsides surrounding the Ranch are available from a variety of vantage points. Unobstructed long-range panoramic views of the Development Area, the other Project site areas within the Ranch, and the surrounding area are available from several segments of nearby roadways, with intermittent obstruction due to intervening

topography and vegetation, particularly along Placerita Canyon Road. Views of the Ranch from northbound SR-14 are largely limited south of the Placerita Canyon Road off-ramp due to the steep-sloped hillsides that line the eastern edge of the freeway. Portions of trails in Angeles National Forest to the southeast also may afford views of the Project site. In general, the long-range views in the area typically feature a rural foreground with a background of steep sloping hillsides, pockets of trees and landscaping, and from some vantages large-scale infrastructure such as LADWP's electrical transmission towers, water storage tanks, power poles, and oil pumps. Few private properties in the area surrounding the Ranch have clear views of the Project site (other than the Off-Site Infrastructure Improvement Areas located adjacent to residential uses) due to intervening hillsides and the elevated SR-14 roadway. Only from certain areas within the residential community west of SR-14 are long-range views available of limited portions of the fill pads in the Development Area, along with the adjacent LADWP transmission towers, the Water Tank Area and portions of the Trail Area.

c. Light/Glare

Very little existing lighting occurs within the Development Area and the adjacent portions of the Ranch. The only permanent light source within the Development Area is the Ranch foreman's mobile home. The southwestern corner of the Development Area experiences light trespass or spillover from five street lights associated with the overpass and ramps at the SR-14 interchange with Placerita Canyon Road. These fixtures produce light levels of approximately 2.5 footcandles (fc) at ground level, while at the western edge of the Development Area, light was measured at 1.6 fc, which faded to an undetectable level 30 feet from the Development Area boundary.

As for the other portions of the Project site within the Ranch, temporary lighting is occasionally used within or near the Conditional Parking Areas in conjunction with filming activities or associated parking; limited lighting occurs near the Potential Mobile Home Relocation Areas from the existing office, barn, and workshop; and no lighting occurs within the Water Tank Area or Trail Area.

The Off-Site Infrastructure Improvement Areas, including the areas where power poles replacements and roadway improvements are proposed, are located primarily within existing road rights-of-way that pass by and through land developed with residential and commercial uses. Lighting in these areas is generally limited to streetlight fixtures along certain street segments, light from vehicular traffic, and light spillover from SR-14, with higher ambient light levels experienced along the more major roadways and intersections.

Daytime glare is generally associated with reflected sunlight from buildings with highly reflective surfaces or from vehicles parked in surface parking areas. The lack of

development within the Development Area and the remainder of the Ranch prevents regular glare conditions. However, the Development Area, as well as the southern conditional parking area, are sometimes used for vehicle parking during filming activities with the potential for temporary glare conditions. Occasional and temporary bright light sources used for nighttime filming also may cause glare. The only potential for glare within the Off-Site Infrastructure Improvement Areas is associated with vehicles.

12. Traffic, Access, and Parking

The Ranch comprises approximately 890 acres located in the unincorporated Santa Clarita Valley area of the County. Primary regional access to the Ranch is provided by SR-14, which provides four travel lanes in each direction in the vicinity of the Ranch. SR-14 connects with Interstate 5 (I-5), which runs generally northwest-southeast, approximately 3 miles south of the Ranch. I-5 connects with other freeways in the region, including the Foothill Freeway (I-210), which runs generally northwest-southeast, approximately 5 miles south of the Ranch; the San Diego Freeway (I-405), which runs generally north-south, approximately 7 miles south of the Ranch; and the Ronald Reagan Freeway (SR-118), which runs generally east-west, approximately 9 miles south of the Ranch. Local access to the Ranch is provided by Sierra Highway and directly from Placerita Canyon Road. Near the intersection of these two streets, full freeway access is provided to SR-14 via on- and off-ramps.

Public transit service in the vicinity of the Ranch is provided by the City of Santa Clarita (City). Specifically, the City operates Route 1, a local line that travels from Whites Canyon Road in Canyon Country to Lake Hughes Road in Castaic. This line provides service to McBean Regional Transit Center in Valencia, the Valencia Commerce Center in Val Verde, Newhall, and Saugus. In addition, Route 2 is a local line that travels from Whites Canyon Road in Canyon Country to the Valencia Commerce Center in Val Verde. This line provides service to McBean Regional Transit Center in Valencia, Newhall, and Saugus. Both Route 1 and Route 2 travel along Sierra Highway less than 0.5 mile from Ranch.

While vehicles park within the Development Area as needed in conjunction with filming uses, no designated parking is currently provided within the Development Area. There are two areas of dirt on the remainder of the Ranch, which are used as the main parking areas for outdoor filming and Ranch operations.

13. Public Services

a. Law Enforcement

The Sheriff's Department is comprised of 24 patrol stations that provide services to 40 contract cities, 90 unincorporated communities, nine community colleges, the Metropolitan Transportation Authority, and 48 Los Angeles County Superior Court locations throughout a service area of over 3,157 square miles. The Sheriff's Department currently maintains a staff of 16,772 personnel, including 9,567 sworn professionals, and serves a population of approximately four million residents.

The Sheriff's Department is divided into three Field Operations Regions. The Ranch and the Development Area are located in Field Operations Region I and are served by the Santa Clarita Valley Station located at 23740 Magic Mountain Parkway in the City of Santa Clarita. The Santa Clarita Valley Station serves approximately 250,000 residents in an area of approximately 656 square miles comprised of the City of Santa Clarita and unincorporated areas of the County from the Los Angeles City limits to the south, the Kern County line to the north, the Ventura County line to the west, and the unincorporated community of Agua Dulce to the east. The Santa Clarita Valley Station includes a traffic unit, detective bureau, Career Offenders Burglary Robbery Apprehension unit, air support, search and rescue, and an advisory committee. Based on the Santa Clarita Valley Station's service area population, the Santa Clarita Valley Station currently maintains a deputy-to-resident ratio of less than one (approximately 0.7) deputy to 1,000 residents. The Sheriff's Department strives to maintain a ratio of one deputy per 1,000 residents and this service level is not being met within the Santa Clarita Valley. The Santa Clarita Valley Station responded to 52,125 total calls for service in 2010. In 2010, there were 4,371 Part I crimes, 6,732 Part II crimes, and 9,328 non-criminal incidents in the Santa Clarita Valley. The County Sheriff's Department indicates that the average response times from the Santa Clarita Valley Station would be 4 to 8 minutes for emergencies, 10 to 15 minutes for priorities, and 45 to 60 minutes for non-emergent calls for service.

The Project site is also located within the jurisdiction of the CHP, which conducts traffic enforcement and traffic accident investigation in the unincorporated Santa Clarita area of the County. Specifically, the Development Area is located within CHP's Southern Division, which serves over 9.75 million residents with approximately 1,123 uniformed officers and 10 area offices. The CHP office located closest to the Development Area is the Newhall Office, which is located at 28648 The Old Road in the community of Valencia, approximately 8.3 miles northwest of the Development Area. The Newhall Office is staffed by approximately 88 uniformed officers, seven sergeants, and four senior volunteers, who serve an area of approximately 600 square miles. During 2009, the Newhall Office gave approximately 54,850 citations, of which approximately 1,803 resulted in physical arrest.

b. Fire Protection

The County Fire Department provides fire prevention, fire protection, and emergency services to over 4.1 million residents in 58 incorporated cities and the unincorporated areas of Los Angeles County. There are 169 fire stations located throughout the County Fire Department's 2,305 square mile service area. The County Fire Department is comprised of approximately 4,850 personnel, of which approximately 2,722 are firefighters.

Three existing County Fire Department stations are located within the vicinity of the Ranch. Fire Station No. 123 is located at 26321 North Sand Canyon Road, approximately 4.2 miles east of the Ranch. Fire Station No. 123 is the jurisdictional ("first in") station for the Development Area and the Ranch. Fire Station No. 73 is located at 24875 North Railroad Avenue (previously North San Fernando Road), approximately 3.4 miles west of the Development Area, and is the "second in" station for the Development Area and the Ranch. Fire Station No. 104 is located at 26201 Golden Valley Road, approximately 2.9 miles northwest of the Development Area, and is the "third in" station for the Development Area and the remainder of the Ranch. Fire Station No. 104 is currently in a temporary location and is scheduled to be relocated to a permanent location at 26901 Golden Valley Road, slightly farther north of its current location. Fire Station No. 104 should be operational at its permanent location by 2013. In addition, a new fire station, Fire Station No. 150, is planned at 19190 Golden Valley Road just east of SR-14, approximately 1.3 miles northeast of the Development Area (approximately 1.7 miles to the proposed driveway), and is expected to become operational in 2012. Once operational, Fire Station No. 150 would replace Fire Station No. 123 as the jurisdictional station for the Development Area and the Ranch. It is anticipated that Fire Station No. 150 would be equipped with a four-person quint (combination engine/ladder truck apparatus), a three-person engine company, and a two-person paramedic squad. Once Fire Station No. 150 is operational, the staffing and equipment of Fire Station No. 104 would change to a four-person engine company and a five-person hazmat squad (creating a hazmat taskforce).

According to the County Fire Department, the Ranch is located in a suburban area. For suburban areas, the County Fire Department has response time goals of 8 minutes for the first arriving unit and 12 minutes for an advanced life support (paramedic) unit. The average response time for Fire Station No. 123, based on 2009 data, is 9:50 minutes for fire responses, 7 minutes for EMS responses, and 8:41 minutes for other responses. The average response time for Fire Station No. 104 is 5:56 minutes for fire responses, 5:49 minutes for EMS responses, and 5:34 minutes for other responses.[8] The average

[8] *Based on 2010 data, the average response time for Fire Station No. 104 is 5:58 minutes for fire responses, 6:07 minutes for EMS responses, and 6:09 minutes for other responses.*

response time for Fire Station No. 73 is 5:29 minutes for fire responses, 5:04 minutes for EMS responses, and 5:32 minutes for other responses.[9] These response times meet Department goals. Fire Station No. 123 is estimated to have a response time of 8 minutes based on actual driving time, which would be within County Fire Department guidelines. Fire Station No. 150, once completed (2012), is anticipated to have a response time to the Ranch of less than five minutes, which would also be within County Fire Department guidelines.

14. Utilities and Service Systems

a. Water Supply

According to the Water Supply Assessment (WSA) prepared by the Newhall County Water District (NCWD), current water supplies for NCWD service area are derived from three primary sources:

- Imported SWP water and additional reliability supplies;
- Groundwater from the Alluvial Aquifer; and
- Groundwater from the Saugus Formation.

In addition, recycled water is now available through the Castaic Lake Water Agency (CLWA), which allows use of State Water Project (SWP) water and groundwater for other uses. These sources of water supply can be characterized as either: (1) imported supplies, transported via the SWP and consisting of SWP Table A Amounts and additional reliability supplies; or (2) local supplies, consisting of groundwater and recycled water. All of these sources are necessary to meet the regional demands identified in the 2005 Urban Water Management Plan (UWMP) as well as the 2010 UWMP.[10]

The SWP contractual Table A Amount (i.e., the maximum amount of water that may be requested each year from the SWP), depending on annual allocation, currently meets more than half of local demand. The reliability of SWP supplies is subject to both annual hydrology and planned improvements to the system. In an effort to assess the impact of

---

[9] *Based on 2010 data, the average response time for Fire Station No. 73 is 5:28 minutes for fire responses, 5:03 minutes for EMS responses, and 5:21 minutes for other responses.*

[10] *The WSA prepared by NCWD for the Project references information from the 2005 UWMP, as that was the plan in effect at the time of preparation of the WSA. More recently, NCWD adopted its 2010 UWMP in June 2011. Therefore, both the 2005 UWMP and 2010 UWMP are referenced herein, as appropriate.*

these varying conditions on SWP supply reliability, the Department of Water Resources (DWR) evaluates the probability of delivering all Table A water deliveries to SWP contractors. The 2007 Reliability Report (which is referenced in the Project's WSA; the 2009 Reliability Report has since been approved) indicates that the SWP could deliver 77 percent of total Table A Amounts on a long-term average basis. The 2007 Reliability Report analysis also projects that SWP deliveries during multiple-year dry periods could average about 25 to 40 percent of total Table A Amounts and could possibly be as low as 4 to 5 percent during an unusually dry single year. During wetter years, or more than 25 percent of the time, 100 percent of full Table A Amounts are projected to be available.

Recent drought conditions in southern California, in combination with legal decisions that have reduced the maximum quantity of water that can be withdrawn from the Sacramento-San Joaquin Delta, have subsequently reduced the reliability of SWP Table A deliveries to the CLWA. As a result of these conditions, the DWR reduced its long-term and single- and multiple-year delivery reliability estimates to SWP contractors in its 2009 Reliability Report. The 2009 Reliability Report describes three areas of significant uncertainty for SWP delivery reliability: (1) climate change and sea level rise; (2) vulnerability of Delta levees to failure; and (3) the biological opinions associated with the Delta smelt. Incorporating this uncertainty into its forecasts, the 2009 Reliability Report indicates that the SWP could deliver 60 percent of total Table A Amounts on a long-term average basis.

Properties in the Project vicinity, including much of the Off-Site Infrastructure Improvement Areas, are served by two existing water tanks located on NCWD property near the western termini of Dockweiler Drive and Deputy Jake Drive, as well as another tank located west of SR-14 and north of Dockweiler Drive. Each of these tanks is connected to a small distribution system, one that runs north to Placerita Canyon Road and serves surrounding, mostly residential, development, and one that runs east along Deputy Jake Drive and Dockweiler Drive and serves the adjacent residential subdivision. There is no NCWD water infrastructure on the Ranch.

b. Wastewater/Sewage Disposal

The County Sanitation Districts' wastewater collection system within the vicinity of the Ranch is composed of individual service connections that tie into a local collection network. This local network, composed of secondary and primary collectors, flows into the County Sanitation Districts' trunk main sewers and water reclamation plants (WRPs). The County Sanitation Districts own and maintain the wastewater trunk mains and two WRPs (discussed below), while the local collection network is owned by the City of Santa Clarita (City) and maintained by the Los Angeles County Department of Public Works (LACDPW).

Most wastewater generated within the Santa Clarita Valley is treated at two existing WRPs operated by the County Sanitation Districts. These two treatment facilities, the Saugus WRP, located at 26200 Springbrook Avenue in Saugus, and the Valencia WRP, located at 28185 The Old Road in Valencia, have been interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The SCVJSS is operated by the Santa Clarita Valley Sanitation District. The two facilities provide primary, secondary, and tertiary treatment of wastewater. The SCVJSS has a combined permitted and design capacity of 28.1 million gallons per day (mgd) and currently treats an average daily flow of 20.5 mgd. As of 2009, approximately 7.6 mgd of treatment capacity was available for future development.

There is no public sewer infrastructure on the Ranch. The existing buildings on the Ranch are served by private septic tank systems, as are portions of the Off-Site Infrastructure Improvement Areas.

c. Solid Waste

Demand for landfill capacity is continually evaluated by Los Angeles County (County) through preparation of the Los Angeles County Integrated Waste Management Plan (ColWMP) Annual Reports. The most recent ColWMP Annual Report is the 2009 ColWMP Annual Report that was completed by the County of Los Angeles in February 2011 and submitted to the California Integrated Waste Management Board (CIWMB), now known as CalRecycle. As with previous Annual Reports, the 2009 ColWMP Annual Report assesses future landfill disposal needs over a 15-year planning horizon, based in part on forecasted waste generation and available landfill capacity.

As discussed in the 2009 ColWMP Annual Report, without changes in the status quo, a shortage of permitted solid waste disposal capacity at in-County Class III landfills is projected in future years. This calculated shortage is due in part to a lack of suitable sites for developing new landfills, limited expansion potential of existing landfills, and strong public opposition to the siting of proposed solid waste management facilities. Nonetheless, the 2009 ColWMP anticipates that future disposal needs can be adequately met through the next 15 years (i.e., 2024) through scenarios that include some combination of the following: (1) use of existing in-County Class III landfills and transformation facilities; (2) proposed expansion of in-County Class III landfill capacity through construction of new facilities or expansion of existing facilities; (3) use of out-of-County landfills for disposal, including waste-by-rail facilities; (4) use of conversion technologies; (5) expansion of diversion infrastructure; and (6) maximization of waste reduction and recycling.

Landfills within the County are categorized as either Class III or unclassified landfills. Non-hazardous municipal solid waste is disposed in Class III landfills, while construction

waste, yard trimmings, and earth-like waste are disposed in unclassified (inert) landfills. Twelve Class III landfills and three unclassified landfills are located within the County. based on the information provided in the 2009 ColWMP Annual Report, the remaining disposal capacity for the County's Class III landfills is estimated at approximately 154.386 million tons, which includes the recently approved capacity at the City of Los Angeles and County portions of the Sunshine Canyon landfill. In 2009, approximately 6.866 million tons of solid waste was disposed at County Class III landfills. Approximately 99 percent of this solid waste disposal was generated from within the County, with the remaining generated outside the County. The Santa Clarita Valley is served primarily by the Chiquita Canyon, Antelope Valley, and Sunshine Canyon Landfills.

The County's unclassified landfills generally have sufficient capacity to meet long-term demand. The remaining disposal capacity for unclassified landfills is estimated at approximately 55.799 million tons. In 2009, approximately 0.137 million tons of inert waste (e.g., soil, concrete, asphalt, and other construction and demolition debris) were disposed at the County's unclassified landfills.

d. Energy

Southern California Edison (SCE) provides electrical service to portions of Los Angeles County, including the Ranch. SCE generates electricity from a variety of sources, including hydropower, coal, nuclear sources, and, more recently, renewable resources such as wind. Currently, SCE delivers over 90,000 gigawatt-hours (GWh) across its entire service area to approximately 4.8 million customers. The Ranch is presently served by SCE's Pardee substation, located in Newhall. Electricity is supplied to the few existing permanent structures on the Ranch through the SCE distribution system, which includes 66 kV overhead lines that connect to existing power poles along Placerita Canyon Road and Sierra Highway. In addition to lighting, electricity is used to supply all on-site space heating, water heating, cooking, and air conditioning. External generators power all temporary filming sets, structures, and filming activities conducted at the Ranch.

In addition to SCE infrastructure, LADWP owns and maintains electrical transmission facilities throughout the vicinity of the Ranch. These facilities include transmission towers and lines that traverse the Ranch in a generally northwest to southeast direction within a 330-foot strip of land that generally separates the Development Area from the remainder of the Ranch. The Applicant holds an easement from LADWP to access and use the land beneath these transmission lines.

Natural gas is provided throughout the County by the Southern California Gas Company (The Gas Company). The Gas Company's service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern

California, from the City of Visalia to the Mexican border. The Gas Company receives gas supplies from several sedimentary basins in the western United States and Canada, including the Rocky Mountains and western Canada, as well as local California supplies. Natural gas for The Gas Company is delivered to the region through interstate pipelines. The Gas Company's total natural gas deliveries in 2008 were approximately 1,009 billion cubic feet (cf). The Ranch is currently served by The Gas Company.

15. Environmental Safety/Fire Hazards

a. Environmental Safety

Hazards and hazardous materials are regulated by a variety of Federal, State and local regulations and requirements. Several locations within the vicinity of the Development Area appear on one or more regulatory lists for various reasons (e.g., locations where prior and/or current uses handled hazardous materials, presence of underground storage tanks). In addition, several off-site and adjacent uses also appear on one or more regulatory lists. However, due to the type of regulatory listings, type of resource (i.e., soil) affected, location of the property with respect to the direction of regional groundwater flow, distance from most areas of the Project site, status of the case, remedial efforts being directed by a regulatory agency, and/or identification of potential responsible parties, there appears to be a low potential for environmental concern from these locations. Some sites are, however, located in close proximity to portions of the Off-Site Infrastructure Improvement Areas. In particular, the Oak Orchard Alignment for the proposed sewer line would traverse The AES Corporation property, a small generator of hazardous waste, in a proposed easement.

The Ranch has been used over the past decades for motion picture and television film production, agriculture, horse breeding, cattle ranching, and some oil production. Before Disney purchased significant holdings within the Ranch in 1959, the property was used for a variety of film production and agricultural uses with some oil production. Today, approximately 225 acres of the 890-acre Ranch are used for outdoor filming/movie ranch and some intermittent agricultural uses, with the remaining areas of the Ranch, which are mostly undeveloped hillsides, used primarily as a filming backdrop with some intermittent agricultural and oil production uses. Over the years, the approximately 225 acres used for filming have been modified continuously to provide for such uses, including the construction of large filming sets.

Currently, some activities at the Ranch involve the acquisition, use, storage and disposal of hazardous materials and emit air emissions that include hazardous constituents, including film production, grounds maintenance, agriculture, and oil production. Temporary on-site construction activities (e.g., set production) may also involve the use of hazardous materials. No radioactive materials are used or stored on the

Ranch. Hazardous materials in solid, liquid, and gaseous forms are currently stored and used in small quantities on the Ranch. In addition, the quantity of hazardous materials used and stored on the Ranch generally increases during film production activities. Minimal amounts of hazardous substances are used and stored on the Ranch to assist in groundskeeping efforts (i.e., weed and pest control, landscaping equipment maintenance). In addition, minimal amounts of fertilizers and herbicides associated with agricultural activities are used and stored on the Ranch. Small amounts of paint and other chemicals are also stored on-site in connection with current Ranch operations. Two 1,000 gallon aboveground storage tanks (ASTs) containing gas and diesel are located on the Ranch in a developed area east of the Development Area (where the main barn and workshop are located). Lastly, an air compressor is located on the Ranch for use in maintenance activities. All hazardous materials on the Ranch are used, stored, and disposed of in accordance with applicable regulations.

Structures on the Ranch and off-site buildings within the general area may contain asbestos, asbestos-containing materials, or lead-based paint. These materials, which are now recognized as hazardous materials, were commonly used in building construction until the 1970's. Through standard industry practices and regulatory compliance these materials can be safely handled and removed from their respective locations.

Existing oil production operations are confined to a 63-acre area within the southwest corner of the Ranch near the Water Tank Area. Ten active wells and five inactive or abandoned wells are currently located on this portion of the Ranch, along with three ASTs. The third-party that owns the mineral rights and has surface right of access or any associated party that has been conveyed such access rights is responsible for the safe operation and abandonment of these tanks in accordance with all applicable laws and regulations. In addition, based on review of DOGGR maps, two plugged and abandoned oil wells exist within the westernmost portion of the Development Area.[11] Several plugged and abandoned dry holes also have been mapped within the Ranch to the east of the Development Area.[12]

Additionally, no underground storage tanks (USTs) or ASTs are known to exist within the Off-Site Infrastructure Improvement Areas. As previously indicated, the alignments are primarily located within existing road rights-of-way. Oil production uses do

---

[11] *Division of Oil, Gas, and Geothermal Resource Map, ftp://ftp.consrv.ca.gov/pub/oi/maps/dist2/251/Map251.pdf, accessed December 1, 2010.*

[12] *Ibid.*

occur, however, in the vicinity, and, as such, associated wells may exist near the Off-Site Infrastructure Improvement Areas.

b. Fire Hazards

The Development Area and the Ranch are located with a Very High Fire Hazard Severity (VHFHS) Zone (formerly known as Fire Zone 4). There are no existing fire hydrants or other fire flow infrastructure within the Development Area, Water Tank Area, Trail Area, or Conditional Parking Areas. An existing private well located within the Ranch is used to supply on-site structures with domestic water, and a 500,000-gallon water tank is located on the eastern side of the Ranch for emergency firefighting purposes. Additionally, a helipad is located within the northern portion of the Ranch with access to well water. Based on the existing water tank for emergency purposes and the helipad on-site, the County Fire Department has indicated that current fire protection capabilities for the Development Area and the Ranch appear to be adequate for existing uses.

16. Land Use

a. Project Site

As previously described, the Ranch comprises approximately 890 acres located in the Santa Clarita Valley in an unincorporated area of the County. The Ranch is situated at the bottom of Placerita Canyon, surrounded by relatively steep hillsides, and used primarily for film production and intermittent agricultural uses. The eastern portion of the Ranch includes private in-holdings within Angeles National Forest. The Development Area, in which the proposed development would generally occur, consists of approximately 58 acres in the westernmost portion of the Ranch, bounded by SR-14 to the west and northwest and Placerita Canyon Road, a secondary highway, to the south. Primary access to the Ranch is on Placerita Canyon Road. Unpaved roads provide internal circulation within the Ranch. Other major roadways in the vicinity of the Ranch include Sierra Highway, Newhall Avenue, and Interstate 5 (I-5). The City of Santa Clarita borders the Ranch to the west and northwest across SR-14.

The Ranch is designated as Rural, Non-Urban (R) and Open Space (O) in the County's currently adopted General Plan. The 1990 Santa Clarita Valley Area Plan (referred to herein as the Area Plan), the local plan covering the Ranch and the surrounding area, designates different portions of the Ranch as Hillside Management (HM), Open Space/National Forest (O-NF), and Floodway/Floodplain (W). The Area Plan designates the Development Area as HM and W, the Water Tank Area and Trail Area as

HM, the Potential Mobile Home Relocation Areas as O-NF, and the two Conditional Parking Areas as W or O-NF.[13] Additionally, the current zoning for the Ranch is Heavy Agriculture (A-2-1 and A-2-2), a designation and zoning that provide for motion pictures sets as conditionally permitted uses. More specifically, the Development Area and surrounding Ranch areas to the northeast and south, including the Water Tank Area, Trail Area, and the northern Conditional Parking Area (Conditional Lot 2), are zoned A-2-1 (Heavy Agricultural—One Acre Minimum Required Area), while the eastern portions of the Ranch that fall within Angeles National Forest, including the Potential Mobile Home Relocation Areas and the southern Conditional Parking Area (Conditional Lot 1), are zoned A-2-2 (Heavy Agricultural—Two Acres Minimum Required Area).

The current land use and zoning designations provide for "motion pictures sets" as conditionally permitted uses. As such, the existing film production uses at the Ranch are permitted by Conditional Use Permit (CUP) No. 04-089-(5), approved by the County in 2006, which allows the Ranch to be used for motion picture and television filming, film set construction, and agricultural activities consistent with the operation of a working filming ranch, including existing living space for on-site workers. The County approved the original CUP No. 1494, which allowed motion picture and television filming on the Ranch, in 1979.

Existing buildings within the Ranch include the Ranch manager's house, the Ranch foreman's mobile home, a guest house, uninhabited structures, a Ranch office, and various barns, stables, and sheds. Collectively these structures comprise approximately 19,800 square feet of floor area. One of the uninhabited structures and the Ranch foreman's mobile home are located within the Development Area. There are also several temporary filming sets on the Ranch, including a residential area, farm houses, cottages, mine entrances, and a rural bridge over a man-made water feature that is used as a set. The Ranch also includes another man-made water feature used for filming east of the Development Area, various agricultural uses including fields intermittently planted with hay and alfalfa, open meadows, and mature stands of trees, including heritage oak trees.

---

[13] *The Board of Supervisors expressed its intent to adopt the Draft 2012 Area Plan in February 2012 as part of the County's intent to adopt the One Valley One Vision (OVOV) plan, which contains new Area Plan land use designations for the Project site. As currently drafted, the Draft General Plan, as well as the Draft 2012 Area Plan, allow complete project applications filed prior to the effective date of the plans to be reviewed for consistency under the current adopted General Plan and Area Plan. As the County deemed complete the Project's application for a vesting tentative tract map and conditional use permit on May 4, 2010, the Project is evaluated within this EIR for consistency with the current General Plan and the 1990 Area Plan.*

b. Surrounding Uses

The Santa Clarita Valley has experienced substantial population growth and urban development in recent years. The majority of this development is concentrated between and adjacent to I-5 and SR-14. Land uses surrounding the Project site include residential subdivisions combined with a variety of agricultural, oil production, and industrial uses, as well as established park lands. In general, the existing topography and ridgelines and SR-14 separate the Ranch from surrounding uses.

To the north of the Ranch within the City of Santa Clarita, the 1,259-acre Golden Valley Ranch planned community is currently under construction. This development will ultimately include residential uses, a commercial shopping center, an elementary school, land for a County Fire Station, and a passive trail system accessing substantial open space.[14] These uses are separated from existing uses within the Ranch by steep ridgelines, with no direct line of sight to or from the Project site. The areas north of the Ranch are zoned and designated as Residential Suburban (RS) and Community Commercial (CC) per the City of Santa Clarita's Zoning Code and General Plan.

To the east of the Ranch within an unincorporated County area are undeveloped land and a small residential subdivision that consists of approximately 30 homes accessed from Placerita Canyon Road. This area is zoned for low-density residential uses, Residential Planned Development of one unit per acre (RPD-1-1U), and designated N1 and HM, surrounded by agriculturally zoned land (A-2-1 and A-2-2) designated HM. Like lands to the north, these areas are separated from uses within the Ranch by steep intervening ridgelines.

Areas to the south and southeast of the Ranch include U.S. Forest Service Land (Angeles National Forest) and State Park Land (Placerita Canyon State Park, known as Placerita Canyon Nature Center, operated by the County). These areas are zoned W and agricultural (A-2-1, A-2-2, and A-2-5) and designated in the County General Plan as O-NF and Open Space/Park (O-P).

To the west of the Ranch, across SR-14 in the City of Santa Clarita, there are oil production wells and industrial uses, with The Master's College and residential subdivisions further to the west. The City has zoned and designated these areas as Community

[14] *Only that portion of the Golden Valley Ranch project that would be constructed by the proposed Project's buildout year of 2020 (i.e., the non-residential components) is accounted for in the related projects (Related Project No. 8).*

Commercial (CC), Residential Low (RL), Residential Very Low (RVL), and Business Park (BP). Additionally, the City has zoned and designated residential subdivisions located southwest and northwest of the Ranch as Residential Moderate (RM) and Residential Suburban (RS), respectively. The Off-Site Infrastructure Improvement Areas are located within the City, west of SR-14. While the proposed utility lines would be located primarily in existing paved roadways, depending on the alignments ultimately selected, the improvements would pass through or adjacent to land designated and zoned as Residential (Very Low, Low, Estates, Suburban, Moderate, and Medium High), Community Commercial (CC), Business Park (BP), and Private Education (PE). Portions of the RL, RM, and RE-designated areas are also designated as a Mineral Oil Conservation Area (MOCA), and some of the CC areas are zoned as a Planned Development (PD).

C. APPLICABLE LOCAL AND REGIONAL PLANS AND POLICIES

1. Los Angeles County General Plan

The County's General Plan directs future growth and development in the unincorporated areas of the County. The current General Plan was approved by the Los Angeles County Board of Supervisors in November 1980. The General Plan contains a number of Elements that address specific issues and establish various goals, policies, and objectives that pertain to the County as a whole. These Elements, several of which were updated or amended between 1987 and 2008, guide the County's land use policies. In order to meet the needs of the large number of local communities within the County, the General Plan Elements are supplemented by area plans that provide more detailed planning policies focused on local community issues. In addition, the County is in the process of updating its General Plan. The County has issued a Draft General Plan, which is proceeding through the County's review and approval process. The policies set forth in the adopted General Plan remain applicable to the Project.

2. Santa Clarita Valley Area Plan

The County has adopted community-driven area plans, which are part of the General Plan and designed to more accurately address the needs of local communities and specific geographic areas throughout the County. The Santa Clarita Valley Area Plan was adopted in February 1984 and updated in December 1990. This Area Plan sets forth area wide planning policies for the Santa Clarita Valley and creates specific objectives for the individual communities in the valley. The County in collaboration with the City of Santa Clarita is updating the Area Plan in the One Valley One Vision (OVOV) process to address future growth throughout the Santa Clarita Valley. Refer to Section V.N, Land Use, for further discussion of the Draft 2012 Area Plan.

3. Los Angeles County Planning and Zoning Code

The Los Angeles County Planning and Zoning Code (Chapter 22 of the Los Angeles County Code), also referred to as the Zoning Ordinance, regulates development through land use designations and development standards. The Zoning Ordinance specifies permitted uses, conditional uses, and requirements regarding heights, setbacks, and yards. Additional sections of the Zoning Code specify other development standards and address such issues as parking requirements, signage, and lot area. Specifically, Parts 20, 21, and 22 of Section 22.52 address Green Building, Drought-Tolerant Landscaping, and Low Impact Development (LID) requirements, respectively, all of which are discussed below.

4. Los Angeles County Green Building Program

On November 18, 2008, the Los Angeles County Board of Supervisors adopted three ordinances to form the County's Green Building Program: the Green Building ordinance (County Code Chapter 22.52, Part 20), the Drought-Tolerant Landscaping ordinance (County Code Chapter 22.52, Part 21), and the Low Impact Development Standards ordinance (County Code Chapter 22.52, Part 22). The Green Building ordinance is intended to minimize the impact of development by requiring building practices that reduce the use of energy, water, and other natural resources, minimize waste, and promote a healthy environment. Non-residential buildings with a gross floor area between 10,000 and 25,000 square feet are required to meet LEED™ Certification requirements, and non-residential buildings with a gross floor area of 25,000 square feet or more are required to meet LEED™ Silver Certification requirements, with compliance demonstrated via site plan review. If a project site contains multiple buildings, each building must comply with the Green Building ordinance. The Drought-Tolerant Landscaping ordinance requires the use of drought-tolerant native or non-native plants that require minimal use of water. Applicable to all projects regardless of size, this ordinance requires 75 percent of a project's total landscaped area to contain drought-tolerant plants and limits the amount of turf to 25 percent of total landscaping or no more than 5,000 square feet. The LID ordinance focuses on water resources and specifies storm water handling and treatment requirements that protect streams, groundwater, surface water quality, and natural drainage characteristics.

5. Southern California Association of Governments' Regional Transportation Plan, Growth Vision Report, and Regional Comprehensive Plan

SCAG is the federally-designated metropolitan planning organization for six Southern California counties, including the County of Los Angeles. SCAG is mandated to create plans for transportation, growth management, hazardous waste management, and air quality. SCAG's 2008 Regional Transportation Plan (RTP), adopted in May 2008, presents a long-term transportation vision through the year 2035 for the SCAG region. The

2008 RTP was produced through a balanced approach that considered system preservation, system operation and management, improved coordination between land use decisions and transportation investments, and strategic expansion. Specific issues addressed within the 2008 RTP include mobility, air quality, climate change, energy, transportation financing, security and safety, environmental justice and mitigation, revenues and expenditures, transportation conformity, implementation and monitoring, corridor preservation, and future connections and growth. The RTP provides a basic policy and program framework for long-term investment in the regional transportation system in a coordinated, cooperative, and continuous manner.

In an effort to maintain the region's prosperity, continue to expand its economy, house its residents affordably, and protect its environmental setting as a whole, SCAG has collaborated with interdependent sub-regions, counties, cities, communities, and neighborhoods in a process referred to by SCAG as Southern California Compass, which resulted in the development of a shared Growth Vision Report for Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. SCAG began Compass in 2002, spearheaded by the Growth Visioning Subcommittee, which consists of civic leaders from throughout the region. The shared regional vision sought to address issues such as congestion and housing availability, which may threaten the region's livability.

In addition, the Compass Blueprint 2% Strategy provides guidance for how and where SCAG can implement the Growth Vision for Southern California's future. It calls for modest changes to current land use and transportation trends on only two percent of the land area of the region. Directing the changes to the selected two percent of the land identified produces the greatest policy achievement for the least land affected.

SCAG has also prepared and issued the 2008 Regional Comprehensive Plan (RCP) in response to SCAG's Regional Council directive in the 2002 Strategic Plan to define solutions to interrelated housing, traffic, water, air quality, and other regional challenges.[15] The 2008 RCP is an advisory document that describes future conditions if current trends continue, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The RCP may be voluntarily used by local jurisdictions in developing local plans and addressing local issues of regional significance. The plan incorporates principles and goals of the Compass Blueprint Growth Vision and includes nine chapters addressing land use and housing, transportation, air quality, energy, open space, water, solid waste, economy, and security and emergency preparedness. The action plans

---

[15] *SCAG, 2008 Regional Comprehensive Plan, http://www.scag.ca.gov/rcp/pdf/finalrcp/f2008RCP_ExecSum.pdf, accessed February 17, 2009.*

contained in the RCP provide a series of recommended near-term policies that developers and key stakeholders should consider for implementation, as well as potential policies for consideration by local jurisdictions and agencies when conducting project review.

6. South Coast Air Quality Management District's Air Quality Management Plan

The South Coast Air Quality Management District (SCAQMD) was established in 1977 pursuant to the Lewis-Presley Air Quality Management Act. The SCAQMD is responsible for bringing air quality in the South Coast Air Basin into conformity with federal and State air pollution standards. The SCAQMD is also responsible for monitoring ambient air pollution levels throughout the Air Basin and for developing and implementing attainment strategies to ensure that future emissions will be within federal and State standards. The SCAQMD's Air Quality Management Plan (AQMP), last amended in 2007, presents strategies for achieving the air quality planning goals set forth in the Federal and California Clean Air Acts (CAA), including a comprehensive list of pollution control measures aimed at reducing emissions.

7. Metro Congestion Management Program

The Los Angeles County Metropolitan Transportation Authority administers the CMP, a State-mandated program designed to provide comprehensive long-range traffic planning on a regional basis. The 2004 Congestion Management Plan (CMP) includes a hierarchy of highways and roadways with minimum level of service standards, transit standards, a trip reduction and travel demand management element, a program to analyze the impacts of local land use decisions on the regional transportation system, a seven-year capital improvement program, and a county-wide computer model used to evaluate traffic congestion and recommend relief strategies and actions.[16] CMP guidelines specify that those freeway segments to which a project could add 150 or more trips in each direction during the peak hours be evaluated. The guidelines also require evaluation of designated CMP roadway intersections to which a project could add 50 or more trips during either peak hour.

[16] *The Metro Board adopted the 2010 CMP for Los Angeles County on October 28, 2010. However, the Project is subject to the adopted CMP in effect at the time of the Notice of Preparation (NOP), which was the 2004 CMP.*

D. RELATED PROJECTS

CEQA requires an EIR to analyze cumulative impacts. CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." In addition, CEQA Guidelines Section 15130(b) indicates the analysis of cumulative impacts need not be as in-depth as what is provided relative to a proposed project, but instead is to "be guided by the standards of practicality and reasonableness."

Cumulative impacts are anticipated impacts of the project along with reasonably foreseeable growth. According to CEQA Guidelines Section 15130(b)(1), reasonably foreseeable growth may be based on either of the following:

- 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; or

- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental planning document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

Cumulative study areas are defined based on an analysis of the geographical scope relevant to each particular environmental issue. Therefore, the cumulative study area for each individual environmental impact issue may vary. For example, a cumulative land use impact generally could affect only the compatibility of uses within the Project vicinity, while a cumulative air quality impact could affect the entire South Coast Air Basin. The specific boundaries and the projected growth within those boundaries for the cumulative study area of each environmental issue are identified in the applicable environmental issue section in Section IV, Environmental Impact Analysis, of this Draft EIR.

Buildout of the Project is expected to occur as early as 2015 or as late as 2020. Accordingly, this Draft EIR considers the effects of other proposed development projects that may be constructed in the general Project area through 2020. For the purposes of the cumulative analyses in this Draft EIR, 14 related projects have been identified within the vicinity of the Project site. The list of Related Projects, or known development projects that are either proposed, approved, or under construction in the vicinity of the Ranch, was obtained from LACDPW in December 2009 and from the City of Santa Clarita in February 2010. A total of 11 Related Projects that fall within a 5-mile radius of the Ranch were identified. Subsequently in April 2011, an updated list of known development projects was obtained from the County Department of Regional Planning and yielded an additional three Related Projects located within a 2-mile radius of the Ranch. These 14 related projects are identified in Table III-1 on page III-41 and are located on the map presented in Figure III-1 on page III-42.

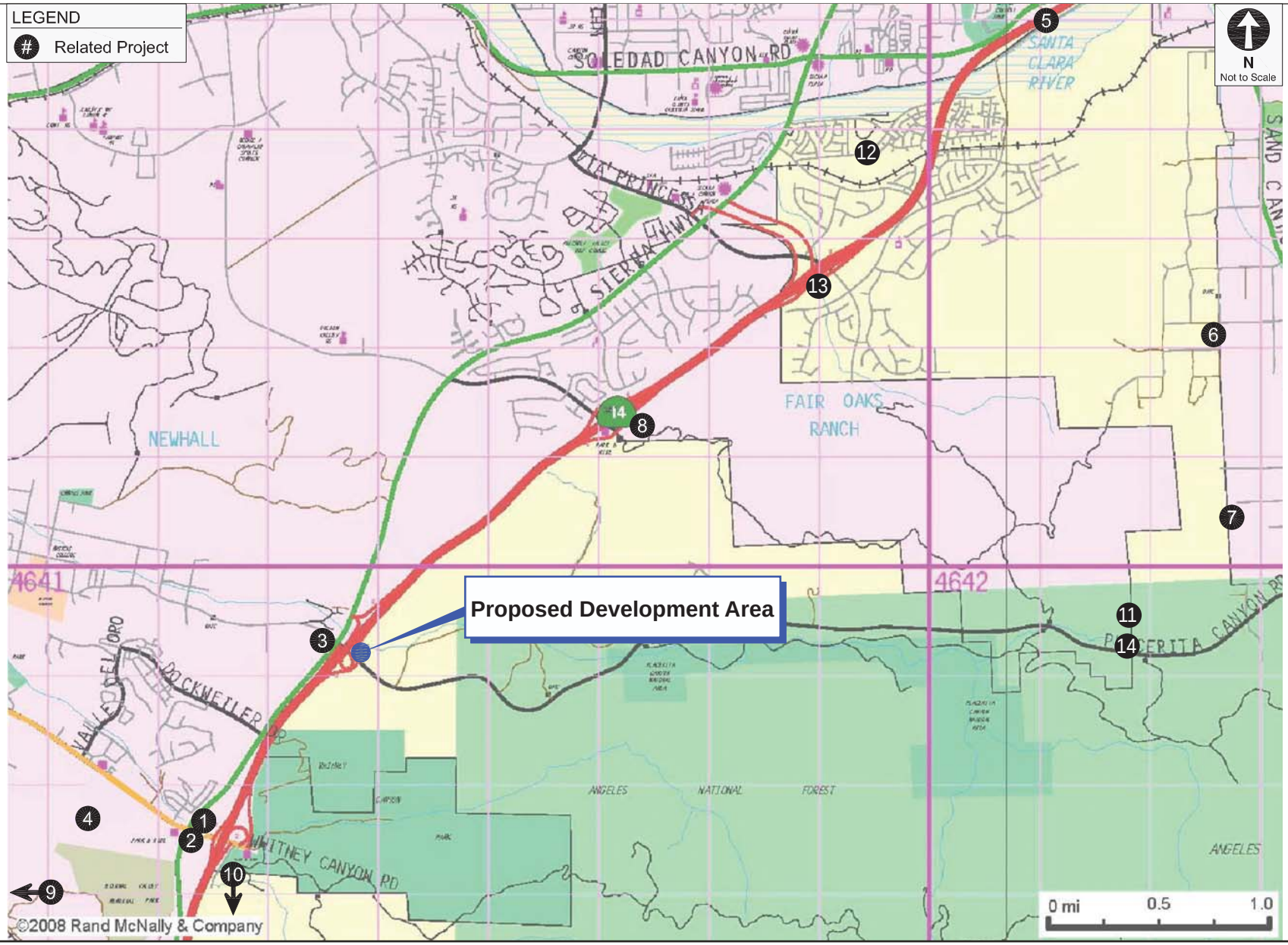
Table III-1
List of Related Projects

	Location	Jurisdiction	Land Use	Size
1	Sierra Crossing	City of Santa Clarita	Campus-Style Office	99 ksf
2	Redmond Project 2/Chinque Terra	City of Santa Clarita	Retail Restaurant Hotel	36,704 sf 7 ksf 55,200 sf
3	Kellstrom Project	City of Santa Clarita	Office Fast-Food Restaurant Mixed-Use Office	30 ksf 7,700 sf 65 ksf
4	Needham Ranch/Gate King	City of Santa Clarita	Industrial Business Park	4,400 ksf
5	Vista Canyon (VCR)	City of Santa Clarita	Office Commercial Space Hotel Residential	646 ksf 164 ksf 200 rooms 1,117 DU
6	PM068934	County of Los Angeles	Single-Family Homes	2 DU
7	R2007-01655	County of Los Angeles	Single-Family Homes	1 DU
8	Golden Valley Ranch [a]	County of Los Angeles	Retail	631 ksf
9	92075	County of Los Angeles	Change from Retail to Restaurant	— sf
10	R2006-01908	County of Los Angeles	Office	— sf
11	TR070070 (APNs 2848-008-001 and 2848-021-086 located north of Placerita Canyon Road and west of Sand Canyon Road)	County of Los Angeles	Single-Family Homes	15 DU
12	87187	County of Los Angeles	Multi-Family Apartments	528 units
13	TR063483	County of Los Angeles	Multi-Family Condominiums	157 units
14	PM065342	County of Los Angeles	Single-Family Homes	4 DU

Note: ksf = 1,000 square feet; du = dwelling unit; APN = Assessors Parcel Number

[a] *Only that portion of the Golden Valley Ranch project that would be constructed by the proposed Project's buildout year of 2020 (i.e., the non-residential components) is accounted for as part of this related project.*

Sources: Los Angeles County Department of Public Works, December 2009; City of Santa Clarita, February 2010; Los Angeles County Department of Regional Planning, April 2011.



Disney | ABC Studios at The Ranch

matrix environmental

Figure III-1
Location of Related Projects

Source: Thomas Brothers Maps, 2008; Gibson Transportation Consulting Inc., 2010; Department of Regional Planning, 2011.

IV. Project Description

IV. PROJECT DESCRIPTION

A. PROJECT LOCATION AND BOUNDARIES

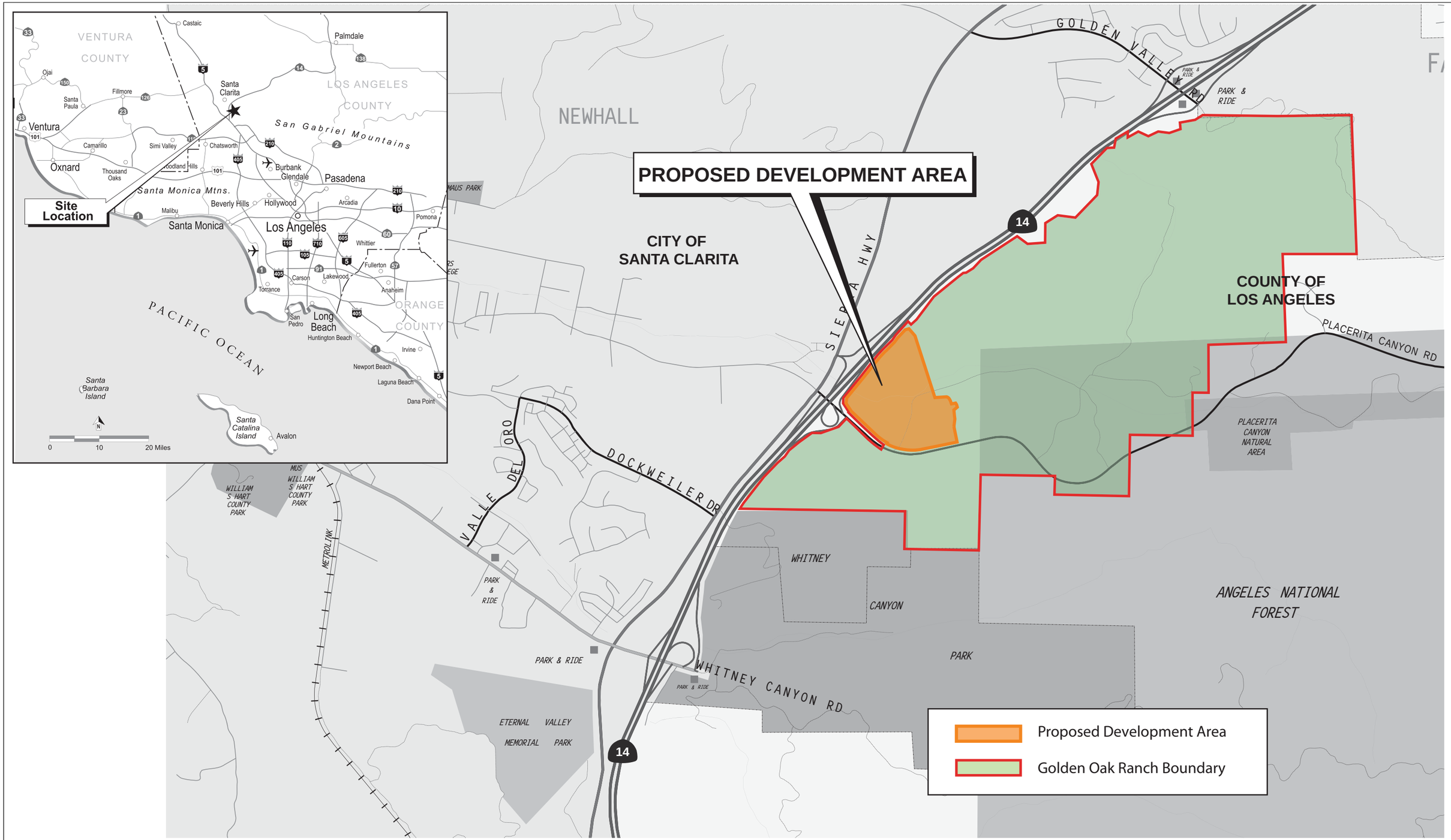
The Project, Disney | ABC Studios at The Ranch, is proposed within an approximately 58-acre Development Area in the westernmost portion of Golden Oak Ranch (the Ranch), with additional Project elements proposed within areas referred to herein as the Water Tank Area, the Trail Area, the Potential Mobile Home Relocation Areas, and the Conditional Parking Areas, all located within the Ranch, and the Off-Site Infrastructure Improvement Areas.[1] Collectively these areas are referred to as the Project site. The 890-acre Ranch is located in the unincorporated Santa Clarita Valley area of Los Angeles County (County), immediately east of State Route 14 (SR-14).[2] Placerita Canyon Road, a secondary highway, runs through the southern portion of the Ranch in an east-west direction. Other major roadways in the Ranch vicinity include Sierra Highway, Newhall Avenue, and Interstate 5 (I-5). Primary access to the Ranch is along Placerita Canyon Road. The location of the Ranch (including the Development Area) from both a regional and local perspective is depicted in Figure IV-1 on page IV-2.[3] The existing conditions throughout the Project site are described in Section III, Environmental Setting, of this Draft EIR.

---

[1] *The Ranch areas of the Project site are depicted in Figure IV-4 on page IV-11. The Project areas located outside of the Ranch are depicted in Figure IV-5 on page IV-13.*

[2] *The western portion of the 890-acre Ranch includes an approximately 30-acre, 330-foot strip of land that traverses the Ranch in a generally northwest to southeast direction and is owned by the City of Los Angeles Department of Water and Power (referred to as the LADWP transmission corridor). The southwest corner of the Ranch also includes two smaller LADWP corridors totaling approximately 4 acres. The Applicant holds an easement from LADWP to access and use the land within the LADWP transmission corridor.*

[3] *During the planning process for the Project, certain Project changes have required revisions to the Development Area boundary. While the Draft EIR evaluates the most current Project characteristics, some of the technical reports appended to this Draft EIR and approved by the County prior to the revisions to the Development Area may reflect a different Development Area boundary. As indicated in a cover letter included with each relevant report, the revisions to the Development Area do not affect the analysis or conclusions contained therein.*



Source: Thomas Bros. Maps, 2009; Matrix Environmental, 2012.

matrix environmental

Figure IV-1
Regional and Local Vicinity Map

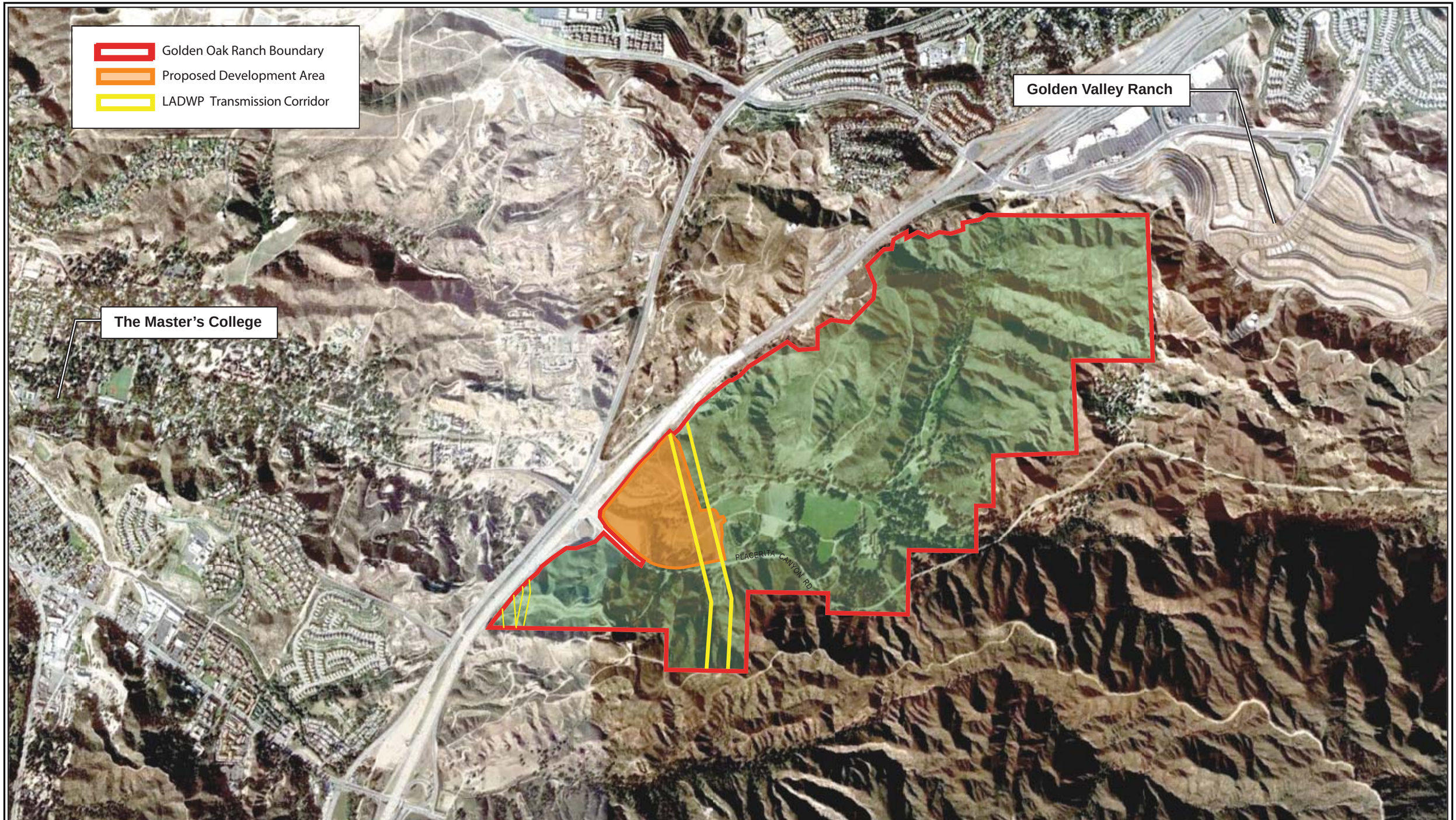
The majority of the Off-Site Infrastructure Improvement Areas, described further below, is located within the City of Santa Clarita, west of the Ranch and SR-14. The utility alignments proposed within these areas are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential and commercial development. Similarly, the SCE power pole replacement areas are located along Sierra Highway and possibly Placerita Canyon Road within existing road rights-of-way. In addition, Project Design Features and Mitigation Measures would require roadway improvements at four intersections adjacent to or near the Ranch.

As shown in the aerial photograph provided in Figure IV-2 on page IV-4, the Project vicinity includes a variety of uses. New development within the Golden Valley Ranch planned community is underway to the north of the Ranch within the City of Santa Clarita (City). Upon completion, new uses within the 1,259-acre Golden Valley Ranch will include approximately 500 single-family residential units, approximately 610,000 square feet of community-serving commercial uses, a school, parks, and a fire station.[4] While these uses are located just north of the Ranch, steep ridgelines separate and preclude visibility of these uses from the Ranch. Residential subdivisions are located to the northwest of the Ranch on the other side of SR-14 within the City and are not visible from the Ranch due to distance and topography. To the south and southeast of the Ranch are U.S. Forest Service Land (Angeles National Forest) and State Park Land (Placerita Canyon State Park, known as Placerita Canyon Nature Center), with residential subdivisions further to the southwest. To the east of the Ranch are undeveloped areas and a small residential subdivision that is also separated from uses within the Ranch by steep ridgelines. This eastern residential subdivision is located approximately 1.25 miles from the Development Area. To the west of the Ranch and the Development Area across SR-14 in the City, there are oil production wells and industrial uses, with The Master's College and residential subdivisions further to the west. The residential area to the west represents the nearest sensitive uses to the Development Area, the closest of which is located approximately 0.5 mile from the Development Area.

B. PROJECT BACKGROUND

The Ranch has been used over the past several decades for motion picture and television film production, agriculture, horse breeding, cattle ranching, and some oil production activities. Since before Walt Disney Productions purchased significant holdings within the Ranch in 1959, the property has been used for a variety of film production and

[4] *Only the portion of the Golden Valley Ranch project that would be constructed by the Project's buildout year of 2020 (i.e., the non-residential components) is accounted for in the related projects (Related Project No. 8).*



Source: Google Earth Pro, 2010; Matrix Environmental 2012.

Disney | ABC Studios at The Ranch

matrix environmental

0 .5 Mile 1 Miles
Approximate Scale in Miles

Figure IV-2
Aerial Photograph of Golden Oak Ranch

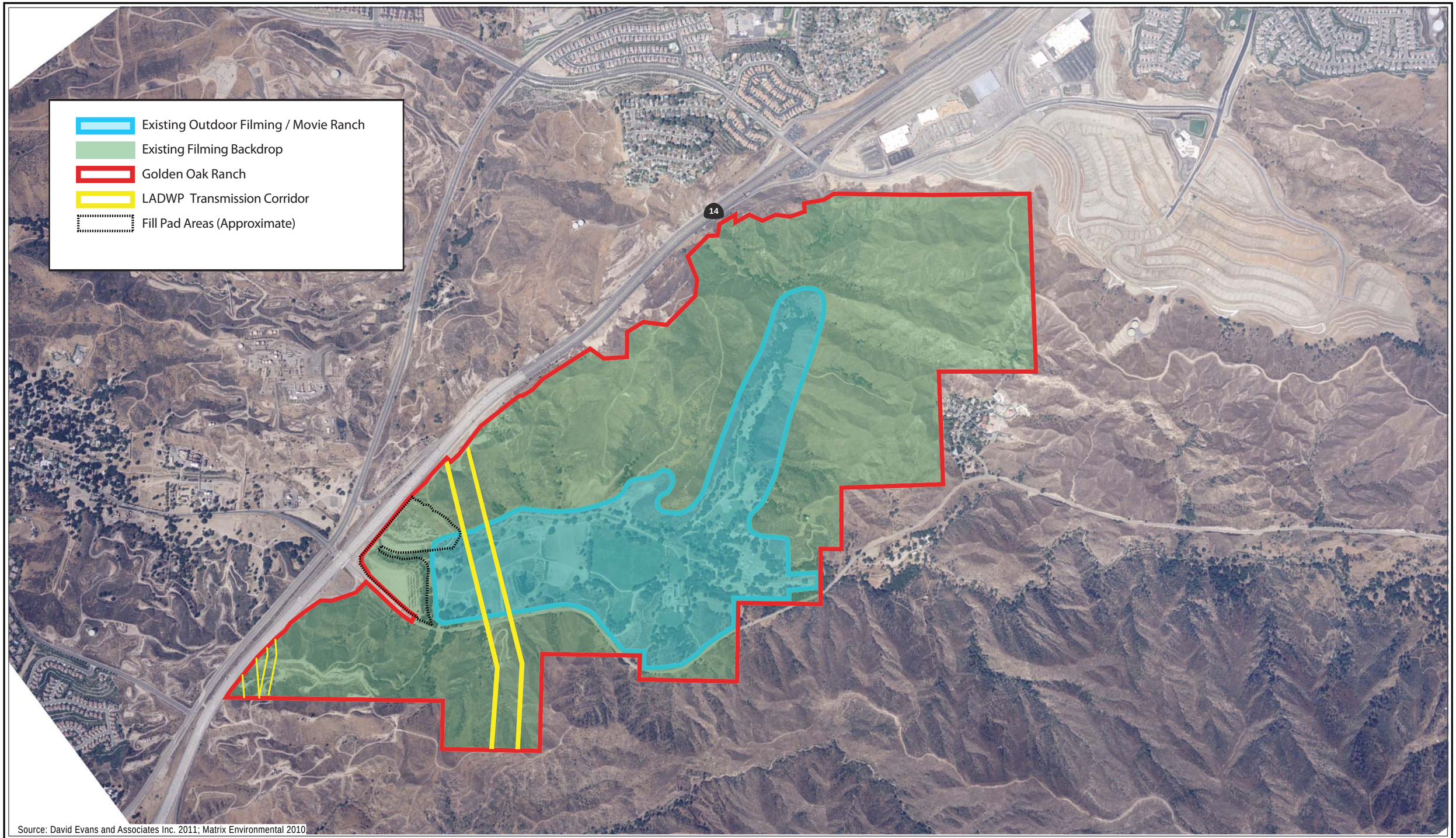
agricultural uses, with some oil production. Specifically, within the 890-acre Ranch, approximately 225 acres are used for outdoor filming/movie ranch and intermittent agricultural uses. The remaining areas of the Ranch, which consist mostly of undeveloped hillsides, are used primarily as a filming backdrop, also with some intermittent agricultural and limited oil production uses. (Such areas are specifically referred to herein as the filming backdrop for the filming activities that occur on the Ranch floor.) Over the years, the approximately 225 acres used for filming have been modified continuously to provide for such uses, including the construction of large filming sets. The existing uses are shown in Figure IV-3 on page IV-6.

The film production uses at the Ranch are currently permitted by a Conditional Use Permit (CUP) issued by the County of Los Angeles. In 1979, Golden Oak Ranch Properties obtained CUP No. 1494 to authorize the use of the Ranch for motion picture sets and the temporary use of wild and domestic animals for filming purposes for a 25-year term. The CUP also allowed up to 600 persons on the Ranch at any one time. Prior to expiration of CUP No. 1494, Golden Oak Ranch Properties applied for a CUP to continue the motion picture set uses on the Ranch. In January 2007, Golden Oak Ranch Properties obtained CUP No. 04-089-(5) to continue using the Ranch for motion picture filming, motion picture set construction, and agricultural activities for 15 years, with the ability to renew the CUP for an additional 15 years. At the same time, the County granted Oak Tree Permit No. 200600032-(5) to Golden Oak Ranch Properties to remove 14 oak trees and permit five encroachments into the protected zone of certain oak trees to relocate the primary site access and driveway in order to meet County line-of-sight requirements on Placerita Canyon Road.

C. PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires the Project Description to contain “a statement of the objectives sought by the proposed project.” In addition, State CEQA Guidelines Section 15124(b) further states “the statement of objectives should include the underlying purpose of the project.”

The underlying purpose of the Project is to provide for a state-of-the-art motion picture and television studio within the westernmost portion of the Ranch which would include at least eight soundstages, while maintaining the scenic qualities of the filming backdrop and the Ranch and existing filming activities on the remainder of the Ranch floor, including the use of outdoor filming sets and intermittent agricultural operations. The Project would recognize the synergy of having the existing outdoor filming activities and proposed indoor film production consolidated on the same site, thus maximizing efficiencies and reducing vehicle trips. In addition, the proposed production facilities would accommodate indoor production needs in the County, while supporting the expansion of



Source: David Evans and Associates Inc. 2011; Matrix Environmental 2010

matrix environmental

0' 1500' 3000'
Approximate Scale in Feet

Figure IV-3
Existing Uses

the entertainment industry both locally and regionally. Below are the specific Project Objectives that support the Project's underlying purpose:

Land Use and Planning Objectives

- Provide for studio uses, including at least eight soundstages and associated production support facilities, within the Ranch, while complementing the Ranch's rural and agricultural setting.
- Transform the area of the Ranch adjacent to SR-14, of which approximately half is comprised of mostly barren fill pads left by Caltrans during construction of SR-14, with a studio design that respects the rural setting of the Ranch and allows views of Placerita Creek and the surrounding hillsides of Placerita Canyon.
- Locate more intensive production uses closest to SR-14, while continuing less intensive existing outdoor filming uses on 195 acres further east within the Ranch, and protecting the existing least intensive uses within the 637 acres used as a filming backdrop.
- Retain 195 acres currently used for outdoor filming and the 637 acres of existing filming backdrop areas within the Ranch.
- Minimize the amount of land within the Ranch to be developed, and cluster and focus new development within and near the existing fill pad areas to reduce the area of impact, provide for a consolidated, efficiently planned Project, minimize the impact to outdoor filming within the Ranch, and retain the ability to film in a natural setting.
- Ensure appropriate and necessary infrastructure capacity for the Project.
- Develop new buildings at grades that minimize visibility from SR-14 and Placerita Canyon Road, adjacent off-site areas, and other portions of the Ranch.
- Minimize visibility of the Development Area from existing outdoor filming areas within the Ranch.
- Implement an environmentally sensitive Project that respects and enhances Placerita Creek and its riparian corridor.
- Implement a comprehensive landscaping program that complies with the County's Drought-Tolerant Landscaping ordinance and provides landscape buffers along Placerita Canyon Road and SR-14.

- Provide a comprehensive oak tree planting program that complies with County requirements and exemplifies a high standard of restoration design, implementation, and maintenance.

- Locate proposed buildings and structures outside the 100-year floodplain and minimize effects on drainage patterns within the Ranch and Project vicinity.

Operational Objectives

- Consolidate indoor and outdoor production uses on a single site, allowing productions full access to the adjacent portions of the Ranch and its outdoor filming and filming sets.

- Provide for either twelve soundstages that allow for up to six first-year productions or eight soundstages with a studio office component that provide further flexibility to host up to two mature productions along with additional post-production facilities associated with those shows.

- Incorporate flexibility into the Project so studio office uses may be developed in lieu of four soundstages, two mills, and associated production offices in order to respond to evolving market conditions and production needs.

- Provide a secure environment consistent with the requirements of studio-related uses.

Transportation, Parking, Access and Transit Objectives

- Provide for convenient vehicular access to and from SR-14 to limit the amount of Project-related vehicles traveling along Placerita Canyon Road and other local roadways in the Project vicinity.

- Maintain adequate internal access within the Ranch to allow continuation of existing outdoor filming and agricultural operations.

- Functionally integrate the proposed development with other areas of the Ranch via a system of roads, shared bicycle access, and pedestrian pathways within the Development Area that connect to existing unpaved roadways within the Ranch.

- Provide adequate internal access within the Development Area to meet the needs of the proposed studio-related uses, including space requirements for production trailers and equipment.

- Provide adequate vehicular queuing areas and lines of sight at entrances and exits in the Development Area and the Ranch.

- Provide improvements that encourage alternative and fuel-efficient forms of transportation (e.g., bicycle storage areas, preferential parking for low-emission/ fuel-efficient vehicles and carpools/vanpools, etc).

- Promote use of recreation trails within the Project vicinity.

- Provide pedestrian and bicycle access throughout the Development Area to reduce unnecessary vehicular travel and promote non-motorized circulation within the Ranch.

- Provide on-site parking that meets the demand generated by the Project uses.

Sustainability Objectives

- Create an ecologically sound Project that implements a comprehensive program of resource protection, enhancement, and conservation and encourages recycling during both construction and operations.

- Promote sustainability, including measures to increase efficiency and the use of renewable resources while decreasing use of non-renewable energy.

- Use green building design and construction practices as well as new technologies to reduce the consumption of energy and water.

- Implement green building design and construction practices capable of achieving Leadership in Energy and Environmental Design (LEED™) certification and LEED™ Silver certification for many buildings within the Development Area. Specifically, the soundstages, production offices, and administration building would comply with the County's Green Building Standards and achieve LEED™ Silver Certification. The commissary would comply with the County's Green Building Standards and achieve LEED™ Certification. The writers/producers bungalows would comply with the County's Green Building Standards. While the mills and the warehouse are exempt from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they would comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant would be exempt from the County's Green Building ordinance.

- Use drought-tolerant plant species, including native and non-native plants, for a minimum of 75 percent of total landscaping in compliance with the County's Drought Tolerant Landscaping ordinance in order to minimize water usage.

- Use planted areas and bio-swales to promote groundwater infiltration and reduce stormwater runoff.

- Promote the efficient use of water through incorporation of water conservation measures.

Economic Objectives

- Support the expansion of the entertainment industry both locally and regionally.
- Continue the Ranch's important role in the entertainment industry by providing for studio-related uses on the Ranch to meet the growing and changing needs of the entertainment industry.
- Expand the economic base of the County and City by generating additional employment opportunities and revenues.
- Provide jobs in a housing rich area.
- Create construction jobs and provide a boost to the local economy.

D. PROJECT CHARACTERISTICS

The Project would provide for the development of a state-of-the-art motion picture and television studio within the westernmost portion of the Ranch. The Project would provide up to 12 soundstages, production offices, six mills, a warehouse, writers/producers bungalows, a commissary, an administration building, a central utility plant, and an electrical substation, all on approximately 58 acres located immediately adjacent to SR-14.[5] This development scenario is referred to herein as the Soundstage Option. The Project also includes an option to develop studio office uses in lieu of four soundstages, two mills, and production offices within the northern portion of the Development Area. This alternative scenario is referred to as the Studio Office Option. Under either development scenario, the remaining areas of the Ranch would continue to operate as a working filming ranch, as the Ranch has been operated since at least 1959. Approximately 30 acres of the existing 225-acre outdoor filming area are located within the Development Area. As shown in Figure IV-4 on page IV-11, with implementation of the Project, approximately 195 acres of the Ranch would continue to be used for outdoor filming/movie ranch uses with some intermittent agricultural uses. Approximately 637 acres of the Ranch would continue to be used primarily as a filming backdrop with some intermittent agricultural and oil production uses. The Project areas located outside of the Ranch, discussed further below, are depicted in Figure IV-5 on page IV-12.

---

[5] *As previously indicated, the 58-acre Development Area includes approximately 12 acres that are owned by LADWP and traverse the easternmost portion of the Development Area. This area would be graded and used for surface parking as part of the Project.*

Golden Oak Ranch - **890 acres**
Filming Backdrop Area - **637 acres**
Outdoor Filming / Movie Ranch - **195 acres**
Proposed Development Area - **58 acres**
LADWP Transmission Corridor
Parcel Lines
Existing Access Road to be Improved
Water Tank
Conditional Parking Areas
Proposed Placerita Canyon Connector Trail

14

1 Potential Mobile Home Relocation Site 1

2 Potential Mobile Home Relocation Site 2

Source: David Evans and Associates Inc. 2011; Matrix Environmental 2012.

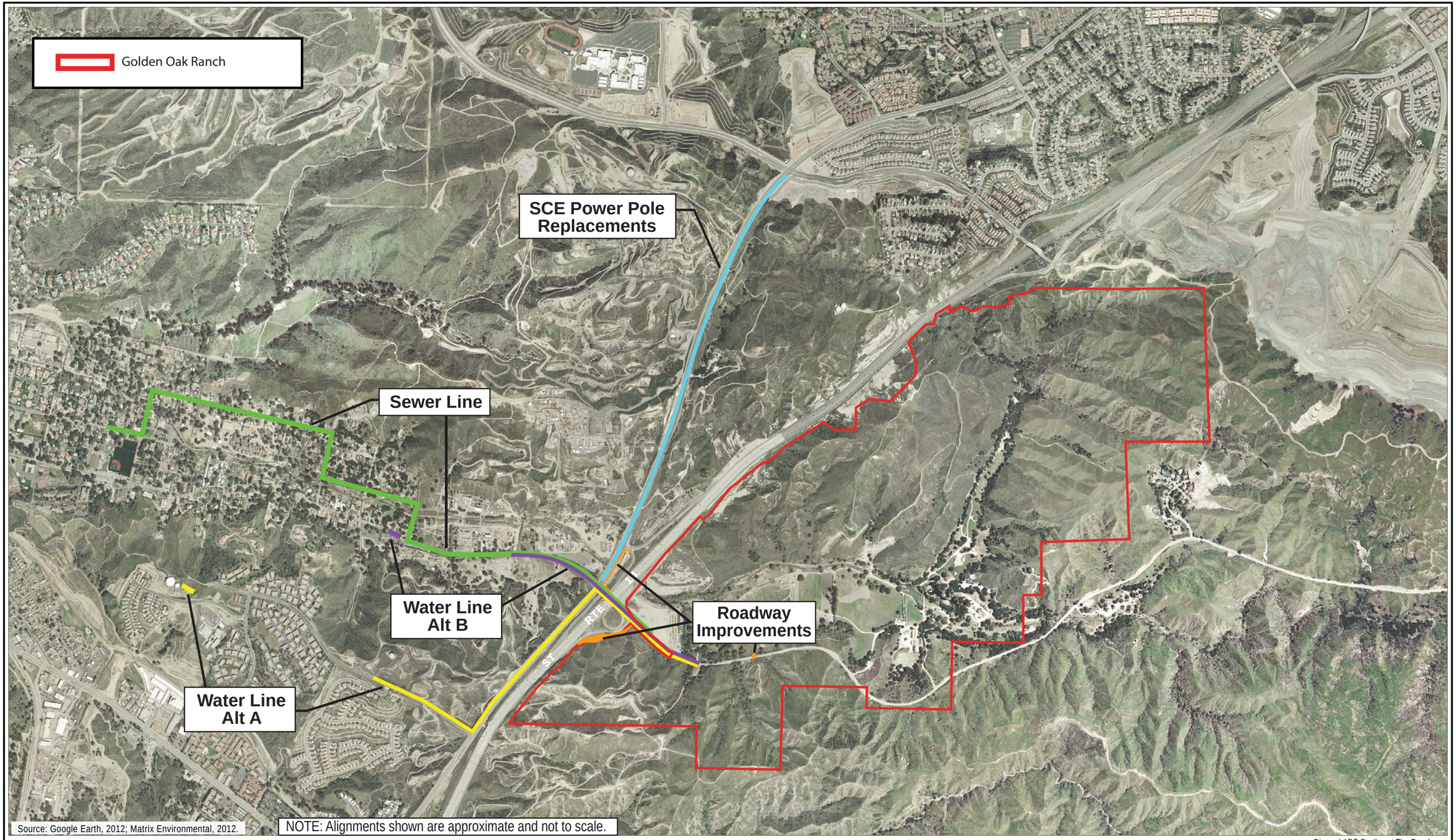
Disney | ABC Studios at The Ranch

matrix environmental

N

0' 1500' 3000'
Approximate Scale in Feet

Figure IV-4
Proposed Uses Within Golden Oak Ranch



Disney | ABC Studios at The Ranch

matrix environmental

NORTH

Figure IV-5

Proposed Uses Outside of Golden Oak Ranch

The Project would recognize the synergy of having the existing outdoor filming activities and proposed indoor film production uses consolidated on the same site. The Project would help satisfy the increased demand for film production studio space within the Los Angeles area as well as support the continued successful establishment of the film industry in the Santa Clarita Valley. The proposed studio uses and continued filming activities could operate 24 hours per day, as under existing conditions. Outdoor filming activities at night could require the use of generators for lighting and other activities. The number of employees associated with the Project would vary based on filming schedules and demand, with up to 1,240 persons associated with Development Area activities potentially present each day, for a total of up to 1,840 persons potentially present on the Ranch on a daily basis.

As shown in the Conceptual Site Plan provided in Figure IV-6 on page IV-14, under the Soundstage Option, the southern portion of the proposed Development Area (south of Placerita Creek and west of the transmission line corridor) would contain: eight soundstages, four mills, and four production offices in the center of the development; writers/producers bungalows, an administration building, and a commissary/amenity building to the north of the soundstages; and a warehouse and a central utility plant along the southern boundary of the Development Area near Placerita Canyon Road. Four additional soundstages, two mills, two production offices, and an electrical substation would be developed in the northern portion of the Development Area, located north of Placerita Creek. As discussed in more detail below, these areas would be connected via a 220-foot long bridge that would span Placerita Creek, as well as an access road at the westernmost portion of the Development Area adjacent to SR-14, and parking would be provided throughout. As shown in Table IV-1 on page IV-15, buildout of the Soundstage Option would result in a total of approximately 555,950 gross square feet of building area, plus approximately 66,300 square feet of ancillary facilities.

Under the Studio Office Option, a total of eight soundstages, associated production offices, four mills, a warehouse, writers/producers bungalows, a commissary, an administration building, a central utility plant, and an electrical substation would be developed in addition to studio office uses.[6] Under the Studio Office Option, development in the southern portion of the Development Area would involve the same uses, floor area, and layout as under the Soundstage Option. Also similar to the Soundstage Option, the Studio Office Option would include an electrical substation in the northernmost portion of the Development Area. However, in lieu of four soundstages, two mills, and associated production offices in the northern portion of the Development Area, the Studio Office

[6] *Studio office uses are general offices for media-related activities and vary from production offices, which focus on the actual production of specific films and television shows.*

BLDG. NO.	USE
1-12	SOUNDSTAGES
13	WAREHOUSE
14	CENTRAL UTILITY PLANT AND ASSOCIATED EXTERIOR EQUIPMENT
15	ADMINISTRATION
17, 26	BUNGALOWS
18, 19, 22, 27, 30, 31	PRODUCTION OFFICES
20, 21, 23, 24, 32, 33	MILLS
25	COMMISSARY
29	ELECTRICAL SUBSTATION

Source: Johnson Fain 2012; Olin Partnership 2012.

matrix environmental

0' 50' 100' 200'
Approximate Scale in Feet

Figure IV-6
Conceptual Site Plan - Soundstage Option

Table IV-1
Project Buildout—Soundstage Option

Use	Building GSF	Quantity	Total GSF
Soundstages	19,800	12	237,600
Production Offices	28,125	6	168,750
Mills	11,500	6	69,000
Warehouse	23,000	1	23,000
Writers/Producers Bungalows	1,725	6	10,350
Commissary/Amenities	17,250	1	17,250
Administration	30,000	1	30,000
Total			**555,950**
Ancillary Facilities			
Central Utility Plant		1	20,000
Electrical Substation		1	46,300

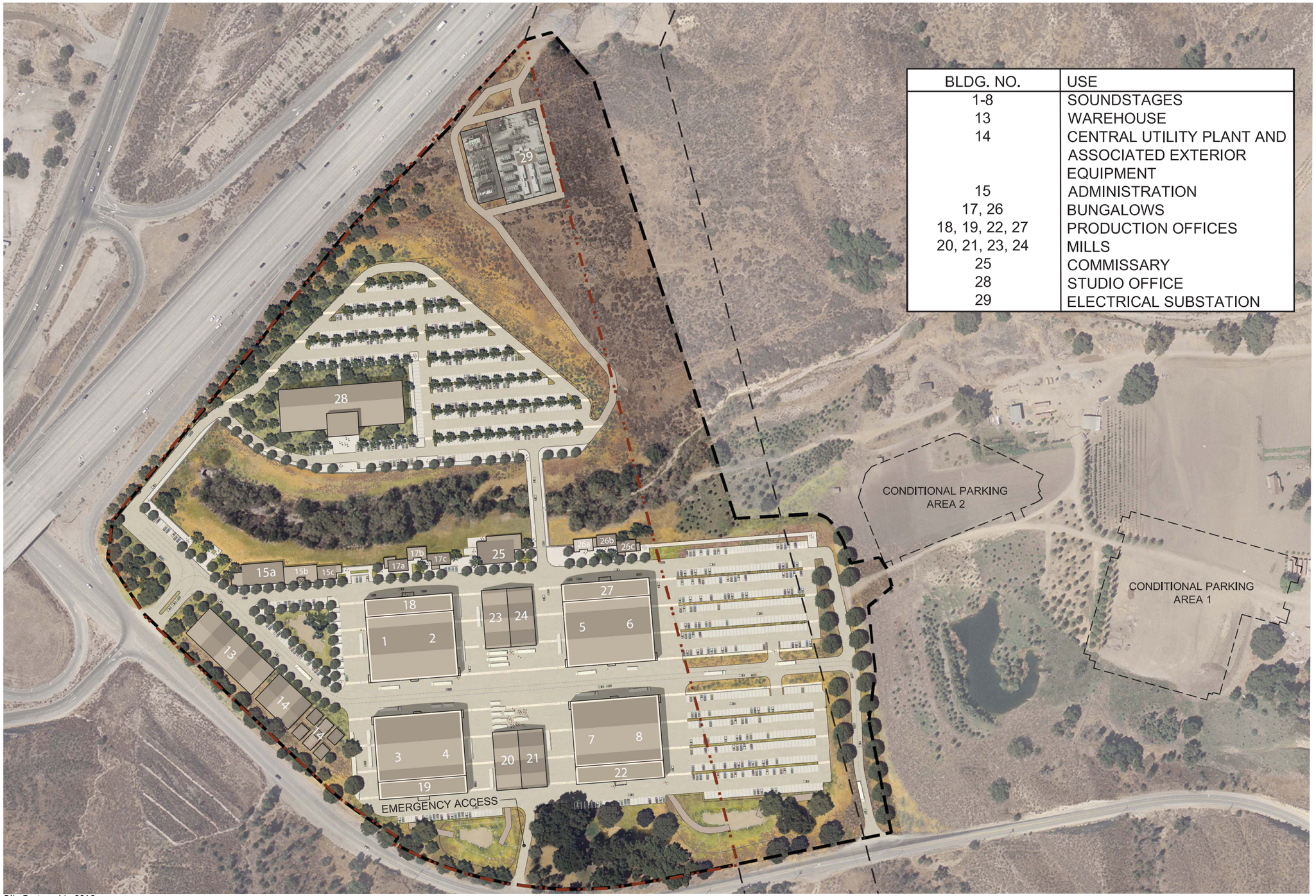
GSF = Gross Square Feet
Source: Johnson Fain, 2010.

Option would involve the development of studio office uses in one office building north of Placerita Creek. A Conceptual Site Plan illustrating this option is provided within Figure IV-7 on page IV-16. As shown in Table IV-2 on page IV-17, buildout of the Studio Office Option would result in a total of approximately 510,000 gross square feet of building area, plus approximately 66,300 square feet of ancillary facilities.

While mature trees, including oak trees, would need to be removed as part of the Project, as shown in Figure IV-6 and Figure IV-7 and discussed further below, many of the existing mature trees along Placerita Canyon Road would be retained. New landscaping along Placerita Canyon Road and the Ranch boundary next to SR-14 would visually shield new buildings, including the electrical substation, from these roadways. (Also see Figure IV-10 and Figure IV-11 on pages IV-29 and IV-30, respectively, for images of the proposed landscaping concepts, described further below, including the landscape screening to be introduced along the perimeter of the Development Area.)

1. Building Design, Signage, and Lighting

The proposed buildings within the Development Area would be designed to reflect the existing agrarian and rustic character of the Ranch. The buildings would be simple in form, function, and architectural design with the intent of complementing the surrounding rural setting. The new buildings would be integrated into the topography of the site with rounded roofs on the soundstage buildings to blend the new development with the



BLDG. NO.	USE
1-8	SOUNDSTAGES
13	WAREHOUSE
14	CENTRAL UTILITY PLANT AND ASSOCIATED EXTERIOR EQUIPMENT
15	ADMINISTRATION
17, 26	BUNGALOWS
18, 19, 22, 27	PRODUCTION OFFICES
20, 21, 23, 24	MILLS
25	COMMISSARY
28	STUDIO OFFICE
29	ELECTRICAL SUBSTATION

Source: Johnson Fain 2012; Olin Partnership 2012.

matrix environmental

0' 50' 100' 200'
Approximate Scale in Feet

Figure IV-7

Conceptual Site Plan – Studio Office Option

Table IV-2
Project Buildout—Studio Office Option

Use	Building GSF	Quantity	Total GSF
Soundstages	19,800	8	158,400
Production Offices	28,125	4	112,500
Mills	11,500	4	46,000
Warehouse	23,000	1	23,000
Writers/Producers Bungalows	1,725	6	10,350
Studio Office	112,500	1	112,500
Commissary/Amenities	17,250	1	17,250
Administration	30,000	1	30,000
Total			**510,000**
Ancillary Facilities			
Central Utility Plant		1	20,000
Electrical Substation		1	46,300

GSF = Gross Square Feet
Source: Johnson Fain, 2009.

surrounding mountains. Building heights would range from approximately 20 to 60 feet in height, with the soundstages being the tallest features.[7] Building materials used for exterior façades, are expected to include wood, brick, stucco, metal panels, concrete, and glass. The buildings located within the western portion of the Development Area would be screened from Placerita Canyon Road and SR-14 by a vegetation barrier (i.e., including a screening berm with native plants) heavily planted with trees and shrubs. Along Placerita Canyon Road, much of the existing landscaped area that includes mature native trees, including mature oak trees, would provide additional screening of the Project buildings. Refer to Figure V.I-3 through Figure V.I-5 in Section V.I, Visual Qualities, for visual simulations of the proposed studio development from a variety of off-site vantage points. Additionally, Figure V.I-8 through Figure V.I-12 therein depict conceptual illustrations of the proposed development and associated views of the Development Area.

Design Guidelines would be implemented as part of the Project and would address such issues as site planning, urban design principles, building design, building heights, setbacks, site circulation, landscaping, and lighting. In accordance with the Design

[7] *Per Los Angeles County Code Section 22.08.080 H, building height is defined as the plumb line distance from the point being measured to the grade.*

Guidelines, new development within the Ranch would be limited to less than 10 percent of the Ranch area and would be sensitively designed and laid out so as to protect and enhance Placerita Creek as the site's main natural feature. A pedestrian-friendly scale would be established through the use of staggered building masses and rooflines, articulated building façades, and architectural devices such as balconies, porches, terraces, loggias, verandas, and courtyards. Building setbacks along the public street rights-of-way would be a minimum of 20 feet, with minimum setbacks of 5 feet from the top of the slopes along Placerita Creek. The edges of the main entry drives would be lined with native shade trees inspired by tree-lined country lanes, except where prohibited below the existing LADWP transmission corridor, and under the Studio Office Option, the northern parking lot would be designed to complement the ranch-like setting by creating orchard grove planting patterns. Building colors would be chosen to complement the predominant hues on the Ranch, such as earth tones of brown, green, and gold. Additionally, the use of roof mounted equipment (e.g., rooftop exhaust fans, air handlers) would be minimized to the extent possible and screened from public view (e.g., through the use of parapet walls).

Project signage would be limited primarily to general ground-level and wayfinding pedestrian/vehicular signage and building identification signage. The new main entrance would have an illuminated signage feature, a conceptual rendering of which is provided in Figure V.I-8 in Section V.I, Visual Qualities. Project signage would be compatible with the character of the Project site and the remainder of the Ranch and the surrounding landscape, and any associated lighting would be kept to the minimum sufficient to provide visibility and interest without creating bright light spots or light spillover.

Project lighting would be designed to ensure visibility and safety while providing flexibility for Project operations. Light fixtures and the associated light levels would be specific to the various outdoor functions occurring on-site, including the assembling of sets, loading and unloading of trucks, walking, dining, and parking. As part of the Project's security features, entryways, lobbies, and parking areas would be well illuminated and designed to eliminate areas of concealment. Lighting would be used to add interest and drama to the character of the Development Area, and care would be taken to ensure minimal light spillover onto adjacent native habitat areas, including Placerita Creek, as well as adjacent public roadways. Project lighting could include post lights, building mounted fixtures, and landscape lighting, all of which would be carefully placed and directed to reduce glare and maximize comfort, security, and visibility. Light fixture control devices such as lenses, louvers, barn doors, and snoots would be implemented to provide optimum beam control and minimize glare. Fixtures would be carefully placed and directed to reduce glare and maximize comfort and visibility. Limited lighting would be introduced in the other areas of the Project site, such as emergency lighting around the electrical substation, the water tank, and the booster pump station.

The Design Guidelines include general lighting guidelines to direct the design and implementation of lighting within the Project site, as follows:

- There would be minimal light trespass on adjacent native habitat areas, including groves of trees and Placerita Creek. Fixtures would be carefully placed and directed to reduce glare. For example, along the southern bank of Placerita Creek (Zone B, described below), the brightest lighting would be located furthest from the creek. The lighting along the creek-side of Project buildings would be located primarily on outdoor decks and consist of surface-mounted fixtures facing down with full light cutoff to confine light to the balconies.

- The use of control devices on fixtures, such as lenses, louvers, barn doors, and snoots would provide optimum beam control and minimize glare. The locations of fixtures would be carefully selected based on desired angles of light and intended use.

- Along bridges, certain small parking areas, and some of the mill areas (Zone C, described below), lighting would have a defined optical system to project lumens downward to minimize light trespass with no backlight on the creek below. In particular, bridges would be lit by low focused light located on the side walls or railings and aimed at the road.

- Within the main parking areas (i.e., the two parking lots within the LADWP transmission corridor), post lights would have optimum beam control including sharp cut off with no uplight component. The fixtures would be located at the perimeters of parking areas. Beam patterns would be asymmetric with the majority of light aimed at parking, and reduced light falling behind post lights. A minimum amount of light would trespass on surrounding foliage.

- Landscaping, including low-lying shrubs and groundcover, would be used within the LADWP transmission corridor, between the southern main parking lot and Placerita Canyon Road, to reduce light visibility and spillover onto Placerita Canyon Road. (See Figure IV-10 and Figure IV-11 on pages IV-29 and IV-30, respectively, for images of the proposed landscaping concepts, described further below.)

- Only emergency lighting would be placed around the electrical substation and at the water tank. These would only be used in cases of emergency and not during normal operations.

- Lighting for the Conditional Parking Areas, if developed, would consist of soft light adequate for visibility and security, like that in Zone C (described below).

In addition, the Design Guidelines include specific lighting guidelines for four distinct zones identified within the Development Area and the Conditional Parking Areas, based on

the proposed land use activities and their associated lighting needs. In general terms, Zone A would allow light levels between 1.0 and 1.5 foot-candles (fc) and would apply to the soundstages, mills, and most of the parking areas that surround them (except the areas nearest to Placerita Canyon Road); Zone B would allow light levels between 1.0 and 4.0 fc and would apply to the administration building, bungalows, commissary, and entryways (with 4.0 fc light levels limited to the areas directly adjacent to these buildings); Zone C would allow light levels between 0.7 and 1.0 fc and would cover the small parking areas by some of the mills and soundstages (including the areas nearest to Placerita Canyon Road), as well as the Conditional Parking Areas (if developed); and Zone D would allow light levels between 0.6 and 1.2 fc and would cover the main parking areas (i.e., the two parking lots within the LADWP transmission corridor).[8] Refer to Appendix H.1 for the full Design Guidelines, including diagrams depicting the various light zones, and Section V.I, Visual Qualities, for further discussion. In addition, exterior lighting for the relocated mobile home would be limited to residential-type lighting (e.g., a front porch light).

2. Sustainability

Central to the development concept for the Project are smart growth and sustainability features that would minimize energy usage, greenhouse gas emissions, impacts to ecosystems such as Placerita Creek, and impacts to view corridors of Placerita Canyon. As part of compliance with the County's Green Building ordinance, the majority of the proposed buildings would achieve LEED™ Certification or LEED™ Silver Certification. Specifically, the soundstages, production offices, and the administration building would comply with the County's Green Building Standards and achieve LEED™ Silver Certification. The commissary would comply with the County's Green Building Standards and achieve LEED™ Certification. The writers/producers bungalows would comply with the County's Green Building Standards. While the mills and the warehouse are exempt from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they would comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant would be exempt from the County's Green Building ordinance.

Design features to accomplish the Project's sustainability goals would include, at a minimum, the following measures or any equivalent measures designed to achieve the same results: photovoltaic technology on selected roofs; use of color and shade structures such as awnings or canopies to reduce the heat island effect; the use of highly efficient

[8] *One foot-candle is a measure of illuminance defined as the light energy within a 1-square-foot surface 1 foot away from a standard candle.*

electric and heating, ventilation, and air-conditioning (HVAC) equipment (housed in a central utility plant); and the use of drought-tolerant plant species, including native and non-native plants, for a minimum of 75 percent of total landscaping. Water conservation and design features would include the following measures or any equivalent measures capable of achieving at least the same results: low-flow/ultra low-flow fixtures, Energy Star appliances, drought-tolerant landscaping, and use of drip irrigation systems. In addition, the Project would include planted areas within the proposed detention basins in the Development Area for bio-remediation of stormwater and neutralization of soil contaminants, expansive drainage swales within parking areas, and use of pervious pavement in parts of the Development Area (specified below). The Project would incorporate a recycling program as part of its operations and additional sustainability features set forth in the County's Green Building, Low Impact Development, and Drought-Tolerant Landscaping ordinances. Refer to Section V.B, Flood Hazards; Section V.E.2, Global Climate Change; Section V.L.1, Utilities and Service Systems—Water Supply; and Section V.L.4, Utilities and Service Systems—Energy, for further description of proposed Project Design Features (PDFs) pertaining to sustainability, drainage, and water and energy conservation.

The Project would implement the following specific sustainability features that address each of the following areas:

(a) Land Use

The Project would include existing outdoor filming uses and proposed indoor production facilities consolidated on the same site to reduce vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods. The combination of such uses at one location would reduce the need for film production-related trips to off-site locations throughout the region. The Project would also provide a direct entrance to the Development Area from the SR-14 northbound off-ramp to allow immediate access to the Development Area from the freeway and reduce travel near sensitive receptors, therefore limiting air quality impacts from cars and trucks travelling to and from the freeway. In the event the proposed improvements to the off-ramp are not approved by Caltrans, Project traffic ingress would be restricted to the current Ranch main entrance on Placerita Canyon Road, which may require additional future environmental review.

(b) Transportation

The Project would include the following:

- Accessibility enhancements and linkages that make use of the Development Area's access to nearby freeways and public transit. Specifically, the Project

would include a number of roadway improvements, either as Project Design Features or Mitigation Measures, as described further below.

- The provision of information on transportation alternatives (transit schedules, maps, etc.).
- A carpool matching program.
- Preferred parking for low-emitting (Zero Emission) and fuel-efficient vehicles.
- Preferred parking for carpool/vanpool vehicles.
- Video conferencing facilities within the Project's studio development.
- On-site secure, bicycle storage areas.
- Non-dedicated walkways, bicycle access, and paved surfaces throughout the Development Area to minimize use of automobiles and trucks travelling throughout the Development Area.
- An on-site circulation system design that reduces vehicle idling and queuing.

(c) Water

The Project would reduce its water demand by at least 20 percent through the use of Project Design Features that would include the following measures or any equivalent measures to achieve at least the same results:

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

The Project would reduce its landscaping water demand by at least 50 percent through the use of Project Design Features that would include the following measures or any equivalent measures to achieve at least the same results:

- Use of weather-based irrigation controller with rain shutoff.

- Use of matched precipitation (flow) rates for sprinkler heads.
- Use of drip/microspray/subsurface irrigation where appropriate.
- Implementation of minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways and along the bungalows, the administration building, and the commissary, as well as within the Conditional Parking Areas, if developed. In addition, permeable surfaces could potentially be used for parking areas that would not be used by trucks (e.g., single rows of parking with a limited number of spaces, such as those that would surround some of the proposed detention basins, or the parking row adjacent to the Administration building).
- Use of proper hydro-zoning and turf minimization.
- Use of landscape contouring to minimize precipitation runoff.

(d) Energy

The Project would reduce its energy usage by at least 15 percent below Title 24 (2008) standards with Project Design Features that would include the following measures or any equivalent measures to achieve at least the same results:

- Installation of energy efficient heating and cooling systems, equipment, and control systems (e.g., via the proposed central plant).
- Installation of efficient lighting and lighting control systems.
- Installation of light-emitting diodes for traffic and street lighting, as permitted.
- Installation of light colored “cool” roofs to more effectively reflect the sun’s energy from the roof’s surface to reduce the roof surface temperature, and use of shade structures such as awnings or canopies around soundstages and mills to reduce the heat island effect.
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate.
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons.

- Use of Energy Star appliances.
- Use of photovoltaic technology on selected roofs.

(e) Solid Waste

The Project has also committed to the following design features pertaining to solid waste reduction:

- Establish a Solid Waste Diversion Program of 75 percent for Project construction.
- The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related wastes, as demonstrated to the satisfaction of the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Establish a Solid Waste Diversion Program of 50 percent for Project operations.
- Recycling Centers: Provide readily accessible areas to serve the Development Area for the deposit, storage, and collection of non-hazardous materials for recycling.

3. Site Access and Parking

To improve access to the Ranch and the Development Area, the Applicant proposes to reconfigure and signalize the SR-14 northbound off-ramp at Placerita Canyon Road. The reconfiguration would allow for northbound vehicles exiting SR-14 to cross Placerita Canyon Road and directly enter the Development Area via the Ranch's new main entry driveway. An entry kiosk would be provided on-site to manage access, with sufficient queuing space along the driveway (approximately 125 feet) to prevent backups onto Placerita Canyon Road. Although the current Ranch main entrance (i.e., the existing driveway further to the east) would continue to be used, primary ingress to the Development Area would be provided via the new entry across from the SR-14 northbound off-ramp. If the proposed off-ramp improvements were not approved by Caltrans, the Project traffic ingress would be restricted to the current Ranch main entrance. In addition, the Ranch's existing gated entrance on Placerita Canyon Road, located west of the current Ranch main entrance, would continue to be restricted for emergency access. Figure IV-8 and Figure IV-9 on pages IV-25 and IV-26 illustrate the circulation system for the Project under the Soundstage Option and the Studio Office Option, respectively.

Due to the nature of the way a working studio functions, there would be no curbs or dedicated pedestrian and bicycle pathways because they would take away from the

Source: Johnson Fain 2012; Olin Partnership 2012.

matrix environmental

Disney | ABC Studios at The Ranch

Figure IV-8

Site Circulation – Soundstage Option

Source: Johnson Fain 2012; Olin Partnership 2012.

Disney | ABC Studios at The Ranch

Figure IV-9

Site Circulation – Studio Office Option

matrix environmental

functionality of dynamic studio uses. However, the studio would be designed for extensive use by pedestrians and bicycles to enhance non-motorized circulation within the Ranch. Internal automobile and truck circulation would be similar with the exception that automobiles would be directed to the perimeters of the soundstages and office buildings on the northern and southern pads, while truck circulation would be permitted amid soundstages to provide for more operational flexibility. In addition, unlike trucks, automobiles would be permitted to traverse the southern pad between the soundstages and the administration building, commissary, and bungalows. A 28-foot-long access road crossing over the Placerita Creek culvert would be provided at the western edge of the proposed Development Area to create access to the northern pad area. A 220-foot-long bridge spanning over Placerita Creek also would be provided further to the east within the Development Area.

The majority of Project parking would be provided within surface lots adjacent to the soundstages and office buildings on the northern and southern pads. Parking for production-related vehicles also would be provided adjacent to the soundstages and mills. Additional parking would be provided in two surface lots located within the LADWP transmission corridor, as well as potentially within one or two surface lots (i.e., the Conditional Parking Areas) located east of the Development Area. These latter conditional lots would be constructed and used only if LADWP were to revoke the parking license agreement for the lots within its transmission corridor. All Code-required parking would be supplied on the Ranch, within the northern and southern portions of the Development Area and, if needed, the Conditional Parking Areas to the east. The parking within the LADWP transmission corridor would provide surplus parking to meet demand requirements and give the Project some flexibility regarding parking around the soundstages and office buildings. At least 1,228 parking spaces would be provided within the Development Area (with up to 260 spaces in the northern pad area including 88 tandem spaces, up to 507 spaces in the southern pad area, and up to 569 spaces within the parking lots located in the LADWP transmission corridor), under the Soundstage Option, and at least 1,162 parking spaces would be provided within the Development Area (with up to 460 spaces in the northern pad area, up to 507 spaces in the southern pad area, and up to 569 spaces within the parking lots located in the LADWP transmission corridor) under the Studio Office Option, thereby exceeding County Code parking requirements by 288 spaces and 208 spaces, respectively. These parking spaces would include compact parking spaces in compliance with County Code. If needed, the northern Conditional Parking Area (Conditional Lot 2) could provide 295 parking spaces, and the southern Conditional Parking Area (Conditional Lot 1) could provide 482 parking spaces, as depicted in Figure V.J-2 in Section V.J, Traffic, Access, and Parking.

The Project would include roadway improvements at nearby intersections as part of its mitigation package, summarized as follows:

- Sierra Highway/State Route 14 Southbound Ramps—The improvement involves signalization of the intersection with protected left-turn phasing for southbound Sierra Highway. The improvement also entails the widening of northbound Sierra Highway to provide a separate right-turn only lane onto the SR-14 southbound on-ramp.

- Sierra Highway/Placerita Canyon Road—The improvement involves widening the Placerita Canyon Road westbound approach to provide a free-flow right-turn lane onto northbound Sierra Highway, thus facilitating traffic flows to the SR-14 southbound on-ramp.

- Current Ranch main entrance/Placerita Canyon Road—The improvement involves signalization of the intersection. The improvement would also entail striping of the eastbound approach of Placerita Canyon Road at the intersection to provide for a left-turn only lane to improve access to the Ranch. The southbound approach exiting the Project site would also be striped to provide one left-turn lane and one right-turn lane.

The Project would also pay a fair share toward the cost of the cumulative traffic improvements listed below:

- Sierra Highway/State Route 14 Southbound Ramps—Southbound Sierra Highway would be widened to provide a second left-turn only lane onto the SR-14 southbound on-ramp.

- Sierra Highway/Placerita Canyon Road—The Sierra Highway northbound approach would be widened to provide a separate right-turn only lane onto eastbound Placerita Canyon Road.

Refer to Section V.J, Traffic, Access, and Parking, for further discussion.

4. Landscaping, Habitat Restoration, and Other Improvements to Natural Features

As part of the Project, a comprehensive landscaping plan would be implemented to enhance the existing natural features within the Development Area. Figure IV-10 and Figure IV-11 on pages IV-29 and IV-30, respectively, illustrate the landscaping concept for the Project under the Soundstage Option and Studio Office Option, respectively. Placerita Creek would continue to serve as an integral natural amenity and focal point for the Ranch, enhanced by implementation of a habitat restoration plan. In accordance with the County's Drought-Tolerant Landscaping ordinance, at least 75 percent of the Project's landscaped area would contain plants from the Los Angeles County Drought-Tolerant Plant List. In addition, consistent with existing practices on the Ranch, mature native trees including oak trees would be planted and enhanced with complementary native vegetation. The steep

Oak Woodlands

Restored Native Vegetation

Restored Riparian Vegetation

Restored Cut and Fill Slopes

Grassy Herbaceous Drainage Swales

Native Vegetation Screening/Berm

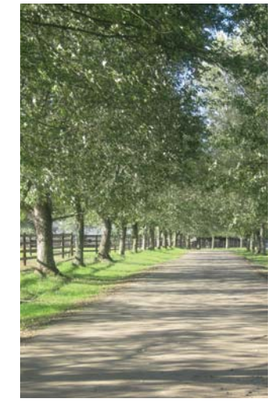
Bioretention

Entry Allée

Country Lane

Bioretention Grove

Restored Riparian Corridor


Country Lane

Screening Berm with Native Plants

Revegetated Cut and Fill Slopes

Drought Tolerant Plantings

Grassy Herbaceous Drainage Swales

Source: Johnson Fain 2012; Olin Partnership 2012.

matrix environmental

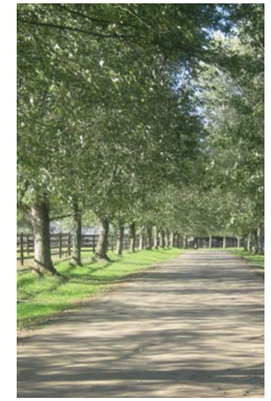
Disney | ABC Studios at The Ranch

Figure IV-10

Landscaping Concept – Soundstage Option

*Option Build Out

Restored Riparian Corridor

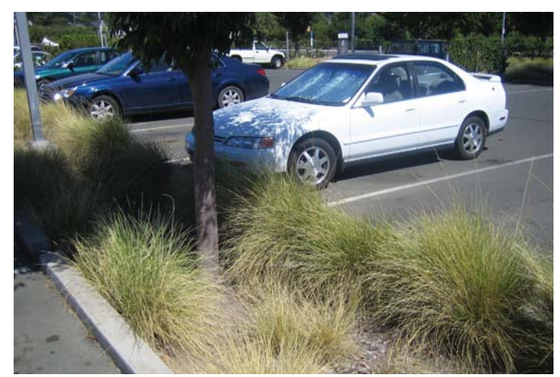

Country Lane

Screening Berm with Native Plants

- Oak Woodlands
- Restored Native Vegetation
- Restored Riparian Vegetation
- Restored Cut and Fill Slopes
- Grassy Herbaceous Drainage Swales
- Native Vegetation Screening/Berm
- Bioretention
- Entry Allée
- Country Lane
- Bioretention Grove

Revegetated Cut and Fill Slopes

Drought Tolerant Plantings


Grassy Herbaceous Drainage Swales

Orchards

Source: Johnson Fain 2012; Olin Partnership 2012.

matrix environmental

Figure IV-11

Landscaping Concept – Studio Office Option

slopes along the south side of the creek would be terraced and planted with native grasses and other native riparian vegetation. Native trees, such as oaks, and other plantings along the existing main entrance road would create a landscaped "gateway" to the Ranch. To screen off-site views of the Project, a vegetation barrier (i.e., including a screening berm with native plants) heavily planted with trees and shrubs would be created along the western perimeter of the Development Area adjacent to SR-14 and a portion of the southern perimeter along Placerita Canyon Road. Fencing, landscaping, and/or vegetation barriers would also be introduced to screen views of the proposed electrical substation and the central utility plant's exterior cooling towers.

Additional landscaping elements would include six vegetated bioswales approximately 5 feet wide and 1 foot deep that would be created between rows of parking in the parking areas within the LADWP transmission corridor. Another vegetated bioswale measuring approximately 8 feet wide and 1 foot deep would be created north of these parking areas and run west approximately 500 feet along the top of the southern slope embankment of Placerita Creek to an underground detention basin, which would drain to the Creek through an outlet structure east of the proposed bridge. In addition, the proposed detention basins in the Development Area would be vegetated for bio-remediation. Downstream bioswales would also be introduced adjacent to the Conditional Parking Areas, if developed, and landscaping would be introduced along the perimeter of those parking areas to reduce light visibility and spillover onto other areas of the Ranch, while existing surrounding trees, landscaping, and/or intermittent agricultural uses would be retained. Refer to Section V.B, Flood Hazards, for further discussion of the vegetated swales and detention basins to be introduced.

Project implementation would require the removal of approximately 158 oak trees, including 16 heritage oak trees, and encroachment on 82 other oak trees, including 3 heritage oak trees.[9,10] The County's Oak Tree Ordinance and current County practices require the replanting of oaks at a minimum 2 to 1 ratio for the loss of jurisdictional oak trees and a minimum 10 to 1 ratio for the loss of heritage oak trees. As such, the Project would require the planting and survival of 444 new oak trees of 15-gallon size, in addition to an oak tree permit. In order to better replace the community of the oak woodland habitat and the oak tree canopy in the Development Area, the Project includes a comprehensive oak mitigation program that would involve planting a total of at least 1,600 oak trees of a

---

[9] *All of the trees requiring removal are located within the Ranch. No oak trees within the Off-Site Infrastructure Improvement Areas would be removed.*

[10] *In accordance with the Project's mitigation program, protective measures would be implemented to protect all encroached oak trees.*

variety of sizes on approximately 10 acres of the Ranch east of the Development Area.[11] In an effort to proactively address Project-related impacts and initiate mitigation efforts, the Ranch's natural resources staff began propagating oak trees from Ranch-harvested acorns in 2009. Field planting of the 460 seedlings occurred in November 2010 under the supervision of the County Forester. The purpose of planting smaller stock (i.e., less than 15-gallon size) is to increase the likelihood of site adaptation and seedling survival. These planted trees will be counted toward the overall mitigation planting totals when they reach the appropriate size (i.e., 1 inch in diameter at 1 foot above the base of the trunk), unless slightly smaller trees are deemed acceptable to the County Forester. The mitigation planting totals reflect more than the County-required replacement ratios for Ordinance-size trees and heritage trees, as well as additional trees to account for potential tree mortality during the establishment period. The proposed restoration areas are located within suitable habitat portions of the Ranch, as depicted in Figure V.F-9 in Section V.F, Biological Resources, in this Draft EIR. The Project's oak mitigation program would replace the approximately 4.4 acres of permanently impacted oak woodland by providing over 7 acres of new oak woodlands over time while preserving over 88 acres of existing oak woodlands on the Ranch. A high standard of restoration design, implementation, and maintenance would be imposed for successful establishment of the planted oak trees. A monitoring period of at least seven years would be implemented following all required restoration planting until the required performance standards are achieved. In addition, the mitigation program would include protective measures, such as fencing, to reduce impacts to oak trees that would not be removed. Finally, the Applicant plans to continue its voluntary program to plant oak trees on the Ranch. Refer to Section V.F, Biological Resources, for further discussion of the oak tree mitigation program and Appendix F.6 of this Draft EIR for the complete Oak Tree and Woodland Mitigation and Monitoring Plan (OTWMMP).

Similarly, a Habitat Mitigation and Monitoring Program (HMMP) would be implemented to restore and enhance riparian habitat within portions of Placerita Creek and mitigate impacts to U.S. Army Corps of Engineers (ACOE)/Regional Water Quality Control Board (RWQCB) "waters of the U.S./waters of the State" and California Department of Fish and Game (CDFG) jurisdictional streambed. The restoration efforts would include the grading and recontouring of the existing slopes along Placerita Creek within the Development Area and revegetation of native riparian species by planting and seeding. The HMMP would address the planting and monitoring requirements to ensure successful restoration and enhancement of the mitigation area. A total of 3.67 acres of jurisdictional

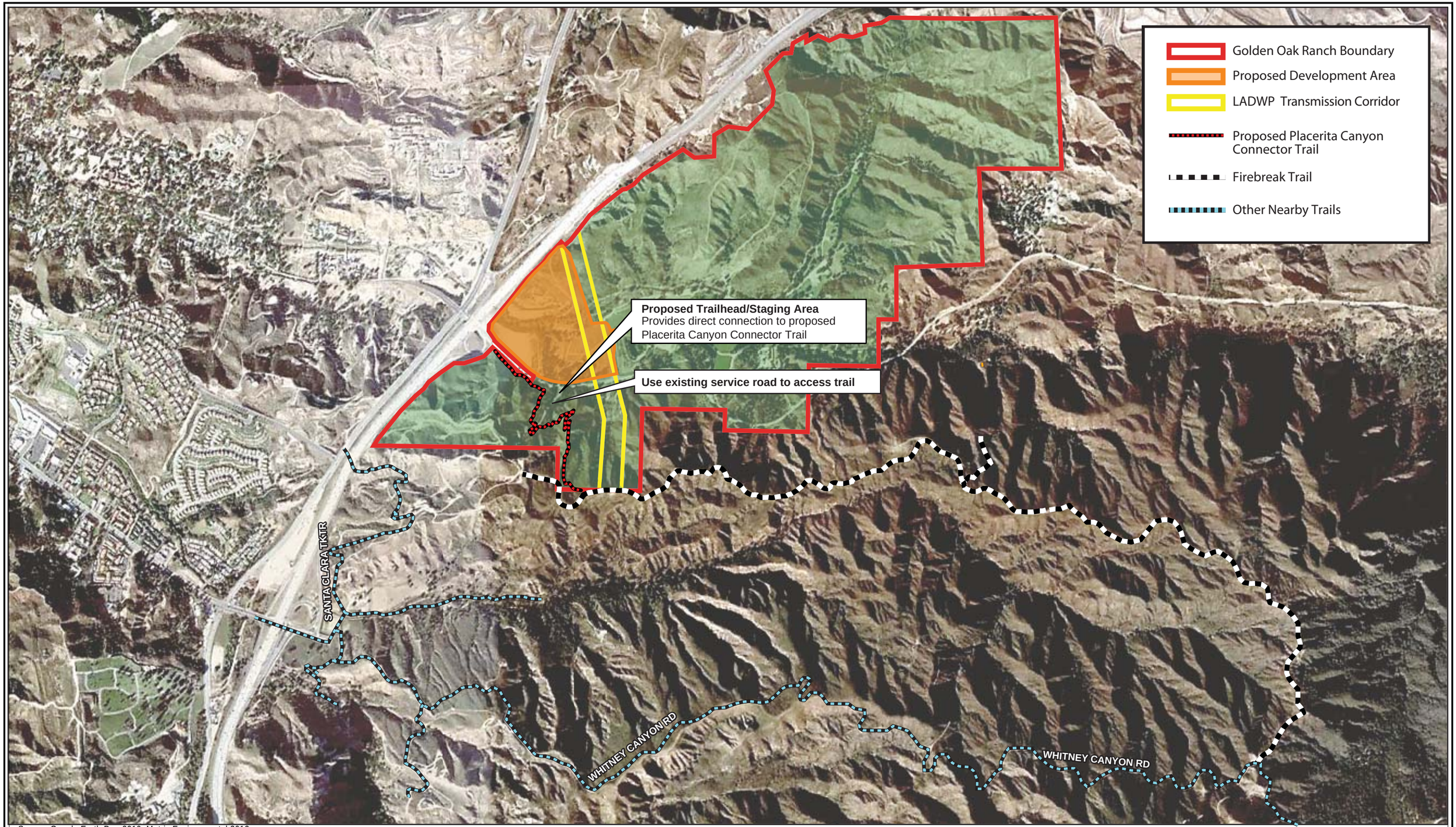
[11] *Per the Project's Oak Tree and Woodland Mitigation and Monitoring Plan (see MM F-3), the Applicant would be required to ensure the survival of 1,144 oak trees through the seven-year monitoring period (monitoring to begin once individual trees grow to measure 1-inch in diameter at 1 foot above the base of the trunk).*

habitat would be established, enhanced, or restored, and 0.47 acre of existing jurisdictional habitat would be preserved. A portion of the new establishment area, specifically 1.38 acres located along the upper areas of the creek slopes (areas which do not currently qualify as falling under ACOE or CDFG jurisdiction), would be vegetated with native transitional buffer plantings and would become new CDFG jurisdictional area. Maintenance (i.e., weeding, pest control, irrigation system maintenance, trash removal) and monitoring of the mitigation area would be conducted for five years to ensure success of the plan. Refer to Section V.F, Biological Resources, for further discussion and Appendix F.11 of this Draft EIR for the complete HMMP.

Following disturbance of portions of Placerita Creek during Project construction (discussed below), the reconstructed creek slopes would be stabilized with soil cement which would be buried to allow surface revegetation, and a permanent, paved 15-foot-wide access road to be used by the County for maintenance purposes would be introduced at the top of the slope stabilization. This access road would extend from the northern parking lot within the LADWP transmission corridor westerly to the edge of the Development Area, then loop around to the northern side of the creek and terminate near the easternmost parking area in the northern pad. The access road is depicted in the site maps provided in Figure IV-14 and Figure IV-15 on pages IV-49 and IV-50, respectively, and is labeled as "slope stabilization access road" in the cross-section drawings therein. The road would allow for access to the proposed drainage outlets (discussed below) and would pass under the proposed bridge; however, the bridge footings would be placed above the banks such that there would be no paved surfaces within Placerita Creek. The creek would then be revegetated in accordance with the HMMP, discussed above. Refer to Section V.B, Flood Hazards, for further discussion of the slope stabilization and access road.

Also as part of the Project, the Applicant would dedicate a variable-width, 12- to 20-foot-wide easement for a proposed trail, referred to as the Placerita Canyon Connector Trail, which would be constructed as a public, multi-use trail for hiking, mountain-biking, and equestrian use and would connect to existing trails within Angeles National Forest.[12] The trail would extend from the SR-14 northbound off-ramp adjacent to Placerita Canyon Road to southeast of the Water Tank Area at the Ranch's southern property line, incorporating switchbacks as the route climbs in elevation to the Firebreak (Viper) Trail, which in turn connects to existing trails within Placerita Canyon Nature Center to the east. This area is referred to herein as the Trail Area, and the proposed trail alignment is shown in the context of the other surrounding trails in Figure IV-12 on page IV-34. Elevations

[12] *The trail would replace a County proposed Placerita Creek Connector Trail, which is designated within the Santa Clarita Valley Area Plan's Trails Plan as well as the new draft Conservation and Open Space Element and aligned along Placerita Creek.*



Source: Google Earth Pro, 2010; Matrix Environmental 2012.

matrix environmental

0' 1500' 3000'
Approximate Scale in Feet
(Trail Alignments are Approximate)

Figure IV-12
Trails in the Project Vicinity

would range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment, with a varying trail tread width of 3 to 5 feet and varying grades of up to 30 percent over the course of the approximately 4,600-foot-long trail.[13] Short segments of the trail (totaling approximately 500 feet) would remain unimproved in order to avoid grading beneath any oak tree canopies, and a segment would follow a portion of the water tank access road. Retaining walls of up to 3 feet in height would be required to maintain trail width and stability along some segments of the trail and would include steel, wood and/or rock materials, consistent with the County of Los Angeles Trail Manual, so as to blend into the surrounding landscape. The Placerita Canyon Connector Trail would also include a trailhead/staging area near the existing access road to the Water Tank Area, which would consist of an approximately 19,000-square-foot dirt or gravel surface with un-striped parking for up to four vehicles and horse trailers, a kiosk for way-finding, regulatory and directional signage, horse ties, an entry gate, and potentially lodge pole fencing where needed. As the trail would be for daytime use, no lighting would be provided at the trailhead or along the trail. Additionally, no waste bins would be provided as all trail users would be expected to pack out any trash.

5. Utilities

(a) Water Infrastructure

Water service to the Development Area would be supplied by the Newhall County Water District (NCWD) for domestic water and fire protection.[14] As NCWD does not have an existing distribution system adjacent to or near the Ranch, new water infrastructure would be constructed to connect the Development Area with the nearest NCWD delivery system. NCWD has provided preliminary information on proposed improvements to its system required to serve the Development Area via one of two alternatives, as summarized below and further detailed in Section V.L.1, Utilities and Service Systems—Water Supply. The off-site improvements are shown in Figure V.L.1-1 therein. At the request of NCWD, the Project would include the construction of a 2,000,000 gallon water tank and associated water line to be located on the Ranch south of Placerita Canyon Road, described further below.

---

[13] *A trail width of three feet would be provided where necessary to avoid impacts to sensitive habitat such as oak trees or a water course and along sections of the trail that traverse steep terrain.*

[14] *While the existing on-site private water well at the Ranch would continue to provide limited amounts of water to other existing Ranch structures, it would not serve the Project or the Development Area.*

(1) Alternative A

Alternative A would involve the construction of a water main from a point of connection with an existing main at the intersection of Oakhurst Drive and Dockweiler Drive, southwest of the Ranch. The proposed water main would run easterly along Dockweiler Drive to Sierra Highway, northerly along Sierra Highway to Placerita Canyon Road, and then easterly to the Development Area for a total length of approximately 6,300 feet. To supply the proposed water tank, a booster pump station would be constructed on NCWD property next to two existing water tanks located west of the point of connection at Dockweiler Drive and north of Deputy Jake Drive. Construction of the water line improvements would require trenching within local roadways and would therefore necessitate temporary lane closures along certain street segments, as detailed in Section V.J, Traffic, Access, and Parking. All lane closures would be conducted per the Project's Construction Traffic Management Plans, detailed therein.

(2) Alternative B

Alternative B would have a point of connection with an existing water main that currently terminates near the LADWP aqueduct along Placerita Canyon Road, west of Sierra Highway. This water line would be extended easterly along Placerita Canyon Road to the Development Area for a total length of approximately 3,100 feet. The existing water tanks that supply this water distribution system are at a lower pressure zone elevation, and NCWD has indicated the current system would not meet the required fire flow and residual pressure requirements of the Project. Therefore, a booster pump station would be constructed along Placerita Canyon Road east of the residential service connections in the lower pressure zone to provide the required pressure to the distribution system. An easement for placement of the booster pump on private property along Placerita Canyon Road would need to be obtained and dedicated to NCWD. Trenching and associated lane closures would be required for the Alternative B alignment, similar to that described above.

(3) Proposed Water Tank

For Alternatives A and B, a water tank would be constructed on the Ranch south of Placerita Canyon Road and included in the proposed CUP for the Project. The approximately 2,000,000 gallon steel tank would measure 90 feet in diameter and 40 feet in height, ringed by a 20-foot perimeter road and an 8-foot-high chain link fence with gated access. The tank would be developed at an elevation of 1,668 feet above MSL, which would be at the same water pressure zone as that of the existing tank north of Dockweiler Drive, and the two tanks would be interconnected. A water main with a total length of 2,300 feet would be installed from Placerita Canyon Road up to the proposed water tank location within an existing, approximately 17-foot-wide, unpaved maintenance road. Approximately 4,050 cubic yards of cut and 7,560 cubic yards of fill would be required to

smooth and pave the existing road and the development pad for the water tank so as to provide all-weather access for NCWD. The access road would be 17 feet wide and 1,960 feet long, with gated access at Placerita Canyon Road. An additional 10-foot-high gate would be provided at the top of the access road to limit access to the water tank. In addition, an "Arizona" dip would be constructed across the access road to accommodate an existing drainage course that sheet flows across the road under existing conditions during storms. The storage capacity of the tank would exceed the Project's water demand and would provide supplemental capacity for NCWD, consistent with their 2001 Master Plan, which called for approximately four million gallons of future storage needs in the area.[15] The proposed water tank would be painted a neutral color that is predominant in the surrounding area so as to blend with the surrounding landscape. In addition, the area disturbed during construction immediately surrounding the water tank's ring road and fencing would be revegetated with native plants. (See PDF I-3 in Section V.I, Visual Qualities, for further discussion.)

(4) On-Site Improvements

The Project would also include an on-site water distribution system consisting of a looped system within each building pad area on the north and south sides of Placerita Creek. The on-site infrastructure would be designed to comply with all County requirements regarding fire flows, and any additional water lines and hydrants that may be needed to provide additional fire flows to new buildings would be constructed as necessary. The system would be designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow. The soundstages, production offices, mills, writer/producer bungalows, administration building, commissary, and/or studio office building would have fire sprinkler systems throughout the buildings. The on-site water distribution system layout and locations of proposed fire hydrants are shown in Figure V.L.1-2 within Section V.L.1, Utilities and Service Systems—Water Supply.

(b) Wastewater Infrastructure

As part of the Project, the Santa Clarita Valley Sanitation District, which is part of the County Sanitation Districts of Los Angeles County (County Sanitation Districts), would need to annex the Development Area into the District before sanitary services could be provided, as the Development Area is currently located outside the District's service area boundaries. Sanitary sewer service for the Development Area would be provided by connecting a proposed on-site wastewater system to the City of Santa Clarita's existing local wastewater

[15] *Per Table 18 (Zones 10 and 11) in the Master Plan for Newhall Division of Newhall County Water District, Don Howard Engineers, Inc., October 5, 2001.*

collection system via the construction of a new sewer main following the proposed alignment, described below. This new 8-inch sewer main would be sufficient in size to convey the Project's wastewater flows as well as flows generated downstream by future development in the vicinity of the Development Area. The new sewer main would encroach on Caltrans right-of-way along Placerita Canyon Road at SR-14, thus requiring encasement of the main for a length of approximately 500 feet. From SR-14 and Sierra Highway, the main would be sized per the standards of the City Development Services Department and LACDPW's guidelines and requirements.

(1) Oak Orchard Alignment[16]

The proposed Oak Orchard Alignment, depicted in Figure V.L.2-1 in Section V.L.2, Utilities and Service Systems—Wastewater/Sewage Disposal, would convey flows westerly from the Development Area for approximately two miles to a point of connection tentatively identified at the intersection of Placeritos Boulevard and Meadview Avenue. The existing sewer main at this location is an 18-inch vitrified clay pipe (VCP) flowing westerly and is at a grade elevation approximately 164 feet lower than the Development Area, thus allowing for a gravity flow system. This proposed alignment would run from the Development Area westerly along Placerita Canyon Road to the west side of The AES Corporation's property, then north along a proposed easement to Placeritos Boulevard, west on Placeritos Boulevard to Golden Oak Lane, north on Golden Oak Lane to Oak Orchard Road, west on Oak Orchard Road to Quigley Canyon Road, south on Quigley Canyon Road to rejoin Placeritos Boulevard, and then west on Placeritos Boulevard to join the City of Santa Clarita's existing local sewer system at Meadview Avenue. The sewer line would travel along unpaved streets from the point the sewer line exits The AES Corporation's property until it reaches the intersection of Quigley Road and Placeritos Boulevard. The sewer line would be encased where it crosses the LADWP aqueduct (constructed above ground) and Placerita Creek (two crossings below ground). The total distance of the sewer line would be approximately 9,800 feet.

The Oak Orchard Alignment is part of the sewer master plan for the City of Santa Clarita and would allow an existing residential area and other existing development in the area to convert from septic tanks to a public sewer system. Consequently, the City would install the portion of the Oak Orchard Alignment within its jurisdictional limits. Construction of the sewer line would require trenching within local roadways and would therefore

[16] *Prior to publication of the EIR, another off-site sewer alignment was proposed as an alternative to the Oak Orchard Alignment. This Force Main System was evaluated in several of the technical studies prepared in conjunction with the EIR. The Force Main System has since been eliminated from the Project; however, discussion or depiction of it may remain in some of the technical reports provided in the appendices.*

necessitate temporary lane closures along certain street segments, as detailed in Section V.J, Traffic, Access, and Parking. All lane closures would be conducted per the Project's Construction Traffic Management Plans, detailed therein.

(2) On-Site Improvements

As part of the Project, an on-site wastewater collection system would be developed to convey wastewater from the Development Area to the proposed off-site sewer line, described above, which would connect to the City's existing local conveyance system and associated treatment plants. The proposed on-site sewer system is illustrated in Figure V.L.2-3 in Section V.L.2, Utilities and Service Systems—Wastewater/Sewage Disposal. This system would consist of an upper and lower network of lines within the northern and southern building pads, respectively, and would flow by gravity toward Placerita Canyon Road. The lines would be at least 8 inches in diameter, except for building laterals, which would have a minimum diameter of 6 inches.

(c) Electricity Infrastructure

To support the energy needs of the Project, an approximately 46,300-square-foot electrical substation would be constructed in the northernmost portion of the Development Area. The proposed substation would be designed, owned, and operated by Southern California Edison (SCE). The substation would occupy an approximate area of 130 feet by 110 feet, enclosed by a 10-foot-tall concrete block wall and surrounded by a 20-foot-wide perimeter access road. As previously indicated, new landscaping along the Ranch boundary next to SR-14 would be introduced to visually shield the electrical substation from off-site views.

The substation would receive power from an existing SCE 66 kV overhead line for conversion to a 16.5 kV underground distribution system on-site. There would be two power transformers located at the center of the substation to step down the voltage from 66 kV to 16.5 kV. Each transformer would be sized at 28 megavolt amperes (MVA). The pair of transformers would be designed to provide redundant backup for each other. Each transformer would provide power through two 16.5 kV circuit breakers to an underground distribution system. The tallest structure in the substation would be a 29-foot-high by 22-foot-wide steel structure installed at a setback of about 12 feet from the wall. In addition to the electrical equipment in the substation yard, there would be a 16-foot by 20-foot control room to house the protective relays, controls, and communication equipment for the substation. A good portion of the ground surface would be left clear with a gravel base to create a safe clearance between the high voltage equipment and the perimeter wall.

Power from the substation would be distributed underground through four feeder circuits to the various buildings on-site. This distribution would occur entirely underground through a dedicated network of ductbanks and manholes.

The major equipment to be installed in the substation would include:

- One 29-foot-tall by 22-foot-wide steel dead-end structure;
- One 66 kV outdoor style circuit breaker;
- Two 28 MVA 66 kV/16.5 kV step down power transformers;
- Four 16.5 kV outdoor style circuit breakers; and
- One 16-foot by 20-foot electrical/mechanical control room.

The new on-site substation would not conflict with nor draw any power from the existing LADWP transmission lines that traverse the Ranch.

As part of these improvements, SCE would replace an estimated nine existing overhead distribution wood poles along public road rights-of-way on Sierra Highway and possibly Placerita Canyon Road with galvanized tubular steel poles and taller wood poles, and install two power poles within the Development Area, likely in the northern portion just east of SR-14, in order to access the substation. The exact location of the replacement poles has not been determined by SCE, but the poles are expected to be placed in approximately the same locations as the existing poles (i.e., within three feet). The existing pole heights along Sierra Highway (steel poles) range from approximately 65 to 80 feet and along Placerita Canyon Road (wood poles) are approximately 35 feet, whereas the new pole heights would range from 60 to 70 feet depending upon the spacing, terrain, and road crossings. Overhead conductors from the last 66 kV pole would drop down to the dead-end structure located inside the substation. The pole relocation areas are considered part of the Off-Site Infrastructure Improvement Areas.

(d) Natural Gas Infrastructure

The Project would also include an on-site natural gas distribution system connecting to an existing 6-inch gas main within Placerita Canyon Road. On-site gas lines would range in size from approximately 4 to 6 inches. The gas infrastructure would tie into a highly efficient heating system for the Project buildings which, along with the heating, ventilation, and air conditioning (HVAC) system, mechanical equipment, and various control systems, would be housed in a new 20,000-square-foot central utility plant located along Placerita Canyon Road. The central utility plant would include chillers, pumps and

other associated equipment which would be enclosed (with exception of louver openings for air ventilation), as well as exterior cooling towers. By centralizing the mechanical infrastructure on-site, energy efficiency of all buildings would be improved. Eight-foot-high decorative fencing and perimeter landscaping would be used to screen views of the exterior cooling towers from Placerita Canyon Road.

(e) Drainage Infrastructure

The Project would require new on-site storm drain facilities to convey stormwater flows from the developed portions of the Development Area as well as from off-site areas that drain to the Development Area. Through a combination of sheet flow, concentrated drainage swales, localized catch basin inlets, and storm drain pipes, all stormwater runoff from the Development Area would flow to Placerita Creek. Surface runoff would be collected by a series of grate inlets designed and located to maximize interception and then conveyed by a combination of surface gutters and underground lines to on-site detention basins. Similarly, building downspouts would direct stormwater to the streets and storm drain system for discharge into on-site detention basins. The Project's storm drain system would be designed and sized to ensure that post-development peak flow rates would not exceed pre-development peak flow rates so as to prevent off-site downstream flooding caused by the Project. The system would include a total of two outlets along the embankments of Placerita Creek in order to generally maintain the historic drainage patterns, with headwalls or flared-end sections with rock slope protection. Refer to Figure V.B-3 in Section V.B, Flood Hazards, for a depiction of the conceptual drainage system.

More specifically, within the northern portion of the Development Area, half the area would drain to the southeastern corner to a detention basin system, and the other half would drain to the southwest to a second detention basin system. These detention basins would be composed of a vegetated above-ground portion and an underground detention system, and would provide sufficient volume capacity beyond that required. The southern portion of the Development Area would drain northwest to a detention basin, a portion of which would be above-ground and vegetated. The surface detention system overflow outlet would drain to Placerita Creek, and the underground portion would provide supplemental storage capacity. The underground detention systems in both the northern and southern portions of the Development Area would capture and detain stormwater flows and provide first flush treatment before either infiltrating back into the local groundwater basin or draining via outlets to Placerita Creek.

Stormwater runoff from the two parking areas within the LADWP transmission corridor would be intercepted within landscaped islands located between the parking rows, which would function as vegetated drainage swales. Surface flows from the northern lot would be directed to the west to underground drainage lines and then would be conveyed north to a vegetated drainage swale running longitudinally along the top of the southern

slope embankment of Placerita Creek. This vegetated swale would incorporate stormwater treatment features and would drain into a proposed on-site detention basin prior to discharge into Placerita Creek. Surface flows from the southern lot would be directed to the west to underground drainage lines that would drain into another on-site detention basin further to the west.

Off-site stormwater runoff that flows to the northern portion of the Development Area would be intercepted with drainage ditches and directed around the Development Area south to Placerita Creek. Energy dissipaters/velocity reducers would be used at outlets in Placerita Creek. Off-site flows from SR-14 would continue to be routed to an existing 48-inch storm drain constructed by Caltrans and would drain to the north toward Placerita Creek. This existing 48-inch storm drain pipe runs under the southern fill pad and is deep enough so that it would not interfere with Project construction. Off-site stormwater and debris flows (i.e., mudflows) from the hillsides south of Placerita Canyon Road, along with surface runoff from the roadway, would be intercepted primarily by two debris basins proposed in the southern portion of the Development Area. Stormwater from these two basins would then flow north in a proposed underground storm drain system through the Development Area to Placerita Creek. The placement of these improvements would maintain the general existing off-site drainage patterns and flows.

6. Fire Protection & Security Features

Since the Development Area is located in a County-designated Very High Fire Hazard Severity Zone, a fuel modification plan would be required to minimize the risk of wildfires. The fuel modification plan for the Project would set forth buffer zones around the proposed structures and would dictate the types of vegetation permitted within the zones. The fuel modification plan would also specify requirements pertaining to landscape irrigation, thinning and removal of brush and dead plant materials, removal of non-native plant species, and maintenance of the buffer zones. One of the primary goals of the fuel modification plan and associated landscaping and irrigation would be to provide adequate defensible space around all potentially combustible structures within a fire environment. Accordingly, routine landscape maintenance would be required per the County Fire Department's Fuel Modification Plan Guidelines. A preliminary fuel modification plan was approved by the Los Angeles County Fire Department's Forestry Division on August 30, 2011, and is provided in Appendix F.8 of this EIR. A final fuel modification plan would be submitted to the Forestry Division for approval prior to the issuance of Project construction permits. Refer to Section V.K.2, Public Services—Fire Protection, for further discussion and Figure V.K.2-2 therein for an illustration of the preliminary fuel modification plan for the Project.

In addition, there is a helipad within the northern portion of the Ranch that is used by the Los Angeles County Fire Department to protect the surrounding areas. A

500,000-gallon water tank is also located on the eastern side of the Ranch for emergency firefighting purposes. This helipad and water tank would continue to be available for use by the Fire Department to fight fires in the surrounding areas.

The Project's design would incorporate state-of-the-art security features to provide for the safety of on-site employees and visitors. These features would include the provision of round-the-clock on-site private security guards with a guard kiosk positioned at the main vehicular entrance, closed circuit television (CCTV) cameras to monitor the Development Area and the Ranch, and alarm systems for all Project buildings with motion sensors and video surveillance. In addition, the Project would include a security fence consisting of 8-foot-high decorative fencing around portions of the Development Area bordering SR-14 and Placerita Canyon Road and sufficient lighting throughout the Development Area to ensure safety and visibility.[17] Entryways, lobbies, and parking areas would also be well illuminated and designed to eliminate areas of concealment.

E. CONSTRUCTION, GRADING, AND PHASING

1. Demolition Activities and Relocation of Mobile Home

To accommodate Project construction, the uninhabited structure located within the Development Area would be removed, and the Ranch foreman's mobile home would be relocated to the southeastern corner of the Ranch (i.e., to one of the two Potential Mobile Home Relocation Areas), as shown in Figure IV-4 on page IV-11. Removal of the approximately 1,000-square-foot uninhabited structure is estimated to generate 1.9 tons of demolition debris. The Ranch foreman's mobile home would be relocated to one of two potential sites identified to the east of the Development Area. The existing private septic system that serves the mobile home would be removed and a new septic system would be installed near the new mobile home location. In accordance with the requirements of the Los Angeles County Department of Public Health, Environmental Protection Bureau, a septic tank feasibility study would be undertaken and submitted prior to issuance of any building permit/installation of any on-site wastewater treatment system. The existing private septic sewer systems that serve the other residential and office buildings on the Ranch would not be affected by the Project.

[17] *Per MM F-9 in Section V.F, Biological Resources, the Project's landscape plan would specify the type and location of 8-foot-high decorative fencing to be installed along those portions of the Project site perimeter visible to the public along SR-14 and Placerita Canyon Road.*

2. Earthwork and Construction-Related Improvements

To accommodate the Project, the entire Development Area would be cleared and mass graded at one time. A maximum of 10 acres would be graded on any given day. As shown in the conceptual grading plan and site cross-section drawings provided in Figures V.A-3 and V.A-4 in Section V.A, Geotechnical Hazards, portions of the fill pads would be excavated and then brought up to design pad elevations. Specifically, the northern fill pad has an existing average elevation of 1,478 feet above MSL and would have an average design pad elevation of 1,448 feet above MSL; the southern fill pad has an existing average elevation of 1,458 feet above MSL and would have an average design pad elevation of 1,446 feet above MSL. At the same time, the area to the east of the southern fill pad would be raised by as much as 29 feet with engineered fill to achieve the desired building pad elevations. The hillside in the far northern portion of the Development Area would be graded and lowered from the existing average elevation of 1,561 feet above MSL to create a pad for the proposed substation at an average elevation of 1,540 feet above MSL. As also shown in the conceptual grading plan provided in Figure V.A-3, the maximum excavation depths would be 40 feet and maximum fill depths would be 29 feet. Conceptual grading plans for the Water Tank Area, the Conditional Parking Areas, and the Trail Area are provided in Figures V.A-5 through V.A-7, respectively, in Section V.A, Geotechnical Hazards. Also refer to the discussion of construction phasing, below, for details on the timing and duration of earthwork activities.

The Project is anticipated to involve approximately 700,000 cubic yards of cut and 350,000 cubic yards of fill within the Ranch, with approximately 350,000 cubic yards of soil export.[18] Based on rough grading estimates, the northern portion of the Development Area would require approximately 443,000 cubic yards of cut and 5,000 cubic yards of fill; the southern portion would require approximately 252,000 cubic yards of cut and approximately 336,000 cubic yards of fill, including fill to be placed east of the southern fill pad. An estimated 4,050 cubic yards of cut and 7,560 cubic yards of fill would be needed to create the development pad for the water tank and to smooth and pave the existing unpaved maintenance road to the tank. Construction of the proposed trail would involve approximately 700 cubic yards of cut which would be used elsewhere within the Ranch and would not require export. Earthwork necessary for the Conditional Parking Areas, if constructed, would involve limited surface grading, with less than 1,000 cubic yards of cut and less than 1,000 cubic yards of fill; the use of excess soil from the Development Area would be used as fill, as necessary and if possible based on timing. Limited fine grading

[18] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated in relevant sections of the Draft EIR.*

would also be necessary at the selected of the two Potential Mobile Home Relocation Areas for the Ranch foreman's mobile home and the associated new septic system.

With respect to the Off-Site Infrastructure Improvement Areas, trenching would be necessary for the proposed water and sewer lines. Trenches within local roadways necessary for the water main installation would be a maximum of 4 feet wide and approximately 6 feet deep in order to provide for 4 feet of cover per County standards. A maximum of 100 feet would be excavated/installed per day (average of 75 feet). Similarly, trenching would be necessary for the sewer installation and would be a maximum of 4 feet wide. The trench depth would vary along its extent from 12 to 14 feet deep depending on the final alignment. The sewer line would be encased where it crosses the LADWP aqueduct (constructed above ground) and Placerita Creek (two crossings below ground). For the creek crossings, tunnels would be created using a jack and bore process and would be located a minimum of 4 feet below the creek bed, with no disturbance to the creek bed or adjacent banks. A maximum of 100 feet would be excavated/installed per day (an average of 75 feet, but less for the deeper trenches). Most soil from the trench excavations would be used as backfill. These improvements would involve an estimated 15,000 to 20,000 cubic yards of cut, approximately 10,000 to 12,000 cubic yards of fill, and as much as 5,000 to 8,000 cubic yards of export. Refer to the discussion of construction phasing, below, for details on the timing and duration of these activities.

Construction activities associated with the power pole replacements would involve limited excavation to remove the existing poles, installation of the new poles, and backfilling of the excavated holes. There would be limited grading of soil, estimated at approximately 7 cubic yards per pole for steel poles and 2 cubic yards for wood poles, some of which could be used to backfill the excavated holes, for a total of up to 63 cubic yards of export. The area to be disturbed is estimated at less than 1,000 square feet per pole, including space for the staging of vehicles and equipment, for a total of approximately 9,000 square feet. Following installation, existing conditions would be restored with negligible change in finished grades. Refer to the discussion of construction phasing, below, for details on the timing and duration of these activities.

The Project would also include traffic infrastructure improvements within the Caltrans right-of-way around the SR-14/Placerita Canyon Road on-ramps and off-ramps, as described in Section V.J, Traffic, Access, and Parking. These improvements would involve cutting into an existing engineered slope adjacent to the northbound off-ramp, requiring an estimated 11,500 to 14,000 cubic yards of cut, approximately 1,500 to 2,000 cubic yards of fill, and as much as 10,000 to 12,000 cubic yards of export. Refer to the discussion of construction phasing, below, for details on the timing and duration of these activities.

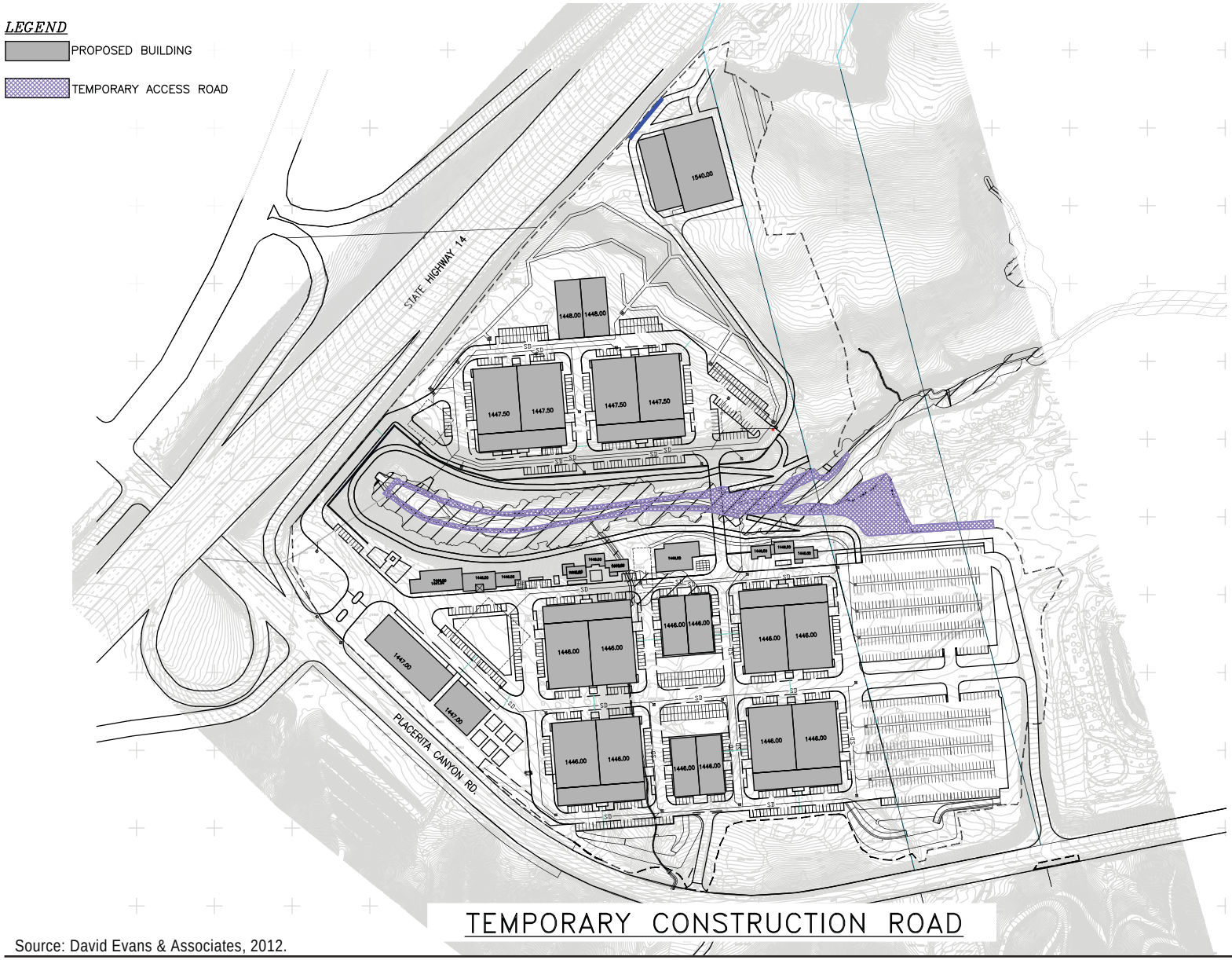
In total, the Project would require approximately 734,000 cubic yards of grading, with approximately 364,000 cubic yards used as fill and approximately 370,000 cubic yards of soil export.[19] All earthwork activities associated with the grading and export of soil would occur in accordance with County requirements, as specified in the Los Angeles County Building Code, or City/Caltrans requirements, as appropriate, and through the grading plan review and approval process. The disposal site(s) for the excess soil would depend on which sites are accepting fill dirt at the time of export. Landfills in Lancaster or Sun Valley likely would be used, thus requiring travel from the Development Area along Placerita Canyon Road to SR-14 north or south, respectively. Designated haul routes would be used during Project construction that would require construction trucks to approach the Development Area by exiting SR-14 at either the southbound off-ramp at Sierra Highway or the northbound off-ramp at Placerita Canyon Road; haul trucks would similarly exit the Development Area via Placerita Canyon Road and proceed to the nearby SR-14 on-ramps at Placerita Canyon Road or Sierra Highway. As part of Project mitigation, the Applicant would post a bond to cover the costs of repairing any roadway damage caused by the Project's truck trips during construction of the Project (see MM J-4).

During the construction phase of the Project, a 20-foot-wide temporary unpaved construction road would be developed around the base of the fill pad slopes into Placerita Creek, with a temporary creek crossing located approximately midway between the eastern and western sides of the Development Area (in the location of an existing unpaved crossing), in order to provide access between the northern and southern portions of the Development Area and to stabilize the creek slopes, as illustrated in Figure IV-13 on page IV-47. This crossing would be removed and this portion of the creek would be restored after the completion of grading and slope stabilization. As previously described, the stabilized slopes would be replanted with native plant species. In addition, during construction an existing unpaved road located just west of the LADWP transmission corridor would be used for access between the northern and southern portions of the Development Area.[20]

---

[19] *However, to be conservative, total soil export of up to 520,000 cubic yards has been evaluated in relevant sections of the Draft EIR.*

[20] *The segment of the existing unpaved road located north of the creek would be improved as part of the Project and provide access to the proposed substation. The segment of the road that currently crosses the creek would be removed and revegetated.*



Source: David Evans & Associates, 2012.

matrix environmental

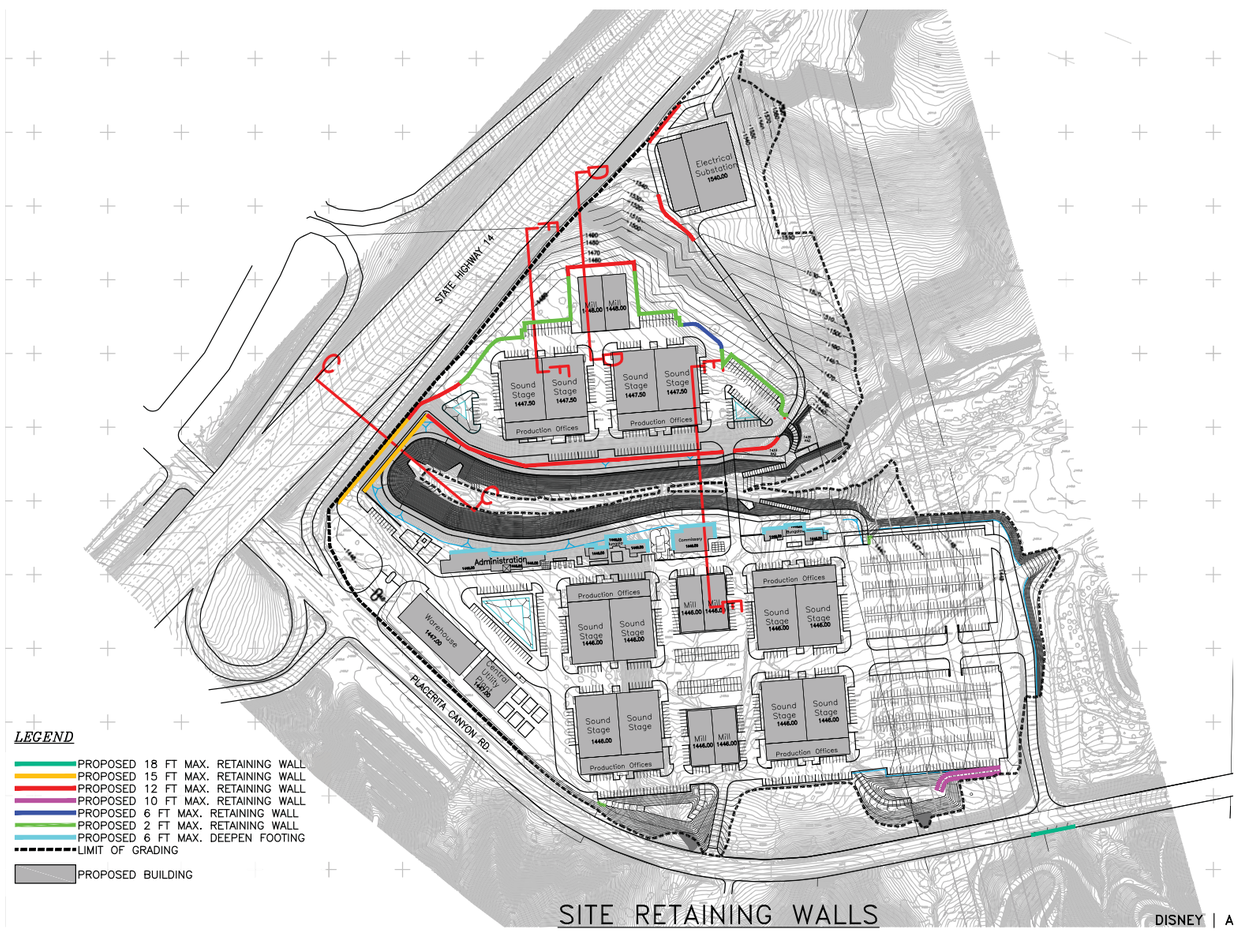
Figure IV-13
Temporary Construction Road

In order to stabilize the site and prepare pads for the proposed structures, the Project would require the construction of retaining walls ranging in height from 2 to 15 feet, located throughout the northern fill pad area, along portions of Placerita Creek, and adjacent to SR-14. In addition, a retaining wall ranging in height from 4 to 18 feet would be located along the south side of Placerita Canyon Road across from the current Ranch main entrance to shore up an existing steep hill. Figure IV-14 and Figure IV-15 on pages IV-49 and IV-50, respectively, illustrate the locations and cross-sections of the retaining walls for the Project under the Soundstage Option and the Studio Office Option, respectively.

3. Project Phasing

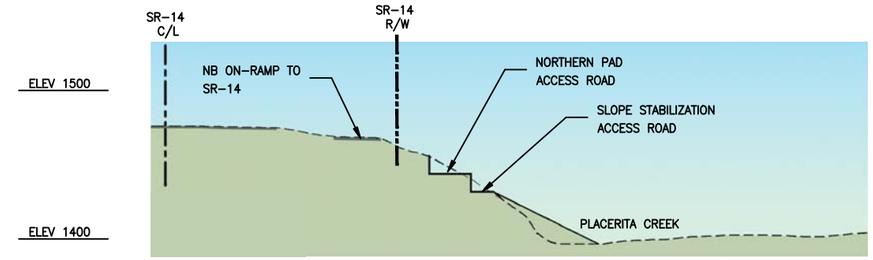
The Applicant is requesting a vesting tentative map and intends to file the final maps in phases. Construction of the Project may occur in phases, with completion as early as 2015 or as late as 2020. The initial construction phase would include the removal of existing uses, mass grading of the Development Area, and development of the southern pad, while the next phase would include construction of the northern pad. For the purposes of this analysis, initial construction is expected to commence in November 2012 and end in February 2015 under both development options. Construction of the next phase is expected to commence in August 2018 and end in March 2020 under the Soundstage Option, or to commence in October 2018 and end in June 2020 under the Studio Office Option. If construction were phased through 2020, a break in construction activity would occur between the construction phases. Earthwork associated with Project development within the Ranch would occur over a period of approximately six months (not taking into account possible nighttime hauling, discussed below, which could reduce the total duration of earthwork activities) during the initial phase of construction, preceded by clearing/ demolition which is expected to last one month. The trail improvements would not be developed concurrently with the Project's earthwork activities elsewhere within the Ranch (refer to Mitigation Measure (MM) E.1-9 in Section E.1, Air Resources—Air Quality) and are expected to last up to three months and be complete prior to recordation of the final map.

The majority of construction activities within the Development Area would be limited to 7:00 A.M. to 7:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday, in accordance with Los Angeles County's Noise Control ordinance. No construction activities would occur on Sundays and holidays. Typical weekday construction hours would be from 7:00 A.M. to 3:30 P.M. In addition, the Project may include nighttime hauling for soil export activities within the Ranch, which would reduce the overall duration of the earthwork phase. Activities scheduled during this night shift would be limited to loading trucks with soil and hauling off-site. If implemented, this second work shift would occur from approximately

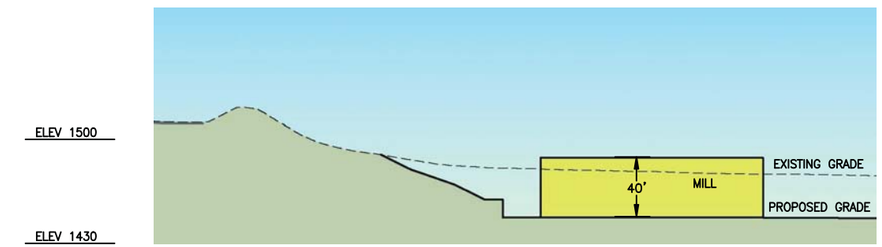


SITE RETAINING WALLS

12 SOUNDSTAGES

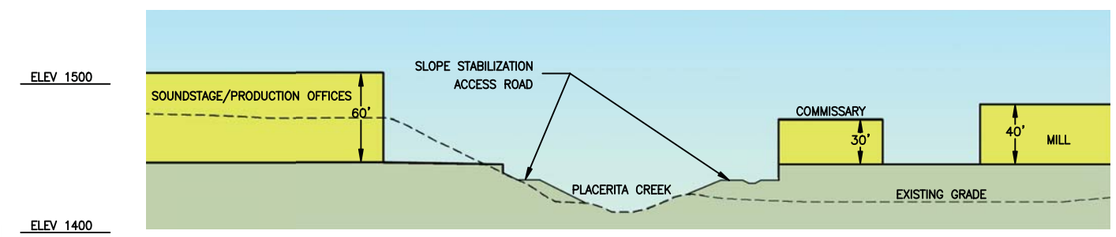


SECTION C–C

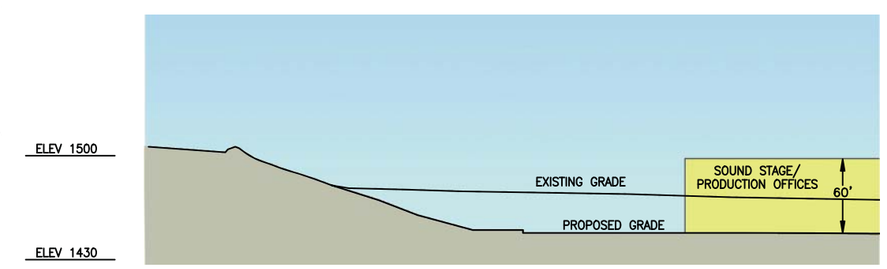


SECTION D–D

0 40 80 160



SECTION E–E



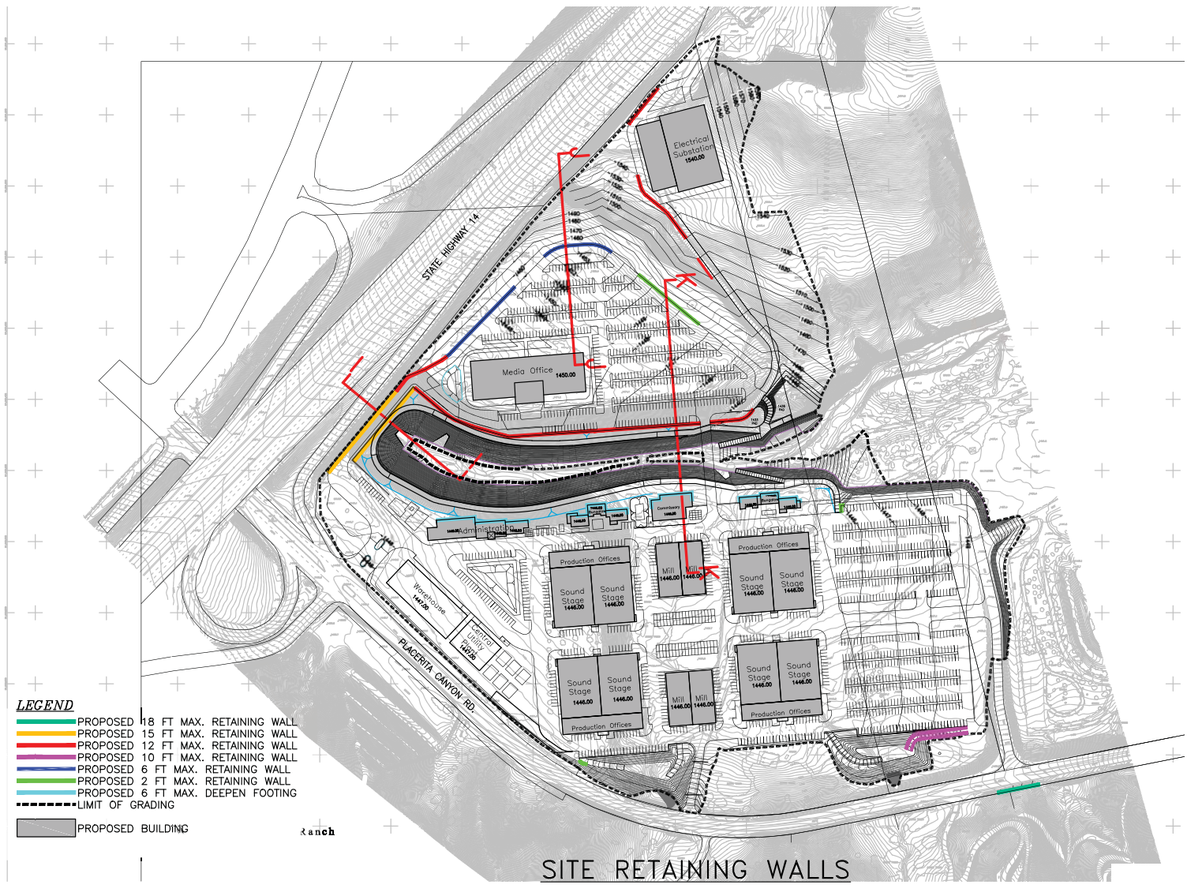
SECTION F–F

0 40 80 160

Source: David Evans & Associates Inc. 2012.

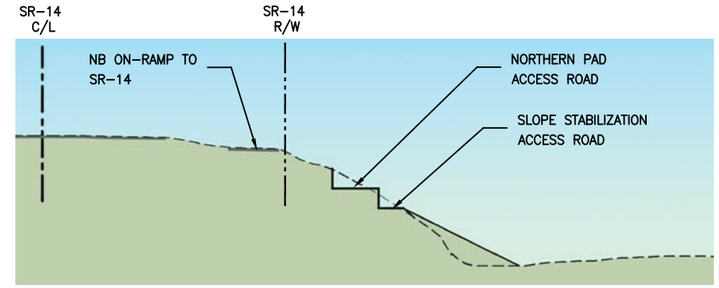
matrix environmental

Figure IV-14
Retaining Walls and Cross Sections - Soundstage Option

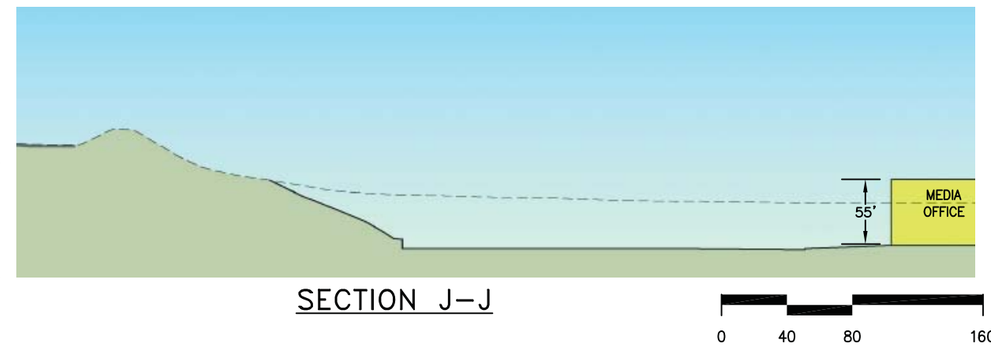


SITE RETAINING WALLS

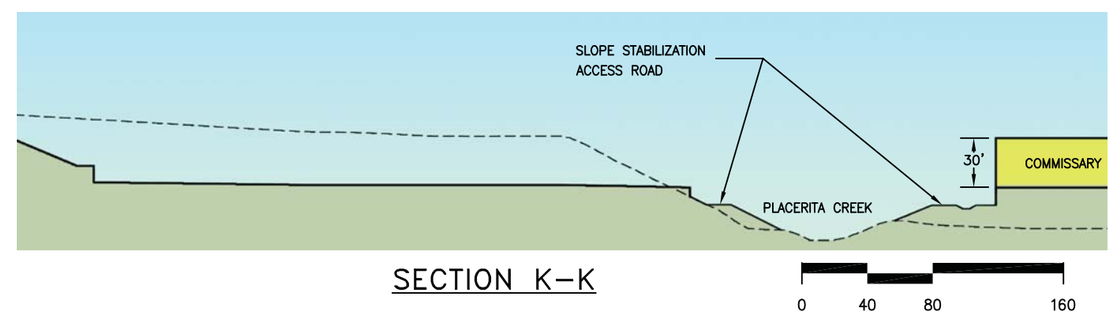
8 SOUNDSTAGES & MEDIA OFFICE



SECTION I–I



SECTION J–J



SECTION K–K

Source: David Evans & Associates Inc. 2012.

matrix environmental

Figure IV-15
Retaining Walls and Cross Sections—Studio Office Option

7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M.[21] In addition, during construction, green screen fencing between 6 and 8 feet tall would be placed around the Development Area to prevent public entry and theft (and to screen views), and periodic private security patrols would be conducted on the Development Area and the Ranch.

As previously discussed, the Project would include substantial off-site water and sewer infrastructure improvements.[22] Construction of the off-site utility improvements likely would start in 2013, would last approximately 9 to 12 months, and would likely occur concurrently with on-site improvements. Construction hours for the off-site infrastructure improvements would depend on the governing jurisdiction of the different segments of the water and sewer line alignments. Specifically, for segments within the jurisdiction of the County of Los Angeles or the City of Santa Clarita, construction would be permitted from 7:00 A.M. to 7:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday. No construction activities would occur on Sundays and holidays. For segments under Caltrans' jurisdiction, construction hours would be from 11:00 P.M. to 5:00 A.M. Monday through Friday. The various street segments along which utility lines would be installed, with the corresponding jurisdiction and expected general construction hours, are listed in Section V.J, Traffic, Access, and Parking. Similarly, construction activities for the roadway improvements within the Caltrans right-of-way around the SR-14/Placerita Canyon Road on-ramps and off-ramps would occur from 11:00 P.M. to 5:00 A.M. Monday through Friday. It is anticipated that the roadway improvements would be completed at the same time as the on-site improvements and would last approximately six months. Further, as detailed in Section V.J, Traffic, Access, and Parking, temporary lane closures would be necessary along segments of certain roadways to allow for the utility trenching and roadway construction. All lane closures would be conducted per the Project's Construction Traffic Management Plans, detailed therein.

The power pole replacement activities are expected to occur in late 2013, concurrent with construction of the substation, and would be scheduled so as to minimize disruption of service to other users in the area. Overall, the replacement activities are anticipated to last

---

[21] *The Los Angeles County Code provides exemptions from the construction standards set forth under Chapter 12.12 of the County Code. As part of the Project (PDF C-2), the Applicant would obtain an exemption from the County Engineer under County Code Section 12.12.050, as applicable, in order to allow nighttime hauling. In addition, under County Code Section 12.12.060, construction of the off-site utilities, some of which would occur at night, would be exempt from the noise requirements specified in County Code Section 12.12. Refer to Section V.C, Noise, of this Draft EIR, for a discussion of the findings the County Engineer would need to make to grant an exemption. As also discussed therein, noise impacts from the potential nighttime hauling activities would be less than significant.*

[22] *The off-site sewer line improvements located within the City of Santa Clarita would be performed by the City as part of their approved Placerita Canyon Sewer Backbone Project.*

several weeks, with the installation of wood poles lasting approximately one day and the installation of steel poles lasting one to two weeks due to the need for concrete foundations, plus a few weeks to remove the old poles and move (i.e., reconnect) the power lines. A single lane closure of limited length may be necessary during installation and would follow SCE protocols.

F. DISCRETIONARY APPROVALS

Discretionary approvals required for implementation of the Project would include, but not be limited to, the following:

- Certification of an Environmental Impact Report.
- Vesting Tentative Tract Map (VTTM) TR071216 to create 20 lots under the Soundstage Option and 18 lots under the Studio Office Option on 44.28 acres of the 58-acre Development Area, corresponding to that area located west of the LADWP transmission corridor. A depiction of the tentative tract map area is provided in Figure IV-16 on page IV-53.
- Local plan amendment to change the land use designation set forth in the 1990 Santa Clarita Valley Area Plan for the tract map area from HM (Hillside Management) to C (Commercial) for approximately 20 acres and from W (Floodway/Flood Plain) to C (Commercial) for approximately 24.28 acres. The remaining portion of the 58-acre Development Area, most of which is owned by the City of Los Angeles Department of Water and Power, would remain designated as HM (Hillside Management) and W (Floodway/Flood Plain). Refer to Figure V.N-1 in Section V.N, Land Use, of this Draft EIR, for an illustration of the proposed Area Plan amendment area.
- Zone change to change the zone from A-2-1 (Heavy Agricultural—One Acre Minimum Required Area) to C-M-DP (Commercial Manufacturing—Development Program) within the Tract Map area. The remaining portion of the 58-acre Development Area, most of which is owned by the City of Los Angeles Department of Water and Power, would remain zoned A-2-1. Refer to Figure V.N-2 in Section V.N, Land Use, of this Draft EIR, for an illustration of the proposed zone change area.
- Conditional Use Permit (CUP) to authorize a Development Program including: grading in excess of 100,000 cubic yards; development of indoor studio and production uses on 44.28 acres associated with VTTM TR071216 in the proposed C-M-DP (Commercial Manufacturing–Development Program) zone; relocation of the Ranch foreman's mobile home and removal and replacement of the associated septic system; construction of an electrical distribution station; construction of a new water tank south of Placerita Canyon Road; construction of

MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO. 71216
SITE PLAN OPTION A

LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

LEGAL DESCRIPTION

PARCEL E:
THAT PORTION OF LOT 1 AND THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 6 IN TOWNSHIP 3 NORTH, RANGE 15 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND FILED IN THE DISTRICT LAND OFFICE JANUARY 25, 1875, WITHIN THE FOLLOWING DESCRIBED BOUNDARY:

BEGINNING AT THE NORTHEAST CORNER OF SAID SECTION 6; THENCE SOUTH ALONG THE EAST LINE OF SAID SECTION TO THE EAST QUARTER CORNER; THEN WEST 1115.60 FEET ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION; THENCE NORTH PARALLEL TO THE EAST LINE OF SAID SECTION TO THE NORTHERLY LINE OF SAID SECTION; THENCE EASTERLY ALONG THE NORTHERLY LINE OF SAID SECTION TO THE POINT OF BEGINNING.

EXCEPT THEREFROM THOSE PORTIONS TRANSFERRED TO THE CITY OF LOS ANGELES BY VIRTUE OF THAT CERTAIN DEED DATED FEBRUARY 23, 1981 AND RECORDED JUNE 2, 1981 IN THE OFFICIAL RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, AS INSTRUMENT NO. 81-545064, SUBJECT TO ALL RESERVATIONS CONTAINED THEREIN.

PARCEL H:
THOSE PORTIONS OF LOTS 7, 8, AND 9 OF SECTION 31, T 4 N, R 15 W, SBM, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND ON FILE IN THE OFFICE OF THE BUREAU OF LAND MANAGEMENT, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEASTERLY CORNER OF SAID LOT 7; THENCE ALONG THE EASTERLY LINE OF SAID LOT N 0 28' 13" W, 413.41 FEET TO THE SOUTHWESTERLY TERMINUS OF THAT COURSE HAVING A BEARING AND DISTANCE OF S 54 58' 30" W, 85.84 FEET AS DESCRIBED IN DEED (STATE PARCEL C994) RECORDED IN BOOK D4328, PAGE 885 OF OFFICIAL RECORDS, IN SAID OFFICE; THENCE ALONG SAID COURSE AND THAT COURSE HAVING A BEARING AND DISTANCE OF S 46 20' 06" E, 24.00 FEET AS DESCRIBED IN SAID DEED (STATE PARCEL C994), N 54 58' 30" E, 85.84 FEET AND N 46 20' 05" W, 24.00 FEET; THENCE ALONG THE NORTHWESTERLY PROLONGATION OF LAST SAID COURSE N 46 20' 05" W, 74.50 FEET TO A POINT IN THE EASTERLY LINE OF THE WEST HALF OF SAID LOT 9, DISTANCE THEREON N 0 28' 13" W, 530.69 FEET FROM SAID SOUTHEASTERLY CORNER OF LOT 7; THENCE S 43 02' 55" W, 325.02 FEET; THENCE S 36 15' 30" W, 100.84 FEET; THENCE S 44 14' 17" W, 200.01 FEET; THENCE S 48 14' 23" W, 50.16 FEET; THENCE S 43 26' 16" W, 79.33 FEET TO THE SOUTHERLY LINE OF SAID SECTION; THENCE ALONG SAID SOUTHERLY LINE N 87 24' 21" E, 516.87 FEET TO THE POINT OF BEGINNING.

EXCEPT THEREFROM THOSE PORTIONS TRANSFERRED TO THE CITY OF LOS ANGELES BY VIRTUE OF THAT CERTAIN DEED DATED FEBRUARY 23, 1981 AND RECORDED JUNE 2, 1981 IN THE OFFICIAL RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, AS INSTRUMENT NO. 81-545064, SUBJECT TO ALL RESERVATIONS CONTAINED THEREIN.

PARCEL I:
THOSE PORTIONS OF LOT 8 AND OF THE EAST HALF OF LOT 9 IN SECTION 31, TOWNSHIP 4 NORTH, RANGE 15 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT THE SOUTHEASTERLY CORNER OF SAID SECTION; THENCE ALONG THE SOUTHERLY LINE OF SAID SECTION, SOUTH 87 24' 21" WEST 1077.04 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 2 35' 39" WEST 661.45 FEET TO THE SOUTHEASTERLY LINE OF THE LAND CONVEYED TO THE STATE OF CALIFORNIA FOR FREEWAY PURPOSES (ANTELOPE VALLEY FREEWAY) BY DEED RECORDED APRIL 4, 1969 AS DOCUMENT NO. 285 IN BOOK D-4328, PAGE 885, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY; THENCE ALONG SAID SOUTHEASTERLY LINE, SOUTH 37 50' 29" WEST 138 FEET TO AN ANGLE POINT THEREIN; THENCE CONTINUING ALONG SAID SOUTHEASTERLY LINE THE FOLLOWING COURSES:

SOUTH 47 47' 00" WEST 125.32 FEET, SOUTH 46 20' 05" EAST, 24 FEET AND SOUTH 54 58' 30" WEST, 85.84 FEET TO THE MOST SOUTHERLY CORNER OF SAID LAND, BEING A POINT IN THE WEST LINE OF SAID LOT 8, DISTANT THEREON NORTH 0 28' 13" WEST 413.41 FEET FROM SAID SOUTHERLY LINE OF SAID SECTION; THENCE ALONG SAID WEST LINE SOUTH 0 28' 13" EAST 413.41 FEET TO SAID SOUTHERLY LINE; THENCE ALONG SAID SOUTHERLY LINE, NORTH 87 24' 21" EAST 257.21 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM THOSE PORTIONS TRANSFERRED TO THE CITY OF LOS ANGELES BY VIRTUE OF THAT CERTAIN DEED DATED FEBRUARY 23, 1981 AND RECORDED JUNE 2, 1981 IN THE OFFICIAL RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, AS INSTRUMENT NO. 81-545064, SUBJECT TO ALL RESERVATIONS CONTAINED THEREIN.

PARCEL K:
LOTS 1, 2 AND 3 AND THE SOUTH HALF OF THE NORTHEAST QUARTER; AND ALSO THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER, ALL IN SECTION 6, TOWNSHIP 3 NORTH, RANGE 15 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND FILED IN THE DISTRICT LAND OFFICE, JANUARY 21, 1875.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED AS FOLLOWS:

THE SURFACE AND 500 FEET OF THE SUBSURFACE VERTICALLY IN DEPTH BELOW THE SURFACE OF THE FOLLOWING DESCRIBED PROPERTY SITUATE IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SAID SURFACE EXISTED ON AUGUST 19, 1963, TO-WIT:

THAT PORTION OF LOT 1 AND THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 6 IN TOWNSHIP 3 NORTH, RANGE 15 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND FILED IN THE DISTRICT LAND OFFICE JANUARY 25, 1875, WITHIN THE FOLLOWING DESCRIBED BOUNDARY:

BEGINNING AT THE NORTHEAST CORNER OF SAID SECTION 6; THEN SOUTH ALONG THE EAST LINE OF SAID SECTION TO THE EAST QUARTER CORNER; THEN WEST 1115.60 FEET ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION; THEN NORTH PARALLEL TO THE EAST LINE OF SAID SECTION TO THE NORTHERLY LINE OF SAID SECTION; THENCE EASTERLY ALONG THE NORTHERLY LINE OF SAID SECTION TO THE POINT OF BEGINNING.

ALSO EXCEPT THEREFROM, THE SURFACE AND THAT PORTION OF THE SUBSURFACE LYING ABOVE A DEPTH OF 100 FEET MEASURED VERTICALLY DOWNWARD FROM SAID SURFACE, OF THAT PORTION OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 6, QUITCLAIMED AND SURRENDERED TO THE COUNTY OF LOS ANGELES BY PARCEL 33.6 OF THAT CERTAIN DOCUMENT DATED MAY 22, 1970 AND RECORDED ON NOVEMBER 24, 1970 AS INSTRUMENT NO. 3334 IN BOOK D4898, PAGE 203, OFFICIAL RECORDS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

ALSO EXCEPT THEREFROM THOSE PORTIONS LYING WITHIN THE LINES OF THE 205 FOOT WIDE AND 120 FOOT WIDE STRIPS OF LAND AS DESCRIBED IN PARCEL NOS. 20-D, 20-E, 20-F, AND 20-G OF THE DEED TO THE CITY OF LOS ANGELES, RECORDED ON DECEMBER 30, 1970 AS INSTRUMENT NO. 46 IN BOOK D4929, PAGE 135, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THOSE PORTIONS OF SAID LAND DESCRIBED IN THAT CERTAIN DEED TO THE STATE OF CALIFORNIA, RECORDED APRIL 5, 1976, AS INSTRUMENT NO. 41, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THOSE PORTIONS OF SAID LAND, DESCRIBED IN THAT CERTAIN DEED TO THE CITY OF LOS ANGELES, RECORDED MAY 18, 1981, AS INSTRUMENT NO. 81-490750, OFFICIAL RECORDS.

ALSO EXCEPT FROM THE REMAINDER THEREOF, THAT PORTION WHICH LIES NORTHWESTERLY OF THAT PORTION OF THE BOUNDARY OF THE ANTELOPE VALLEY FREEWAY DESCRIBED IN PARCEL 1 (C 990-32, -33, PORTIONS OF C 990, C 990-1, -2, -3, -21 AND -22) IN THE DEED TO THE STATE OF CALIFORNIA BY DOCUMENT RECORDED APRIL 5, 1976 AS INSTRUMENT NO. 41, AS HAVING LENGTHS OF 1919.41 FEET, 700.39 FEET, AND 34.26 FEET.

EASEMENTS

(1) AN EASEMENT FOR USE AS A PUBLIC HIGHWAY AND INCIDENTAL PURPOSES, RECORDED IN BOOK 18596, PAGE 127 OF OFFICIAL RECORDS
IN FAVOR OF: THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA; TO BE VACATED AND ABANDONED WITH APPROVAL OF TRACT MAP.
AFFECTS: PORTIONS OF PARCELS E & K (PLOTTED HEREON)

(2) AN EASEMENT FOR ELECTRIC LINE AND INCIDENTAL PURPOSES, RECORDED JULY 31, 1952 AS INSTRUMENT No. 2163 IN BOOK 39504, PAGE 49 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION; TO BE ABANDONED AND RELOCATED WITH APPROVAL OF TRACT MAP.
AFFECTS: PORTIONS OF PARCELS K (NOT PLOTTABLE FROM RECORD)

(3) AN EASEMENT FOR PUBLIC HIGHWAY, SLOPE AND INCIDENTAL PURPOSES, RECORDED MARCH 14, 1955 AS INSTRUMENT No. 3835 OF OFFICIAL RECORDS.
IN FAVOR OF: COUNTY OF LOS ANGELES; TO REMAIN.
AFFECTS: PORTIONS OF PARCELS E & K (PLOTTED HEREON)

(4) ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM THE FREEWAY HAVE BEEN RELINQUISHED IN THE DOCUMENT RECORDED MARCH 6, 1974 AS INSTRUMENT No. 3561 OF OFFICIAL RECORDS; TO REMAIN. (PLOTTED HEREON)

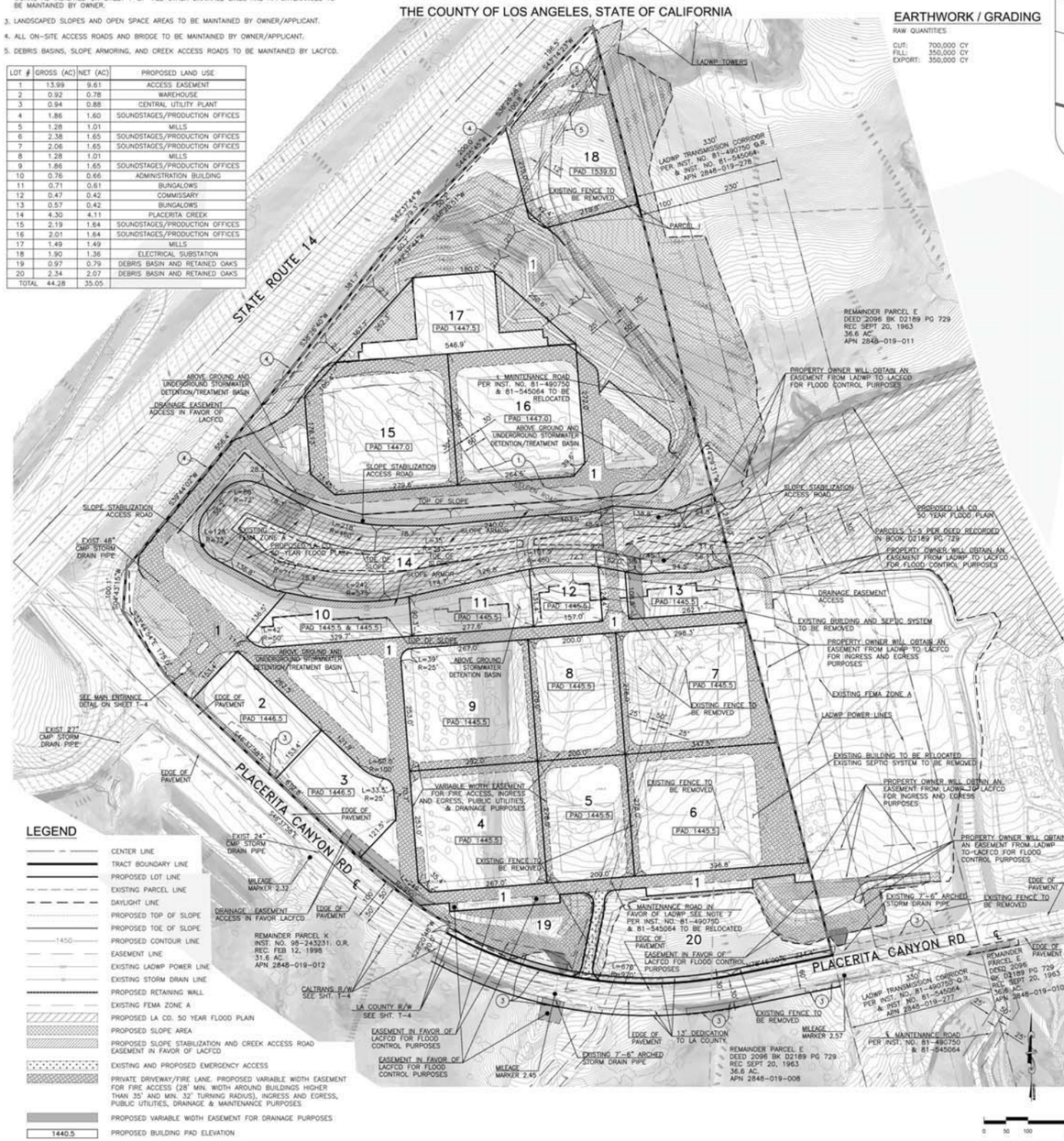
(5) AN EASEMENT FOR AERIAL AND UNDERGROUND ELECTRICAL LINES AND COMMUNICATION LINES AND INCIDENTAL PURPOSES, RECORDED MARCH 6, 1974 AS INSTRUMENT No. 3561 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CALIFORNIA CORPORATION, ITS SUCCESSORS AND ASSIGNS; TO BE ABANDONED AND RELOCATED WITH APPROVAL OF TRACT MAP.
AFFECTS: PORTIONS OF PARCEL H (PLOTTED HEREON)

NOTE:
1. ONSITE GRADED ROADS DO NOT SHOW UP ON ANY RECORDED DOCUMENTS AS EASEMENTS.
2. (#) DENOTES EASEMENT PLOTTED HEREON

NOTES

1. THE SUBDIVIDER INTENDS TO FILE MULTIPLE FINAL MAPS PER CALIFORNIA GOVERNMENT CODE SECTION 66456.1 AS PART OF PROJECT PHASING. PERMISSION IS REQUESTED TO RECORD MULTIPLE MAPS.
2. MAINTENANCE OF STORM DRAIN LINES AND APPURTENANCES BY LOS ANGELES COUNTY PUBLIC WORKS AS INDICATED ON SHEET T-3. ALL OTHER DRAINAGE LINES AND APPURTENANCES TO BE MAINTAINED BY OWNER.
3. LANDSCAPED SLOPES AND OPEN SPACE AREAS TO BE MAINTAINED BY OWNER/APPLICANT.
4. ALL ON-SITE ACCESS ROADS AND BRIDGE TO BE MAINTAINED BY OWNER/APPLICANT.
5. DEBRIS BASINS, SLOPE ARMORING, AND CREEK ACCESS ROADS TO BE MAINTAINED BY LACFCD.

LOT #	GROSS (AC)	NET (AC)	PROPOSED LAND USE
1	13.99	9.61	ACCESS EASEMENT
2	0.92	0.78	WAREHOUSE
3	0.94	0.88	CENTRAL UTILITY PLANT
4	1.86	1.60	SOUNDSTAGES/PRODUCTION OFFICES
5	1.28	1.01	MILLS
6	2.38	1.65	SOUNDSTAGES/PRODUCTION OFFICES
7	2.06	1.65	SOUNDSTAGES/PRODUCTION OFFICES
8	1.28	1.01	MILLS
9	1.86	1.65	SOUNDSTAGES/PRODUCTION OFFICES
10	0.76	0.66	ADMINISTRATION BUILDING
11	0.71	0.61	BUNGALOWS
12	0.47	0.42	COMMISSARY
13	0.57	0.42	BUNGALOWS
14	4.30	4.11	PLACERITA CREEK
15	2.19	1.64	SOUNDSTAGES/PRODUCTION OFFICES
16	2.01	1.64	SOUNDSTAGES/PRODUCTION OFFICES
17	1.49	1.49	MILLS
18	1.90	1.36	ELECTRICAL SUBSTATION
19	0.97	0.79	DEBRIS BASIN AND RETAINED OAKS
20	2.34	2.07	DEBRIS BASIN AND RETAINED OAKS
TOTAL	44.28	35.05	



SITE ADDRESS

19802 PLACERITA CANYON ROAD
NEWHALL, CALIFORNIA 91321

EARTHWORK / GRADING

RAW QUANTITIES

CUT: 700,000 CY
FILL: 350,000 CY
EXPORT: 350,000 CY

VICINITY MAP
NOT TO SCALE

SHEET INDEX

T-1 VESTING TENTATIVE TRACT MAP NO. 71216
T-2 OPTION BUILD OUT MAP
T-3 ON-SITE UTILITIES MAP AND STREET AND WALL SECTIONS
T-4 TYPICAL STREET AND WALL SECTIONS
T-5 OFF-SITE UTILITIES MAP
T-6 PHASING MAP

OWNER/APPLICANT

GOLDEN OAK RANCH PROPERTIES
19802 PLACERITA CANYON ROAD
NEWHALL, CALIFORNIA 91321
CONTACT: DEANNA DETCHEMENDY
PHONE: (818) 560-8952

AGENT

KATHLEEN O'PREY TRUMAN, TRUMAN & ELLIOTT LLP
626 WILSHIRE BLVD, SUITE 550
LOS ANGELES, CA 90017
PHONE: (213) 629-5300
FAX: (213) 629-1212

LAND SURVEYOR/ MAP PREPARED BY:

DAVID EVANS AND ASSOCIATES, INC.
4200 CONCOURS, SUITE 200
ONTARIO, CALIFORNIA 91764
(909) 481-5750

UTILITY PURVEYORS FOR TRACT MAP

GAS ____ SOUTHERN CALIFORNIA GAS COMPANY
SEWER ____ SANTA CLARITA VALLEY SANITATION DISTRICT
WATER ____ NEWHALL COUNTY WATER DISTRICT
ELECTRIC ____ SOUTHERN CALIFORNIA EDISON
TELEPHONE ____ AT&T
CABLE ____ TIME WARNER

EXISTING USE

VACANT, OUTDOOR PARKING, MOTION PICTURE/TELEVISION FILMING AND AGRICULTURAL USES

PROJECT DATA

TOTAL PROJECT LAND AREA: 1,928,670 SF (44.28 AC)

SOUNDSTAGES ____ 12
PRODUCTION OFFICES ____ 6
MILLS ____ 6
WRITERS/PRODUCERS BUNGALOWS ____ 6
COMMISSARY ____ 1
ADMINISTRATION BUILDING ____ 1
CENTRAL UTILITY PLANT ____ 1
WAREHOUSE ____ 1
ELECTRICAL SUBSTATION ____ 1

DRAINAGE NOTE

THE ONSITE RUNOFF WILL BE DRAINED TOWARDS UNDERGROUND DETENTION SYSTEMS. THE PERFORATED UNDERGROUND DETENTION SYSTEMS WILL DETAIN THE PEAK FLOWS AND INFILTRATE THE FIRST FLUSH BEFORE IT REACHES PLACERITA CREEK OR THE GROUNDWATER BASIN.

THE OFFSITE RUNOFF WILL BE PICKED UP BY A SEPARATE STORM DRAIN SYSTEM AND DRAIN DIRECTLY INTO PLACERITA CREEK.

GENERAL NOTES

1. OWNER/SUBDIVIDER SHALL COMPLY WITH ALL REQUIREMENTS OF THE COUNTY OF LOS ANGELES SUBDIVISION CODE, TITLE 21.
2. OWNER/SUBDIVIDER SHALL COMPLY WITH ALL REQUIREMENTS OF THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS.
3. NO COMMON AREA SHALL BE DEDICATED.
4. PERMISSION IS REQUESTED TO VACATE DELDEN ROAD.
5. MAP BASED ON RECORDED DATA PREPARED BY DAVID EVANS & ASSOCIATES DATED JUNE 2009.
6. PROJECT IS IN FEMA 100-YEAR FLOOD ZONE AND LOS ANGELES COUNTY'S 50-YEAR CAPITAL FLOOD ZONE.
7. EXISTING MAINTENANCE ROAD IN FAVOR OF LADWP SHALL BE VACATED AND INSTEAD AN EASEMENT IN FAVOR OF LADWP WILL BE GRANTED OVER LOT 1, THE PRIVATE DRIVEWAY SYSTEM.
8. LOTS 15, 16, AND 17 MAY BE MERGED INTO ONE LOT WITH OPTION BUILD OUT.
9. LADWP TRANSMISSION CORRIDOR IS OWNED BY LADWP. OWNER/APPLICANT HAS AN ACCESS EASEMENT OVER THE LADWP TRANSMISSION CORRIDOR.
10. PERMISSION IS REQUESTED TO WAIVE STREET FRONTAGE
11. PERMISSION REQUESTED FOR ALLOWANCE OF 5-FOOT DEVIATION FOR ELEVATION OF PADS IN LOTS.
12. PERMISSION IS REQUESTED TO RECORD MULTIPLE MAPS.
13. PERMISSION IS REQUESTED TO SATISFY LANDSCAPING REQUIREMENT OF 10% OVER ENTIRE TRACT MAP RATHER THAN ON LOT-BY-LOT BASIS.
14. THE OWNER/APPLICANT SHALL OBTAIN WRITTEN AUTHORIZATION FROM LADWP PRIOR TO ISSUANCE OF GRADING PERMITS FOR USE OF TRANSMISSION LINE ROW FOR PARKING LOT AND GRADING CONSTRUCTION.
15. DRIVEWAY ACCESS FROM PLACERITA CANYON RD. MAY REQUIRE MINOR ADJUSTMENT TO THE SATISFACTION OF CALTRANS, LADWP, PUBLIC WORKS, AND REGIONAL PLANNING.
16. THE PROPOSED BRIDGE OVER PLACERITA CREEK REQUIRES AN ACCESS EASEMENT OVER LOT 14.
17. OWNER/SUBDIVIDER SHALL DEDICATE CONSTRUCTION RIGHTS OVER LOT 14.
18. OWNER/SUBDIVIDER SHALL DEDICATE TO THE COUNTY ON THE FINAL MAP THE RIGHTS TO PROHIBIT CONSTRUCTION OF RESIDENTIAL AND ACCESSORY STRUCTURES OVER ALL LOTS.

LAND USE & ZONING

EXISTING LAND USE: AGRICULTURAL PROPOSED ZONING: C-M-DP
PROPOSED LAND USE: COMMERCIAL TOTAL NUMBER OF LOTS: 20
EXISTING ZONING: A-2-1

ASSESSORS PARCEL NUMBERS

2848-009-037, PORTION OF 2848-009-038, 2848-019-008, 2848-019-009, 2848-019-010, 2848-019-011, 2848-019-012, 2848-019-013

Source: David Evans & Associates Inc. 2012.

Figure IV-16
Vesting Tentative Tract Map

a publicly accessible trail and trailhead south of Placerita Canyon Road; authorize outdoor night lighting beyond that allowed by the Rural Outdoor Lighting District ordinance; continued operation and maintenance of the existing filming ranch and associated outdoor sets on 195 acres with the remaining 637 acres used as a filming backdrop; and continuation of permitted existing agricultural and oil production uses in the A-2-1 (Heavy Agricultural–One Acre Minimum Required Area) and A-2-2 (Heavy Agricultural–Two Acres Minimum Required Area) zones. A depiction of the Exhibit "A" Map to support the CUP application is provided in Figure IV-17 on page IV-55.

- Oak tree permit to authorize the removal of 158 oak trees and encroachment within the protected zone of 82 oak trees located within or near the Development Area, Water Tank Area, and Conditional Parking Areas.

- A parking permit to authorize tandem parking, use of shared off-lot parking, and an exemption from paving and striping requirements for surplus parking within the conditional parking lots unless parking within the LADWP transmission corridor is later revoked by LADWP.

- Vacation of the portion of Delden Road traversing the Development Area.

- Re-alignment of County floodway/floodplain map boundary.

- Approval by the Los Angeles County Local Agency Formation Commission (LAFCO) to annex the Ranch into the Santa Clarita Valley Sanitation District of Los Angeles County.

- Approval by the California Department of Transportation of off-site traffic improvements.

- Issuance of a U.S. Army Corps of Engineers Permit pursuant to Clean Water Act Section 404.

- Issuance of a Streambed Alteration Agreement from the California Department of Fish and Game pursuant to the Fish and Game Code Section 1603.

- Issuance of a Water Quality Certification from the Regional Water Quality Control Board pursuant to Clean Water Act Section 401.

- Approval of Fuel Modification Plan from the Los Angeles County Fire Department.

- Additional County and other governmental actions as may be determined necessary.

VESTING TENTATIVE TRACT MAP NO. 71216
CONDITIONAL USE PERMIT R200900126
EXHIBIT "A" MAP

SANTA CLARITA VALLEY AREA PLAN LAND USE DESIGNATIONS

CURRENT LAND USE DESIGNATION:
W (FLOODWAY/FLOODPLAIN), HM (HILLSIDE MANAGEMENT), AND
O-NF (NATIONAL FOREST)

PROPOSED LAND USE DESIGNATION FOR VESTING TENTATIVE TRACT MAP NO 71216:
C (COMMERCIAL)

ZONING INFORMATION

CURRENT ZONING:
A-2-1 AND A-2-2

PROPOSED ZONING FOR VESTING TENTATIVE TRACT MAP NO 71216:
C-M-DP

PERMISSION IS REQUESTED TO SATISFY LANDSCAPING REQUIREMENT OF 10% OVER ENTIRE TRACT MAP RATHER THAN ON A LOT-BY-LOT BASIS

PROPOSED BUILDING USE

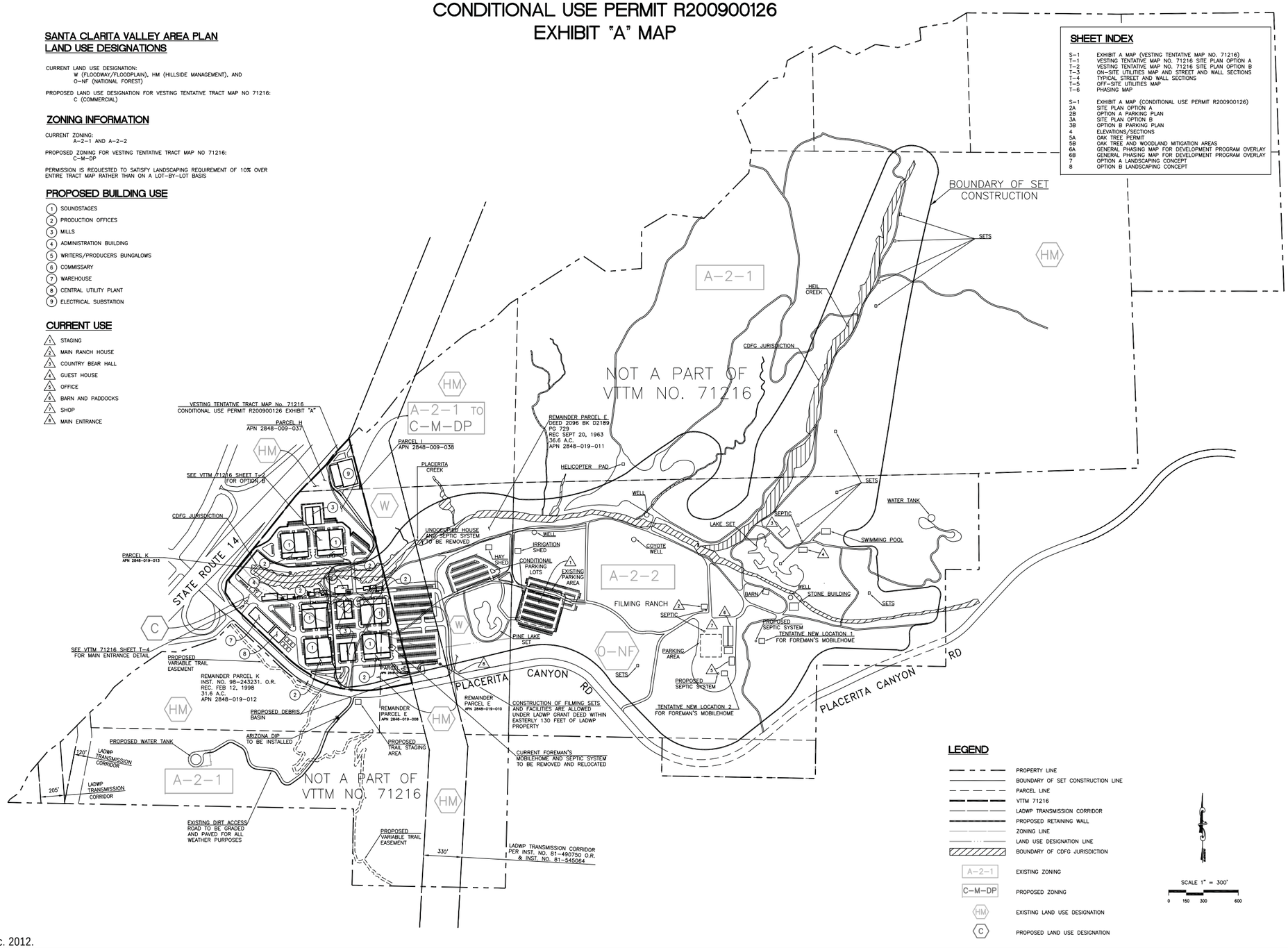
1. SOUNDSTAGES
2. PRODUCTION OFFICES
3. MILLS
4. ADMINISTRATION BUILDING
5. WRITERS/PRODUCERS BUNGALOWS
6. COMMISSARY
7. WAREHOUSE
8. CENTRAL UTILITY PLANT
9. ELECTRICAL SUBSTATION

CURRENT USE

1. STAGING
2. MAIN RANCH HOUSE
3. COUNTRY BEAR HALL
4. GUEST HOUSE
5. OFFICE
6. BARN AND PADDOCKS
7. SHOP
8. MAIN ENTRANCE

SHEET INDEX

S-1	EXHIBIT A MAP (VESTING TENTATIVE MAP NO. 71216)
T-1	VESTING TENTATIVE MAP NO. 71216 SITE PLAN OPTION A
T-2	VESTING TENTATIVE MAP NO. 71216 SITE PLAN OPTION B
T-3	ON-SITE UTILITIES MAP AND STREET AND WALL SECTIONS
T-4	TYPICAL STREET AND WALL SECTIONS
T-5	OFF-SITE UTILITIES MAP
T-6	PHASING MAP
S-1	EXHIBIT A MAP (CONDITIONAL USE PERMIT R200900126)
2A	SITE PLAN OPTION A
2B	OPTION A PARKING PLAN
3A	SITE PLAN OPTION B
3B	OPTION B PARKING PLAN
4	ELEVATIONS/SECTIONS
5A	OAK TREE PERMIT
5B	OAK TREE AND WOODLAND MITIGATION AREAS
6A	GENERAL PHASING MAP FOR DEVELOPMENT PROGRAM OVERLAY
6B	GENERAL PHASING MAP FOR DEVELOPMENT PROGRAM OVERLAY
7	OPTION A LANDSCAPING CONCEPT
8	OPTION B LANDSCAPING CONCEPT



Source: David Evans & Associates Inc. 2012.

G. INTENDED USE OF THIS EIR

The intended uses of this EIR include compliance with CEQA and to provide information needed by the Los Angeles County Regional Planning Commission, Board of Supervisors, and other County departments to make decisions regarding Project approvals and conditions. This EIR is also intended to support all federal, state, and regional and/or local government discretionary approvals that may be required to develop the Project.

V. Environmental Impact Analysis

A. Geotechnical Hazards

V. ENVIRONMENTAL IMPACT ANALYSIS

A. GEOTECHNICAL HAZARDS

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's potential impacts with regard to geotechnical issues. The analysis includes an evaluation of the potential geologic hazards associated with surface fault rupture, seismic ground-shaking, liquefaction, lateral spreading, differential seismic settlement, seismically induced flooding, seiche and tsunami, subsidence, landslides, and expansive soils. The analysis is based on the Preliminary Geotechnical Investigation for Disney | ABC Studios at The Ranch, dated March 2010, and the Preliminary Geotechnical Investigation for Vesting Tentative Tract Map No. 71216, dated February 2011, as updated with attachments dated May and August 2011 (all of which are collectively referred to herein as the Geotechnical Reports), which were prepared by URS Corporation and approved by the County of Los Angeles Department of Public Works (LACDPW) on August 31, 2011, and which are provided in Appendices B.1 and B.2, respectively, of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Regional Geologic Setting

The Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, and Off-Site Infrastructure Improvement Areas, collectively referred to as the Project site, lie within the Transverse Ranges physiographic province of southern California. This province is characterized by a complex series of mountain ranges and valleys with dominant east-west trends. The east-west structural grain of the Transverse Ranges is the consequence of active faulting and folding driven by movement along the boundary between the North American and the Pacific crustal plates.[1]

---

[1] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

The Project site is located at the easternmost extent of the Ventura Basin, which contains a thick layer of marine sedimentary rocks deposited during the late Cenozoic era.[2] The marine sediments are covered by non-marine sediments deposited during late Pliocene epoch to recent time.[3] The sides of Placerita Canyon, in which the Ranch is located, are underlain by the Pliocene-Pleistocene epoch Saugus Formation, which is composed of weakly hardened, non-marine, fluvial pebble-cobble conglomerates, sandstones, and siltstones.[4] Overlying the Saugus Formation in Placerita Canyon in an unconformed manner is Holocene epoch alluvium that is composed of unconsolidated gravel, sand and clay.[5] Artificial fill overlies these native deposits adjacent to State Route 14 (SR-14) at Placerita Canyon Road, where the Development Area is located.[6]

(2) Local Geologic Setting

The Project site is generally located at the bottom of Placerita Canyon, which is surrounded by local mountain ridges to the north, east and south. The bottom of Placerita Canyon is relatively flat with site topography descending gently toward the west. The Development Area includes two graded fill pads known as the northern fill pad and the southern fill pad, respectively. These fill pads were placed by Caltrans during the construction of SR-14 in the early 1970s and are derived from local cut areas. More specifically, the majority of the northern and southern fill pads consist of fill soils generated by excavations into the surrounding hills during construction of SR-14. Combined, the two fill pads comprise approximately 23.6 acres of the 58-acre Development Area. The northern fill pad is approximately 12 acres in size, approximately 34 feet to greater than 61.5 feet in depth, and located approximately 10 to 20 feet below the elevated SR-14 to the northwest. The southern fill pad is approximately 11.6 acres in size, approximately 21 feet to greater than 53 feet in depth, and at its southern point is at approximately the same grade as Placerita Canyon Road. The northern and southern fill pads are separated by Placerita Creek, which traverses the Ranch, including the Development Area, from east to west before entering a 20-foot culvert under SR-14. Placerita Creek is approximately 25 feet in width where it extends across the Development Area. The creek banks ascend at a gradient of approximately 2:1 (horizontal to vertical) for 40 to 50 feet to the northern fill pad and southern fill pad, respectively, and are exposed with sparse vegetation and some

---

[2] *The Cenozoic era is the present geologic era that began 65 million years ago.*

[3] *The Pliocene geologic epoch lasted from five to two million years ago.*

[4] *The Pleistocene geologic epoch lasted from two million to 10,000 years ago.*

[5] *The Holocene epoch is the current geologic epoch that began 10,000 years ago.*

[6] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

trees. The eastern portion of the Development Area is located within a City of Los Angeles Department of Water and Power (LADWP) Transmission Corridor. The corridor is approximately 330 feet wide and contains high voltage tower mounted electrical transmission lines.[7]

(a) Project Site Topography

Like the Ranch as a whole, the topography of the Development Area varies, with the lowest elevation at approximately 1,400 feet above mean sea level (MSL) within Placerita Creek near SR-14 and the highest elevation at approximately 1,567 feet above MSL within the northernmost portion of the Development Area. There is a 60-foot drop in elevation on the eastern slope of the southern fill pad, extending into the remaining southern portion of the Development Area.

The Water Tank Area is located on the Ranch in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of an existing unpaved access road to 1,668 feet above MSL at the site of the proposed water tank pad. The footprint of the proposed water tank and access road improvements generally encompass areas previously disturbed by past and current oil drilling operations. These disturbances include prior clearing and grading to create level pads, which remain readily evident today and are largely devoid of native vegetation.

Near the Water Tank Area, the Trail Area is also located in hilly terrain south of the Development Area and Placerita Canyon Road. The Trail Area extends from the SR-14 northbound off-ramp adjacent to Placerita Canyon Road to southeast of the Water Tank Area at the Ranch's southern property line and includes a trailhead/staging area of approximately 19,000 square feet at the base of the access road to the proposed water tank. Elevations within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The Trail Area comprises generally undisturbed land containing native vegetation; the trailhead/staging area, however, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch.

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed areas of the Ranch. These areas are generally flat with an average elevation of approximately 1,440 feet above MSL within the northern lot and

---

[7] *Ibid.*

ranging from 1,450 feet to approximately 1,470 feet above MSL within the southern lot. Much of the southern Conditional Parking Area is used for surface parking and staging for existing Ranch and filming operations.

The Potential Mobile Home Relocation Areas are situated in the southeast corner of the Ranch near an existing, developed area where the Ranch office, a barn, and a workshop are located. These areas are generally flat with elevations ranging from approximately 1,506 feet to 1,523 feet above MSL.

The majority of the Off-Site Infrastructure Improvement Areas is located within the City of Santa Clarita, west of the Ranch and SR-14. The utility alignments proposed within these areas are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential and commercial development. The SCE power pole replacement areas are along Sierra Highway and potentially Placerita Canyon Road within existing road rights-of-way. Placerita Creek also flows through a portion of the Off-Site Infrastructure Improvement Areas. These areas are generally flat with elevations ranging from approximately 1,290 feet above MSL at the lowest point along the proposed sewer line alignment (Oak Orchard Alignment) to approximately 1,550 feet above MSL at the highest point along the Dockweiler Drive water line alignment (Alternative A).[8] In addition, Project Design Features and Mitigation Measures would require off-site roadway intersection improvements at the current Ranch main entrance/Placerita Canyon Road intersection and at the following intersections: Sierra Highway/SR-14 southbound ramps, Sierra Highway/Placerita Canyon Road, Placerita Canyon Road (new Ranch main entrance)/SR-14 northbound off-ramp, and the current Ranch main entrance/Placerita Canyon Road.

(b) Surface Fault Rupture

A fault is defined as a fracture along which rocks on one side have been displaced with respect to those on the other side. The California Geological Survey (CGS) categorizes faults within the earth's crust as active, potentially active, or inactive. Active faults are those that have shown evidence of surface displacement within the past 11,000 years (i.e., Holocene epoch). Potentially active faults are those that have shown evidence of surface displacement between 11,000 and 1.6 million years ago (i.e., Pleistocene epoch). Inactive faults are those that have not shown evidence of surface

[8] *The point of connection of these systems to the proposed on-site system is at an elevation of approximately 1,450 feet above MSL.*

displacement within the last 1.6 million years before the present.[9] There are blind thrust faults, which are low angle reverse faults with no surface exposure. The southern California region is crossed by numerous active and potentially active faults and is underlain by several blind thrust faults, as shown in Figure V.A-1 on page V.A-6.

Fault rupture is the visible breaking and displacement of the earth's surface along the trace of a fault during an earthquake. As further discussed below, the Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish and map fault rupture zones (called earthquake fault zones).[10] These zones, which generally extend from 200 to 500 feet on each side of a known active fault, identify areas where potential fault rupture could prove hazardous and where special studies are required to characterize hazards to habitable structures. To be zoned under the Alquist-Priolo Fault Zoning Act, a fault must be considered active or both sufficiently active and well-defined. The CGS defines an active fault as one that has had surface displacement within Holocene time (about the last 11,000 years), and a sufficiently active fault as one that has evidence of Holocene surface displacement along one or more of its segments or branches. The CGS considers a fault to be well-defined if its trace is clearly detectable as a physical feature at or just below the ground surface.

As indicated in the Geotechnical Reports prepared for the Project, no known active and well-defined faults have been recognized as crossing the Project site, including the Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Areas, or the Off-Site Infrastructure Improvement Areas. In addition, the CGS does not delineate any part of the Project site as being within an Earthquake Fault Zone. The closest Earthquake Fault Zone to the Development Area is a portion of the San Gabriel Fault Zone, which is located approximately two miles northwest of the Development Area.[11] The San Gabriel fault is considered capable of generating a maximum earthquake of approximately magnitude 7.

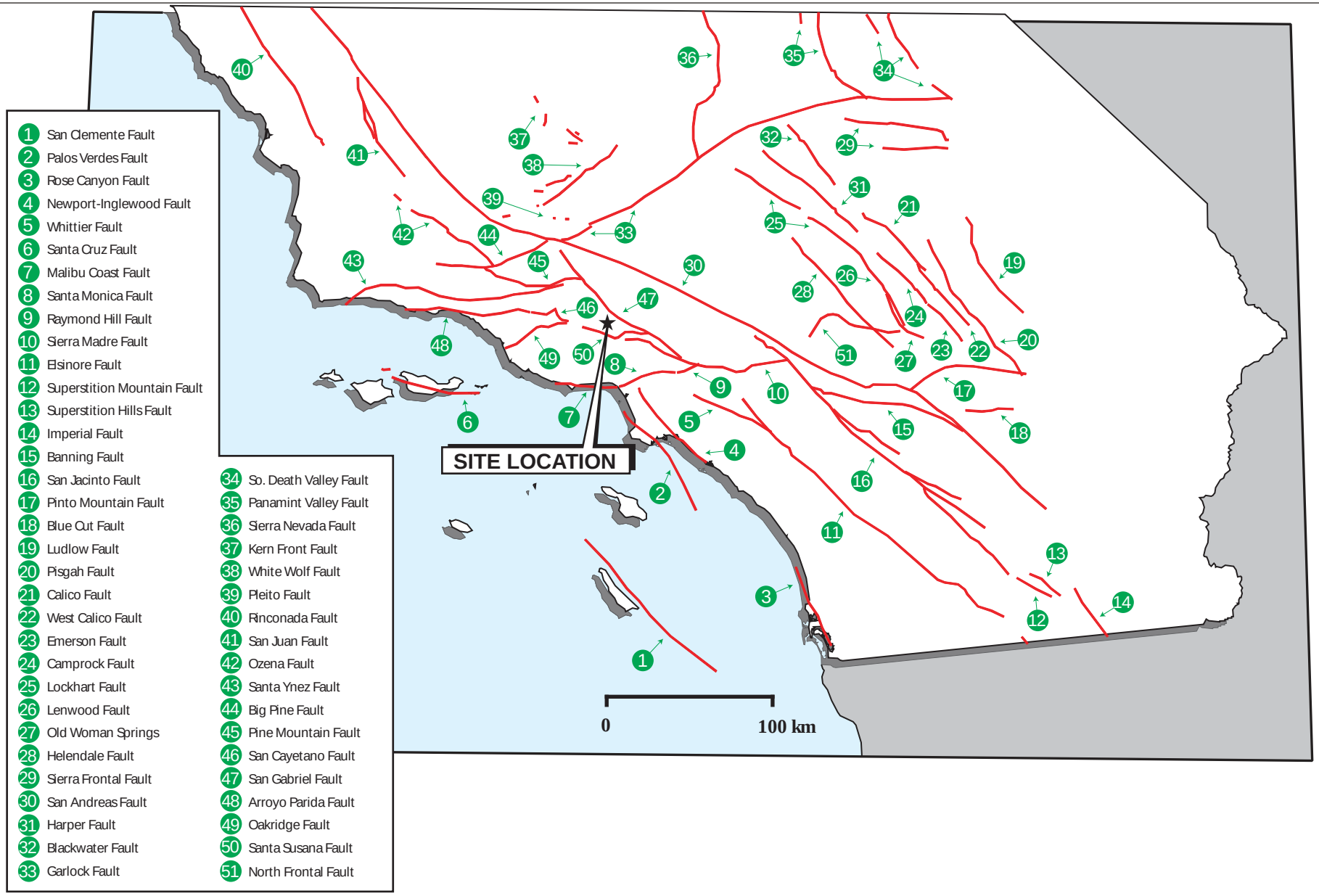
The north-south trending, steeply east-dipping Whitney fault, which crosses through the Development Area, has been mapped at the surface cutting the Pliocene-Pleistocene epoch Saugus Formation along the south side of Placerita Canyon, and was mapped as a concealed (buried) fault beneath the Holocene alluvium of Placerita Canyon. However, the

---

[9] *California Geological Survey, Special Publication 42: Fault Rupture Hazard Zones in California, Interim Revision, 2007.*

[10] *Until 1975, earthquake fault zones were called "Special Studies Zones."*

[11] *The portion of the San Gabriel fault which lies within 0.75 mile northeast of the Development Area has not been zoned by the CGS as an Earthquake Fault Zone.*



Disney | ABC Studios at The Ranch

matrix environmental

Figure V.A-1

Regional Faults in Southern California

Source: California Geological Survey, 2010.

Whitney fault is not located within an Alquist-Priolo Earthquake Fault Zone and is not defined as an active fault by the CGS.[12] The Whitney fault is shown as a Quaternary fault on the Fault Activity Map of California and in accordance with the CGS Alquist-Priolo Earthquake Fault Zoning Act is regarded as a potentially active fault. Based on the Geotechnical Reports, no linear topographic features suggestive of surficial faulting were identified as passing through the Development Area. Thus, although the presence of the potentially active Whitney fault beneath the Development Area represents some potential for surface fault rupture, there is only a remote possibility that this fault would exhibit surface displacement during the lifetime of the Project. Therefore, surface fault rupture does not represent a significant hazard for the Project.[13]

(c) Seismic Groundshaking

The Project site, including the Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, and the Off-Site Infrastructure Improvement Areas, like most of California, is located within Seismic Zone 4, the highest level hazard zone designated by the current Uniform Building Code (UBC). As such, the Project site may be subjected to future seismic shaking during earthquakes generated by any of several surrounding active faults. Significant historical earthquakes that have occurred near the Project site include:

- The Wrightwood Earthquake (magnitude 7.5) on the San Andreas fault in 1812;
- The Fort Tejon Earthquake (magnitude 7.9) on the San Andreas fault in 1857;
- The Sylmar Earthquake (magnitude 7.1), on the San Fernando fault in 1971; and
- The Northridge Earthquake (magnitude 6.7) on the Northridge thrust in 1994.

Maximum ground motion for the Development Area was calculated for a 10 percent earthquake occurrence (i.e., an earthquake with a 10 percent probability of exceedance in 50 years, or a return period of 475 years). Based on information from the United States Geological Survey (USGS), there is a 10 percent probability that peak ground acceleration

[12] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[13] *Ibid.*

(PGA) of 0.8 g (0.8 times the acceleration of gravity) would be exceeded in 50 years within the Development Area.[14,15]

Based on the above, the Project site could be subject to strong seismic groundshaking, typical of areas throughout southern California. The strongest groundshaking in the vicinity of the Project site is likely to result from an earthquake on the San Gabriel fault, located approximately 0.75 mile north of the Project site and capable of a maximum earthquake of approximately Magnitude 7.[16]

(d) Liquefaction

Liquefaction is a form of earthquake-induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils located below the groundwater table. Liquefaction can occur when these types of soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. A shallow groundwater table, the presence of loose to medium dense sand and silty sand, and a long duration and high acceleration of seismic shaking are factors that contribute to the potential for liquefaction. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures. Liquefaction typically results in horizontal and vertical movements from lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials.

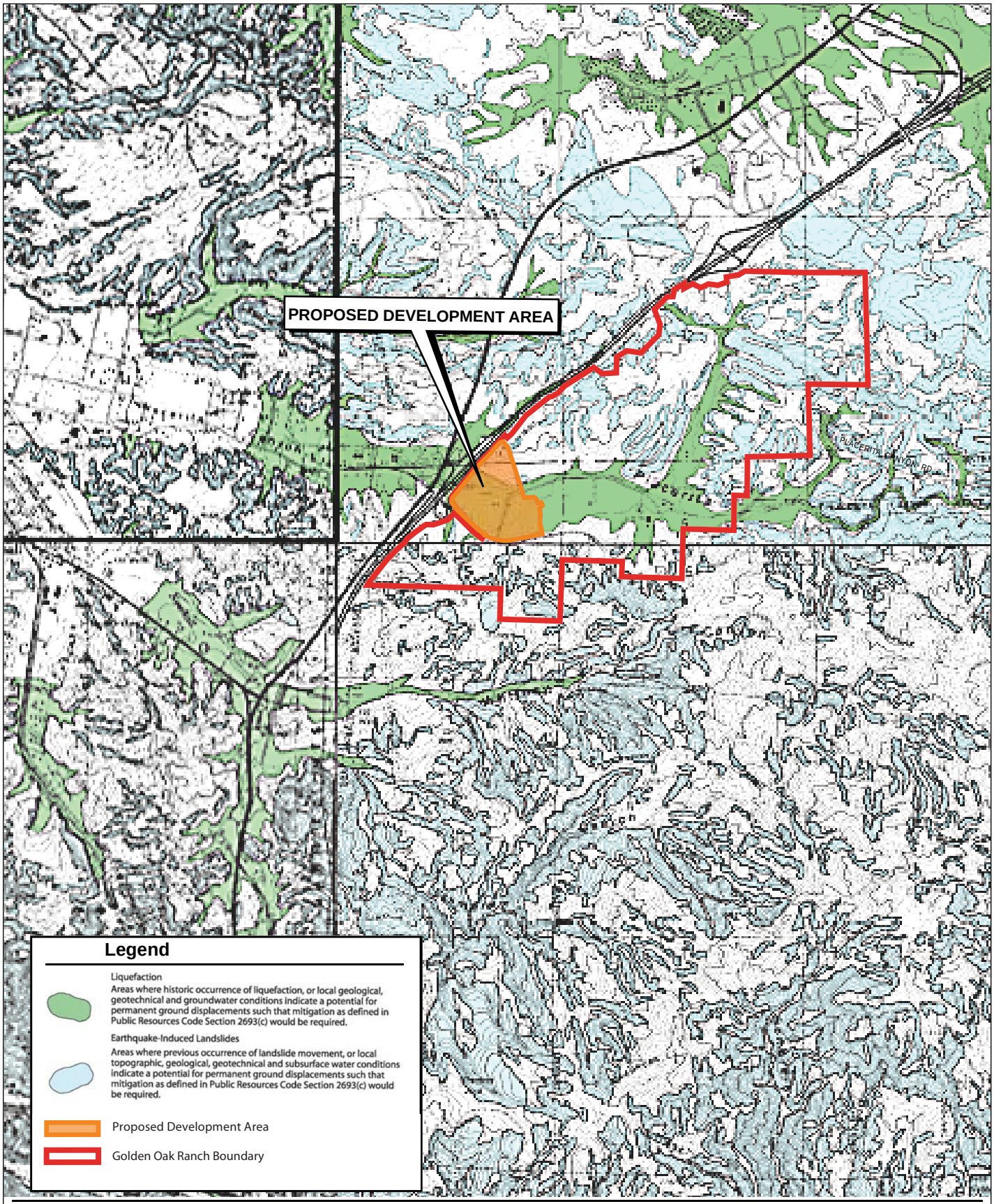
The Seismic Hazards Mapping Act requires the State Geologist to delineate seismic hazard zones in areas with the potential for strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events. Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of the area are investigated and appropriate mitigation measures, if needed, are incorporated into development plans. In accordance with the Seismic Hazards Mapping Act, the CGS has produced Seismic Hazards Zone Maps (SHZM). As illustrated in Figure V.A-2 on page V.A-9, the SHZM for the general area around the Project site shows that most of the Development Area including the two fill pads, the remainder of the Ranch floor, including the Conditional Parking Areas and the Potential Mobile Home Relocation Areas, and portions of the Off-Site Infrastructure Improvement Areas are within a potential liquefaction

---

[14] *This ground motion value has been calculated for a firm rock site. Much of the Development Area, however, is a soil site, which may amplify or de-amplify this value.*

[15] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[16] *Ibid.*



Disney | ABC Studios at The Ranch

matrix environmental

N

0 .5 1 Mile

Approximate Scale in Miles

Figure V.A-2
Seismic Hazard Zone Map

Source: US Geological Survey, 2010.

hazard zone.[17] Furthermore, CGS records indicate a shallow historic perched groundwater table, discussed further below, also indicating the potential for liquefaction impacts to occur.[18]

(e) Lateral Spreading

Lateral spreading is a failure within a nearly horizontal soil zone (possibly due to liquefaction) that causes the overlying soil mass to move toward a free face or down a gentle slope. Although no potential free-face conditions were identified in the Geotechnical Reports, the Development Area includes steep slopes within Placerita Creek, which may be underlain by liquefiable soils. However, the liquefiable soils were found to be discontinuous in both elevation and area across the Development Area. Thus, lateral spreading is not anticipated to pose a significant hazard to the Project.[19]

(f) Subsidence

The extraction of water or petroleum from sedimentary source rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The compaction of subsurface sediments by fluid withdrawal will cause subsidence of the overlying ground surface. If the volume of water or petroleum removed is substantial, the amount of resulting subsidence may be sufficient to damage nearby structures. Although oil production uses exist within the Ranch and surrounding area, significant quantities of water or petroleum are not presently being and have not historically been extracted beneath most of the Project site, including the Development Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, or the Off-Site Infrastructure Improvement Areas. A portion of the Water Tank Area overlaps with areas of substantial petroleum removal; however, due to the bedrock conditions and compliance with current State and federal regulations, the potential from subsidence hazards is considered low. Thus, subsidence is not anticipated to pose a significant hazard to the Project.[20]

---

[17] *Figure V.A-2 on page V.A-9 includes portions of the Mint Canyon Quadrangle, San Fernando Quadrangle, Oat Mountain Quadrangle, and Newhall Quadrangle in order to provide a complete view of the Development Area, the Ranch, the Off-Site Infrastructure Improvement Areas, and the surrounding area.*

[18] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[19] *Ibid.*

[20] *Ibid.*

(g) Landslides

With the exception of relatively steep slopes within the Water Tank Area, most of the Project site occupies relatively flat ground that would not be subject to landslides. Moderate natural slopes exist within the northern portion of the Development Area; man-made slopes include the SR-14 fill slope on the west side of the Development Area and fill pad slopes adjacent to Placerita Creek. There is no evidence of pre-existing slope instability in the existing slope areas. However, the SHZM indicates that other areas of the Ranch, including two small portions of the Development Area, shown in Figure V.A-2 on page V.A-9, and portions of the Water Tank Area, lie within areas designated as either prone to future earthquake-induced landslides or in an area of previous landslide occurrence.[21,22]

(h) Expansive Soils

Expansive soils are fine-grained soils that swell when subjected to moisture and shrink when dried. Expansive soils are typically associated with clayey soils. Depending on the soil characteristics and design of building construction, expansive soils can cause extensive damage to building foundations. The surficial soils observed within the on-site fill pads, the colluvial soils developed on the Saugus Formation, and the alluvial soils immediately adjacent to Placerita Creek appear to primarily consist of coarse-grained soils that would not be susceptible to expansion. However, some clayey soils exist on the floodplain south of Placerita Creek.[23]

(i) Differential Seismic Settlement

During a seismic event, differential seismic settlement or compaction of dry or moist, cohesionless soils can occur. Differential seismic settlement is most likely to occur in areas that transition between rock formations and more recently deposited alluvial soils or human-placed artificial fill. Such settlements are typically most damaging when settlements of a different nature cross the length of structures. As the Project site is underlain by a variety of deposits, including sedimentary bedrock, alluvium and artificial

---

[21] *Ibid.*

[22] *U.S. Geological Survey, Seismic Hazard Zone Map (see Figure V.A-2 on page V.A-9).*

[23] *Ibid.*

fill, strong groundshaking during a seismic event could cause differential seismic settlement of any loose cohesionless soils within the Project site.[24]

(j) Seismically Induced Flooding, Seiche and Tsunami

Tsunamis are large ocean waves generated by sudden water displacement due to a submarine earthquake, landslide or volcanic eruption. The Project site is located approximately 23.6 miles from the Pacific Ocean and is not mapped as a tsunami inundation area.[25] As such, the Project site would not be affected by a tsunami.

Other forms of inundation include structural failures of dams due to factors including earthquakes, which can result in the flooding of areas located downstream. Seiches are wave oscillations generated in enclosed bodies of water which can be caused by groundshaking during an earthquake and can also result in inundation. There are no dams, levees, or large bodies of water located upstream of the Project site.[26] Therefore, seismically-induced flooding and inundation by a seiche are not considered significant hazards in the Project site.

The Federal Emergency Management Agency (FEMA) flood insurance rate map (FIRM) shows Placerita Creek and the eastern portion of the Development Area, portions of the Conditional Parking Areas, and portions of the Off-Site Infrastructure Improvement Areas are located within Zone A, defined as special flood hazard areas (SFHAs) subject to inundation by a one percent annual chance flood. Refer to Section V.B, Flood Hazards, of this Draft EIR for a detailed discussion of flooding.

(k) Soil Conditions

Surficial deposits within the Project site consist of artificial fill, unconsolidated Holocene alluvium, and weakly lithified, Pliocene-Pleistocene bedrock of the Saugus Formation.[27] Within the Development Area, exploratory borings and subsequent laboratory

---

[24] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[25] *State of California Department of Conservation, Los Angeles County Tsunami Inundation Maps, www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/LosAngeles/Pages/LosAngeles.aspx, accessed February 22, 2010.*

[26] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[27] *Lithification is a process by which unconsolidated sediments are converted into solid stone or rock (also called induration).*

testing were conducted as part of the Preliminary Geotechnical Investigation to obtain subsurface data, the results of which are mapped therein (see Figure 2 in Appendix B.1). As previously indicated, artificial fill comprises the two fill pads adjacent to SR-14 (i.e., the northern and southern fill pads). The thickness of the artificial fill varies from approximately 34 feet to greater than 61.5 feet in the northern fill pad, and approximately 21 feet to greater than 53 feet in the southern fill pad. Native alluvium was encountered underlying the artificial fill soils or was exposed at the surface in all borings that extended below the artificial fill. Bedrock was exposed along the base of the northern fill pad adjacent to Placerita Creek, but was not observed at the base of the southern fill pad adjacent to the creek.[28]

Holocene alluvium is exposed at the surface in the eastern portion of the Development Area. Alluvium is present overlying the Saugus Formation in the southeast portion of the Development Area. Saugus Formation bedrock is exposed in the northern corner of the Development Area, along the southern boundary of the Development Area, as well as south of Placerita Canyon Road outside of the Development Area. Saugus Formation bedrock was encountered below the alluvium in several borings located relatively close to the Saugus formation outcrops mapped in the Development Area.[29]

(l) Groundwater

Groundwater that is likely perched above the relatively impervious Saugus Formation was encountered within the alluvial soils in some of the borings drilled within the Development Area. Specifically, groundwater was encountered at depths of approximately 61 feet to 79 feet below the southern fill pad, approximately 71.5 feet below the northern fill pad, and approximately 11.5 feet to 16 feet below ground surface (bgs) in the eastern low lying areas of the Development Area. Based on this data, the average groundwater depth below the fill pads is approximately 68.5 feet below the fill pad surface. Deeper aquifers may exist below the Development Area. However, according to the CGS, the historic high groundwater in the alluvial valley portion of the Development Area, the Conditional Parking Areas, and the Potential Mobile Home Relocation Areas was reported to be approximately 5 to 10 feet bgs. The portions of the Project site located in higher bedrock areas (e.g., the Water Tank Area) experience groundwater depths of deeper than 50 feet bgs. The Off-Site Infrastructure Improvement Areas located west of the Development Area within Placerita Creek are located in a zone where the historic high groundwater deepens to the west from

---

[28] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[29] *Ibid.*

10 to greater than 60 feet bgs. As the State and County rely on the CGS published historic high water level for the evaluation of liquefaction potential, a perched alluvial groundwater level at the creek bottom elevation or 10 feet below the adjacent creek banks has been used for design purposes for the Development Area.[30]

b. Regulatory Framework

(1) State of California

(a) Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy.[31] The Alquist-Priolo Earthquake Fault Zoning Act was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged homes, commercial buildings, and other structures. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings intended for human occupancy on the surface traces of active faults. The Alquist-Priolo Earthquake Fault Zoning Act is intended to provide citizens with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking. The Alquist-Priolo Earthquake Fault Zoning 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 to assist cities and counties in planning, zoning, and building regulation functions. Maps are distributed to all affected cities and counties for the controlling of new or renewed construction and are required to sufficiently define potential surface rupture or fault creep. The State Geologist is charged with continually reviewing new geologic and seismic data, revising existing zones, and delineating additional earthquake fault zones when warranted by new information. Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than State law requires. According to the Alquist-Priolo Earthquake Fault Zoning Act, before a project can be permitted, cities and counties must require a geologic investigation, prepared by a licensed geologist, to demonstrate that buildings will not be constructed across active faults. 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. Although setback distances may vary, a minimum 50-foot setback is required. The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are

---

[30] *Ibid.*

[31] *The Act was originally entitled the Alquist-Priolo Geologic Hazards Zone Act.*

presented in California Department of Conservation, CGS, Special Publications (SP) 42, *Fault-Rupture Hazard Zones in California*.

(b) Seismic Hazards Mapping Act

In order to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State of California passed the Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of a project site are investigated and appropriate mitigation measures, if any, are incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under Public Resources Code Section 2697, cities and counties must require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. Each city or county must submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval.

State publications supporting the requirements of the Seismic Hazards Mapping Act include the CGS SP 117, *Guidelines for Evaluating and Mitigating Seismic Hazards in California* and CGS SP 118, *Recommended Criteria for Delineating Seismic Hazard Zones in California*. The objectives of SP 117 are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. SP 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the State.

(c) California Building Code

The California Building Code (CBC) [California Code of Regulations (CCR), Title 24] is a compilation of building standards, including seismic safety standards for new buildings. CBC standards are based on building standards that have been adopted by state agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature but not covered by the national model code. Given the State's susceptibility to seismic events, the seismic standards within the CBC are among the strictest in the world, augmenting and superseding the UBC with stricter requirements to reduce the risks associated with buildings in Seismic Zone 4 to the

maximum extent practical. The CBC applies to all occupancies in California, except where stricter standards have been adopted by local agencies. The State recently adopted the 2010 CBC, which became effective on January 1, 2011. Specific CBC building and seismic safety regulations have been incorporated by reference in the Los Angeles County Building Code and the City of Santa Clarita Building Code, with local amendments, and are discussed below.

(2) County of Los Angeles

(a) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to geotechnical hazards. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to geotechnical hazards.

(b) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to geotechnical hazards. As discussed in the policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to geotechnical hazards.

(c) Los Angeles County Building Code

The County of Los Angeles adopted the 2007 California Building Code on January 1, 2008, as the Los Angeles County Building Code, Volumes 1 and 2. Effective January 1, 2011, the County will now require compliance with the 2010 California Building Code, Volumes 1 and 2. Together, the provisions in Volumes 1 and 2 of the Los Angeles County Building Code address issues related to site grading, cut and fill slope design, soil expansion, geotechnical investigations before and during construction, slope stability, allowable bearing pressures and settlement below footings, effects of adjacent slopes on foundations, retaining walls, basement walls, shoring of adjacent properties, potential primary and secondary seismic effects. The County Department of Public Works Building and Safety Division is responsible for implementing the provisions of the Building Code.

(3) City of Santa Clarita Building Code

On November 23, 2010, the City of Santa Clarita adopted as the City of Santa Clarita Building Code the California Code of Regulations, Title 24, Parts 1, 2, 2.5, 7, 8, and 10, which include the 2010 California Building Code, with amendments to address local climatic, geologic, and topographic conditions. New building permit applications received by the City on or after January 1, 2011, are subject to the updated City of Santa Clarita

Building Code, which regulates the erection, construction, alteration, repair, relocation, demolition, occupancy, use, height, area, and maintenance of all buildings and structures, and certain equipment therein.

3. ENVIRONMENTAL IMPACTS

a. Methodology

To evaluate potential hazards relative to geology and soils, Preliminary Geotechnical Investigations were prepared by URS Corporation and are provided in Appendices B.1 and B.2. The Geotechnical Reports included field investigation, including subsurface exploration, and laboratory testing to determine the characteristics of the subsurface conditions at the Development Area. In addition, relevant literature and materials were reviewed as part of the Geotechnical Reports.

b. Significance Thresholds

The potential for the Project to result in impacts associated with geotechnical hazards is based on the CEQA significance thresholds specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold A-1: Would the project expose people or structures to 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 active fault trace? Refer to Division of Mines and Geology Special Publication 42.
- Strong seismic ground shaking?
- Seismic-related ground failure, including liquefaction and lateral spreading?
- Landslides?

Threshold A-2: Would the project result in substantial soil erosion or the loss of topsoil?

Threshold A-3: 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?

Threshold A-4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Threshold A-5: Would the project have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?

Threshold A-6: Would the project conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element?

Threshold A-7: Would the project entail substantial grading and/or alteration of topography including slopes of over 25 percent?

c. Project Design Elements

To accommodate the Project, the entire Development Area would be cleared and mass graded at one time. A maximum of 10 acres would be graded on any given day. As shown in the conceptual grading plan and site cross-section drawings provided in Figure V.A-3 and Figure V.A-4 on pages V.A-19 and V.A-20, portions of the fill pads would be excavated and then brought up to design pad elevations. Specifically, the northern fill pad has an existing average elevation of 1,478 feet above MSL and would have an average design pad elevation of 1,448 feet above MSL; the southern fill pad has an existing average elevation of 1,458 feet above MSL and would have an average design pad elevation of 1,446 feet above MSL. At the same time, the area to the east of the southern fill pad would be raised by as much as 29 feet with engineered fill to achieve the desired building pad elevations. The hillside in the far northern portion of the Development Area would be graded and lowered from the existing average elevation of 1,561 feet above MSL to create a pad for the proposed substation at an average elevation of 1,540 feet above MSL. As also shown in the conceptual grading plan provided in Figure V.A-3, the maximum excavation depths would be 40 feet and maximum fill depths would be 29 feet. It is anticipated that many of the proposed structures would be supported on pile foundations in order to achieve adequate bearing support for the relatively heavy column loads, as well as to provide adequate mitigation for potential seismic-settlement hazards due to liquefaction (discussed in further detail below). Conceptual grading plans for the Water Tank Area, the Conditional Parking Areas, and the Trail Area are provided in Figure V.A-5 on page V.A-21, Figure V.A-6 on page V.A-22, and Figure V.A-7 on page V.A-23, respectively.

EARTHWORK/GRADING

RAW QUANTITIES

CUT: 700,000 CY
FILL: 350,000 CY
EXPORT: 350,000 CY

NORTH PAD AVERAGE GRADES
EXISTING: 1478
PROPOSED: 1448

SOUTH PAD AVERAGE GRADES
EXISTING: 1458
PROPOSED: 1446

SUBSTATION AREA AVERAGE GRADES
EXISTING: 1561
PROPOSED: 1540

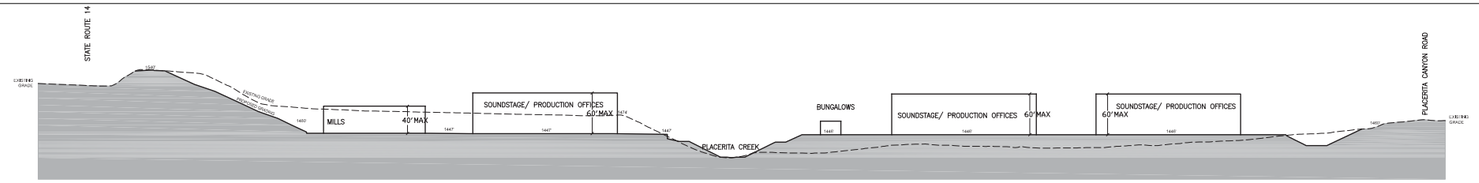
DEEPEST CUT/FILL
CUT: 40 FEET
FILL: 29 FEET

SCALE: NTS

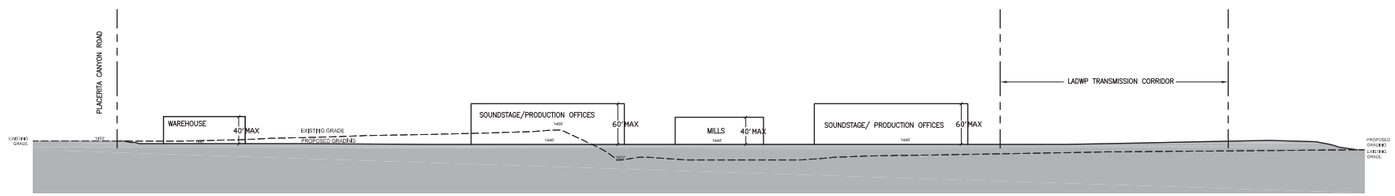
Source: David Evans & Associates, Inc., 2012.

matrix environmental

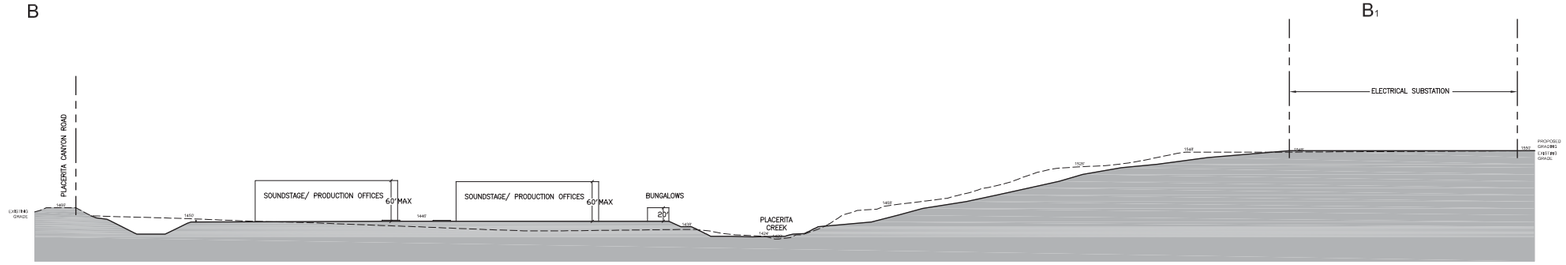
Figure V.A-3
Project Grading Plan



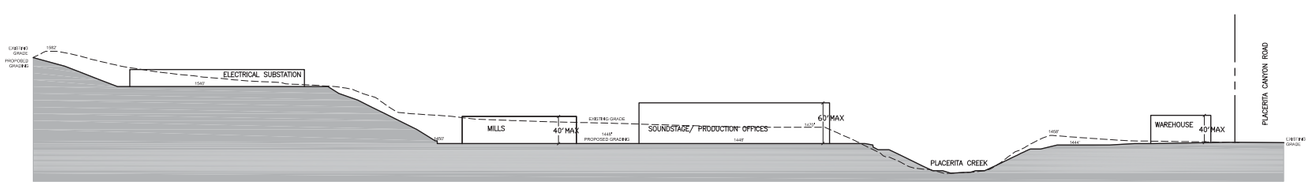
A A1



B B1

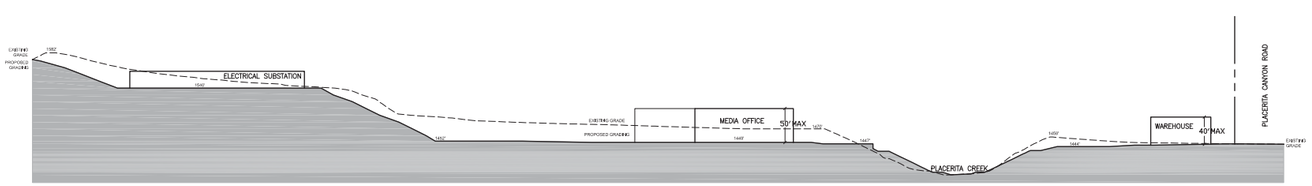


C C1



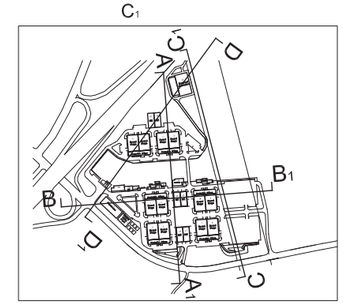
D D1

SITE PLAN ELEVATION/ SECTION

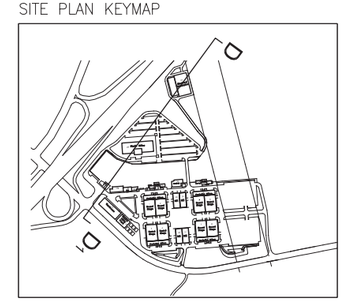


D D1

OPTION BUILD OUT ELEVATION/ SECTION



SITE PLAN KEYMAP



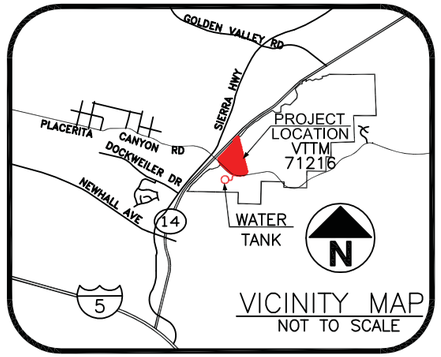
SITE PLAN – OPTION BUILD OUT KEYMAP

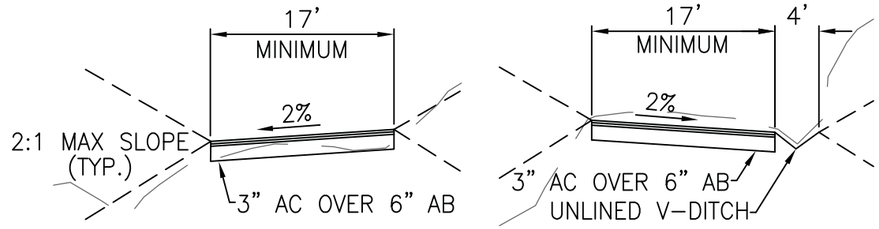
SCALE 1" = 80'
0 40 80 160

Source: Johnson Fain 2012.

matrix environmental

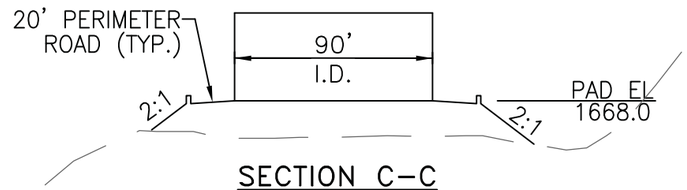
Figure V.A-4
Grading Profiles



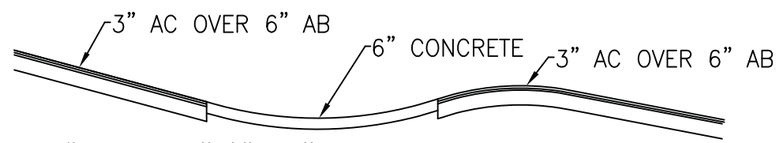


SECTION A–A
NTS

SECTION B–B
NTS



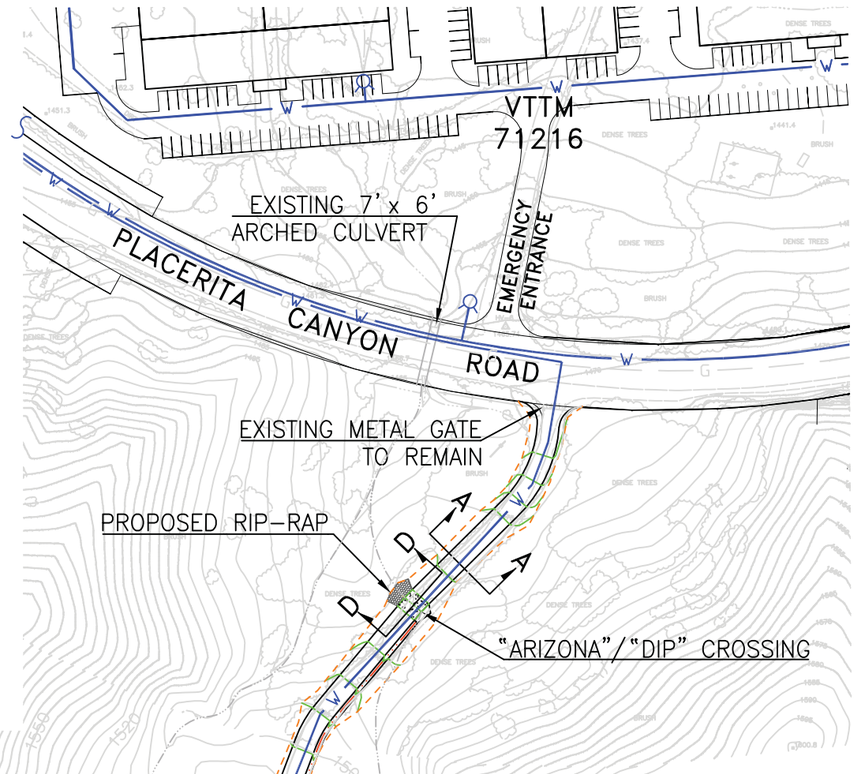
SECTION C–C
NTS

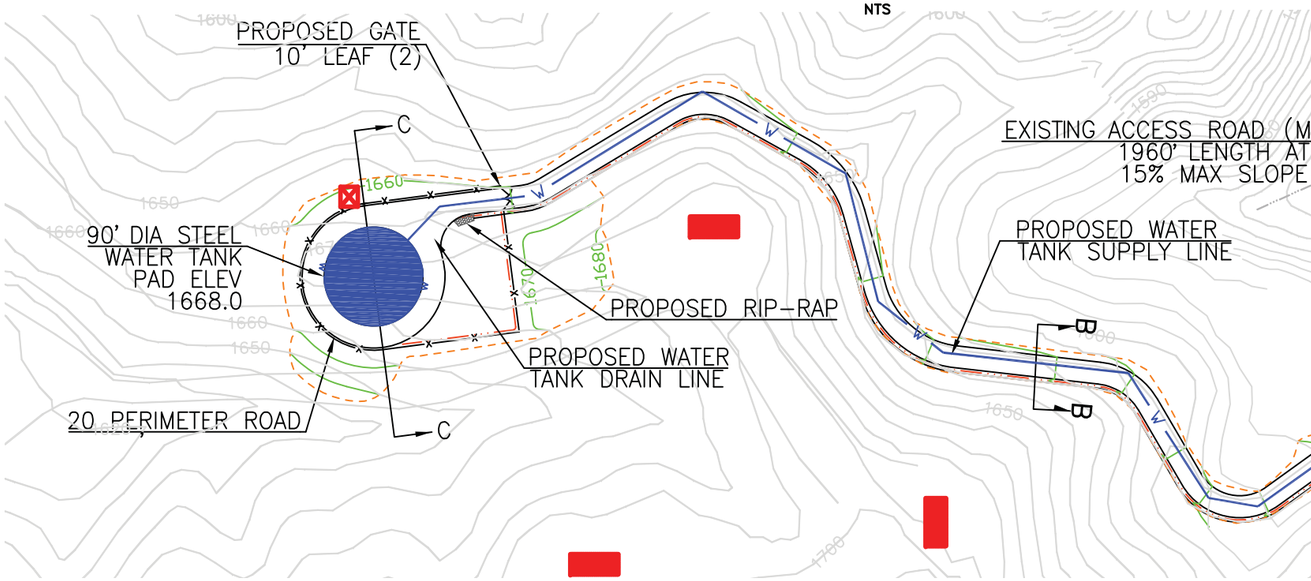


"ARIZONA"/"DIP" CROSSING WITH CUT-OFF WALLS ON EITHER SIDE
SECTION D–D
NTS

LEGEND

- PROPOSED WATER LINE
- PROPOSED CONTOUR
- PROPOSED DRAINAGE FLOWLINE
- PROPOSED CHAIN LINK FENCE
- GRADING LIMIT
- OPERATIONAL OIL WELL
- NON-OPERATIONAL OIL WELL





EARTHWORK QUANTITIES

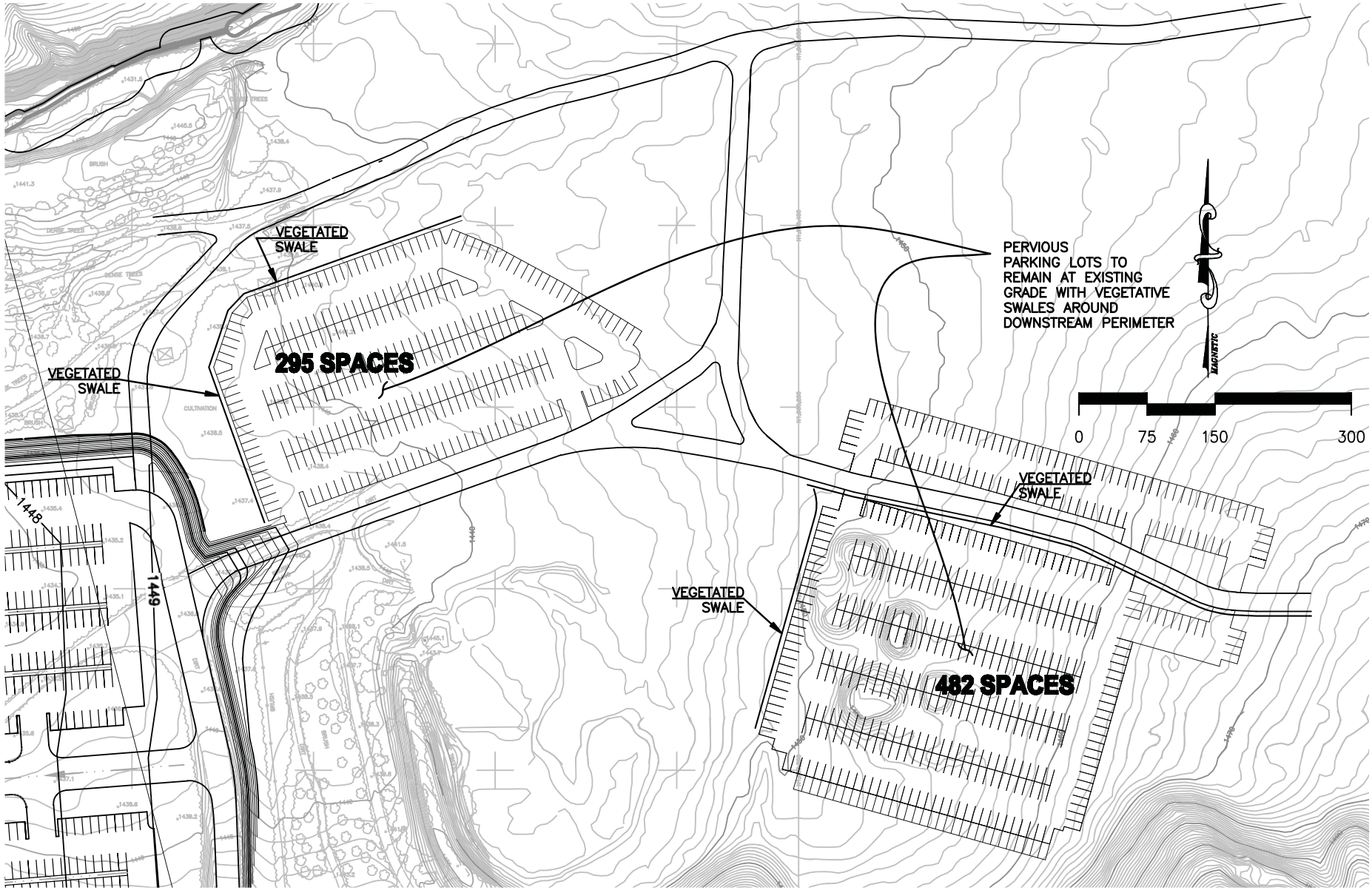
4050 CY RAW CUT
7560 CY RAW FILL

Source: David Evans & Associates, Inc., 2011

matrix environmental

North

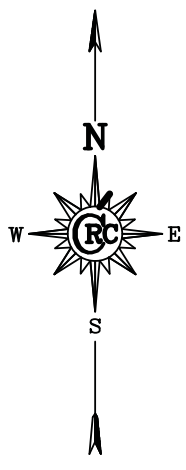
Figure V.A-5
Water Tank Grading Plan



Source: David Evans & Associates Inc. 2012.

matrix environmental

Figure V.A-6
Conditional Parking Areas Grading Plan



SCALE: 1"=300'

LEGEND:

- PROPERTY LINE
- DESIGNATED STREAM FLOWLINE
- PROPOSED RETAINING WALL (UP TO 3' IN HEIGHT)
- PLACERITA CANYON CONNECTOR TRAIL, 5% GRADE OR LESS
- PLACERITA CANYON CONNECTOR TRAIL, UP TO 10% GRADE
- PLACERITA CANYON CONNECTOR TRAIL, UP TO 20% GRADE
- PLACERITA CANYON CONNECTOR TRAIL, UP TO 30% GRADE
- PROPOSED UNIMPROVED TRAIL

Source: CRC Enterprises, 2011

matrix environmental

Figure V.A-7
Proposed Placerita Canyon Connector Trail

The Project is anticipated to involve approximately 700,000 cubic yards of cut and 350,000 cubic yards of fill within the Ranch, with approximately 350,000 cubic yards of soil export.[32] Based on rough grading estimates, the northern portion of the Development Area would require approximately 443,000 cubic yards of cut and 5,000 cubic yards of fill; the southern portion would require approximately 252,000 cubic yards of cut and approximately 336,000 cubic yards of fill, including fill to be placed east of the southern fill pad. An estimated 4,050 cubic yards of cut and 7,560 cubic yards of fill would be needed to create the development pad for the water tank and to smooth and pave the existing unpaved maintenance road to the tank so as to provide all-weather access for Newhall County Water District (NCWD). Construction of the proposed trail would involve approximately 700 cubic yards of cut which would be used elsewhere within the Ranch and would not require export. Earthwork necessary for the Conditional Parking Areas, if constructed, would involve limited surface grading, with less than 1,000 cubic yards of cut and less than 1,000 cubic yards of fill; the use of excess soil from the Development Area would be used as fill, as necessary and if possible based on timing. Limited fine grading would also be necessary at the selected of the two Potential Mobile Home Relocation Areas for the Ranch foreman's mobile home and the associated new septic system.

With respect to the Off-Site Infrastructure Improvement Areas, trenching would be necessary for the proposed water and sewer lines. Water trenches would be approximately 4 feet wide and 6 feet deep; sewer trenches would be approximately 4 feet wide with varying depths of up to 12 to 14 feet. Most soil from the trench excavations would be used as backfill. These improvements would involve an estimated 15,000 to 20,000 cubic yards of cut, approximately 10,000 to 12,000 cubic yards of fill, and as much as 5,000 to 8,000 cubic yards of export.

The Project would also include traffic infrastructure improvements as part of the Project Design Features and Mitigation Measures within the Caltrans right-of-way around the SR-14/Placerita Canyon Road on-ramps and off-ramps, the Sierra Highway/SR-14 southbound ramps, Sierra Highway/Placerita Canyon Road, and the current Ranch main entrance/Placerita Canyon Road. These improvements would involve cutting into an existing engineered slope adjacent to the SR-14 northbound off-ramp, requiring an estimated 11,500 to 14,000 cubic yards of cut, approximately 1,500 to 2,000 cubic yards of fill, and as much as 10,000 to 12,000 cubic yards of export.

In addition, the SCE power pole replacements would require minimal excavation to remove existing poles and install new poles. There would be limited grading of soil,

[32] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated herein.*

estimated at approximately 7 cubic yards per pole for steel poles and 2 cubic yards for wood poles, some of which could be used to backfill the excavated holes, for a total of up to 63 cubic yards of export. Following installation, existing conditions would be restored, resulting in a negligible change in finished grades.

All earthwork activities associated with the grading and export of soil would occur in accordance with County requirements, as specified in the Los Angeles County Building Code, or City/Caltrans requirements, as appropriate, and through the grading plan review and approval process. Construction of the Project may occur in phases, with completion as early as 2015 or as late as 2020.

During the Project's construction phase, a 20-foot-wide temporary access road across Placerita Creek would be constructed, as illustrated in Figure IV-13 in Section IV, Project Description. The temporary access road and associated creek crossing would be removed and ultimately replaced with a permanent bridge, and the creek would be restored after the completion of construction. To provide for stable slopes and to address existing erosion of the slopes, the banks of Placerita Creek within the Development Area would be graded, stabilized with slope armor, and replanted with native plant species. This slope stabilization would occur from the base of the creek to the top of the slopes along the entire portion of the creek within the Development Area (i.e., between the culvert under SR-14 and the eastern boundary of the Development Area). Additionally, a 15-foot wide slope stabilization access road paved with soil cement and designed for County use for maintenance purposes would be introduced at the top of the slopes of the creek to provide access to the proposed storm drain outlet structures and slope armor.

The Project includes both on- and off-site improvements that include construction of new utility infrastructure (e.g., sanitary sewer and water lines, a new 2,000,000-gallon water tank, and a booster pump station). The steel water tank would measure 90 feet in diameter and 40 feet in height. The access road to the tank would be 17 feet wide and 1,960 feet long, with gated access at Placerita Canyon Road. The off-site utilities infrastructure improvements are expected to start in 2013 and would last approximately 9 to 12 months. These improvements may occur concurrently with on-site improvements.

The following Project Design Features (PDFs) would ensure compliance with County requirements:

- During construction and operation of the Project, appropriate erosion control and drainage devices would be implemented as specified in the Project's Stormwater Pollution Prevention Plan and Standard Urban Stormwater Mitigation Plan.

- Excavation and grading activities would be scheduled during dry weather periods to the extent feasible. If grading occurs during the rainy season (October 15 through April 1), diversion dikes and channels would be constructed to channel runoff around the site. Channels would be lined with grass, jute mesh or berms to reduce runoff velocity.

- Stockpiled soil would be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.

The Project would comply with the construction and design recommendations provided within a final Geotechnical Investigation Report to be prepared for the Project, as required by Mitigation Measures (MM) A-1 and A-2. Based on the Preliminary Geotechnical Investigation Reports (Appendices B.1 and B.2 of this Draft EIR), engineering recommendations to be implemented would include, but would not be limited to, the following:

- Removal and disposal of all unsuitable materials such as debris, deleterious materials, loose native soils, and partial removal of existing fill soils;

- Overexcavation of up to 5 feet in non-bedrock areas, which includes overexcavation of native (alluvium and colluvium) and artificial fill soils up to 5 feet below existing or proposed grades (whichever is deeper), and replacement with engineered fill within the Development Area;

- Overexcavation to a depth of at least 3 feet below the bottom of proposed footings and recompaction as engineered fill to limit differential settlement across any transition between cut and fill;

- Proof-rolling of the exposed subgrade to locate any loose or soft zones and additional overexcavation where loose zones greater than 12 inches in depth are encountered;

- Compliance with the current California and Federal Occupational Safety and Health Act (OSHA) requirements, as applicable, for all excavations;

- Appropriate precautions (e.g., perimeter berms) to prevent stockpiled materials and surface water runoff from entering temporary excavations;

- Construction of all fill slopes in accordance with the geotechnical recommendations to include keyways at least 15 feet in width and excavated to a minimum depth of 5 feet below the proposed fill slope toe elevation. Each keyway should include a subdrain with an outfall location approved by the project civil engineer;

- Compaction of all fills used to support structural loads to at least 95 percent of the maximum dry density per ASTM D1557;
- Planning of all permanent cut and fill slopes to a gradient no steeper than 2:1 (horizontal to vertical);
- Use of pile foundations with estimated pile lengths between 20 and 80 feet below proposed pad grades. Pile length will depend on the specific building locations and foundation loading constraints;
- Use of shallow spread or continuous footings founded into engineered fill overlying bedrock or bedrock may be used for support of structures;
- Use of shallow spread or continuous footings founded into engineered fill overlying undocumented fill or alluvial deposits may be used for support of lightly loaded, non-settlement sensitive structures;
- Underlaying of all exterior concrete flatwork not subject to vehicular traffic with a minimum of 12 inches of non-expansive, granular soils, a minimum of 4 inches thick, and reinforced with welded wire mesh to reduce the potential for cracking (additional requirements would be met for vehicular circulation areas and specifically for truck/fire truck access areas);
- Installation of all pavement adjacent to buildings so as to slope pavement away in all directions, preventing ponding of water adjacent to the buildings;
- Use of retaining walls ranging in height from 2 to 18 feet, located throughout the northern fill pad area, along portions of Placerita Creek, and adjacent to SR-14 and Placerita Canyon Road; and
- Monitoring of all earthwork and foundation construction by a qualified geologist/engineer/technician under the supervision of an engineering geologist and geotechnical engineer.[33]

d. Impact Analysis

Threshold A-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

[33] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010; and Preliminary Geotechnical Investigation, Vesting Tentative Tract Map No. 71216, URS Corporation, February 28, 2011.*

- 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 active fault trace? Refer to Division of Mines and Geology Special Publication 42.
- Strong seismic ground shaking?
- Seismic-related ground failure, including liquefaction and lateral spreading?
- Landslides?

Threshold A-3: 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?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Surface Fault Rupture

As discussed above, the CGS does not delineate any part of the Project site as being within an Earthquake Fault Zone. The Whitney fault, which crosses through the Development Area, and the San Gabriel fault, which is located approximately 0.75 mile north of the Project site, are regarded as potentially active faults. Based on the Geotechnical Reports prepared for the Project, no lineaments suggestive of surficial faulting were identified as passing through the Development Area or the remainder of the Project site. The presence of the Whitney fault represents some potential for surface fault rupture, which could result in a potentially significant impact. There is a remote possibility this fault would exhibit surface displacement during the lifetime of the Project. However, with implementation of MM A-1 through MM A-3, below, which would ensure a geotechnical investigation is performed and approved by LACDPW such that the Project is designed and constructed to comply with all relevant CBC and County Building Code requirements, potential impacts regarding fault rupture would be reduced to a less than significant level.

(b) Seismic Groundshaking

As previously indicated, the Project site could be subject to strong seismic groundshaking typical of areas within southern California due to seismic activity along local, regional, and more distant active faults. The degree of shaking that is felt at a given site depends on the distance from the earthquake epicenter and the type of subsurface

material on which the site is situated. Based on the Geotechnical Reports prepared for the Project, the strongest groundshaking in the Project site would likely result from an earthquake on the nearby San Gabriel fault.[34] As discussed above, the Geotechnical Reports calculated the maximum ground motion for the Development Area for a 10 percent earthquake occurrence and determined that there is a 10 percent probability that PGA of 0.8 g would be exceeded in 50 years in the Development Area.[35] Thus, impacts associated with seismic groundshaking could be potentially significant. However, strong groundshaking is common to southern California, and potential damage caused by seismic shaking is typically reduced through proper structural design and construction techniques that are required as part of compliance with State and local seismic regulations.

As with any new development in the State of California, building design and construction for the Project would be required to conform to the current seismic design provisions of the CBC. The CBC incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program (NEHRP), to mitigate losses from an earthquake and provide for the latest in earthquake safety.[36] These standards are among the strictest standards in the world. Implementation of MM A-1 through MM A-3, below, would ensure construction of the Project would adhere to the seismic safety requirements contained in the Los Angeles County Building Code through the preparation of a design-level geotechnical investigation and implementation of the specific recommendations of the geotechnical investigation. Therefore, the Project would not cause or accelerate geologic hazards, which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury impacts from strong seismic groundshaking. Thus, with implementation of MM A-1 through MM A-3 below, potential impacts associated with seismic groundshaking would be reduced to less than significant levels.

(c) Liquefaction

As discussed above, much of the Project site falls within a potential liquefaction hazard zone. Furthermore, historic high groundwater in the alluvial valley portions of the Project site was reported to range from approximately 5 to 60 feet bgs. Thus, the potential exists for liquefaction to occur in the valley portions of the Project site, and impacts could be potentially significant. However, as discussed above, the majority of the proposed

---

[34] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

[35] *Ibid.*

[36] *IHS website, "New Construction Codes Coming to California," http://aec.ihs.com/news/newsletters/2007/august/california-construction-codes.htm;accessed July 2, 2010.*

structures would be supported on pile foundations or reinforced with seismic-tolerant connections in order to reduce impacts for potential seismic-settlement hazards due to liquefaction. Design features, such as soil improvement through overexcavation and recompaction of susceptible soils, would be implemented as part of the Project. Further, in accordance with the Seismic Hazards Mapping Act, a liquefaction investigation would be conducted prior to issuance of a building permit for those portions of the Development Area that are in a liquefaction hazard zone, with appropriate mitigation measures implemented as necessary. As such, mitigation is proposed to ensure compliance with CBC and the Los Angeles County Building Code requirements, as demonstrated through a design-level geotechnical investigation, and implementation of the recommendations set forth in the geotechnical investigation, to ensure impacts associated with liquefaction would be reduced to a less than significant level.

(d) Landslides

With the exception of relatively steep slopes within the Water Tank Area, the natural slopes within much of the area proposed for new development within the Project site are relatively flat, and no evidence of pre-existing slope instability was encountered. Furthermore, the SHZM indicates the Project site does not lie within an area designated as prone to future earthquake-induced landslides or in an area of previous landslide occurrence.[37] Project grading to construct slopes adjacent to SR-14 and Placerita Canyon Road associated with lowering of the northern and southern fill pad areas would be completed in accordance with regulatory requirements, including the CBC. In accordance with MM A-1, below, as part of these regulatory requirements, a design-level geotechnical investigation would be prepared. The final geotechnical investigation would set forth appropriate slope gradients, retaining wall design parameters, and other design measures, such as soil improvement or surficial stabilization that would be implemented as part of MM A-2, below. Thus, implementation of the proposed mitigation measures would ensure potential impacts associated with landslides would be less than significant.

(e) Lateral Spreading

As discussed above, the Development Area has significant slopes associated with the fill pads and Placerita Creek which may be underlain by liquefiable soils and, as such, the potential for lateral spreading exists, resulting in a potentially significant impact. As specified in the Geotechnical Reports and in accordance with MM A-1, a design-level geotechnical investigation would be prepared to ensure the Project complies with CBC and

---

[37] *Preliminary Geotechnical Investigation, Disney | ABC Studios at The Ranch, URS Corporation, March 22, 2010.*

Los Angeles Building Code requirements. In addition, MM A-2, below, requires the recommendations set forth in the final geotechnical investigation report be implemented. Recommendations to address lateral spreading would include features such as pile foundations. Thus, with implementation of MM A-1 through MM A-3, potential impacts associated with lateral spreading would be reduced to a less than significant level.

(f) Subsidence

As discussed above, significant quantities of water or petroleum are not being and have not been historically extracted beneath the Development Area and the remainder of the Ranch, although oil production uses do exist within the Ranch and the surrounding area. Current regulations prevent extraction that causes detrimental effects to overlying areas. In addition, visual inspections are routinely performed by the third party that owns the mineral rights and has surface right of access within the southwest corner of the Ranch. With compliance with all regulatory requirements and implementation of the Project design features and recommendations set forth in the Geotechnical Reports, subsidence is not anticipated to pose a significant hazard to the Project, and impacts due to subsidence would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

Off-site impacts with respect to surface fault rupture, seismic groundshaking, liquefaction, landslides, lateral spreading, and subsidence would be generally the same as the on-site impacts discussed above. With compliance with regulatory standards, impacts would be less than significant.

Threshold A-2: Would the project result in substantial soil erosion or the loss of topsoil?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

Potentially significant impacts related to sedimentation and erosion could occur as a result of exposed soils during Project construction. However, construction activities would occur in accordance with erosion control requirements, including grading and dust control measures, imposed by the County pursuant to grading permit regulations. As discussed in detail in Section V.D, Water Quality, of this Draft EIR, the Project would be required to have a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the National Pollutant Discharge Elimination System (NPDES) permit requirements. As part of the SWPPP, Best Management Practices (BMPs) would be implemented during construction to reduce

sedimentation and erosion levels to the maximum extent possible. The following types of BMPs would be implemented during construction:

- Erosion Control: Measures would be employed to prevent the movement of soil by wind or water during construction, including potentially watering and implementing physical barriers to the movement of soil particles.

- Tracking of Soil: Measures would be employed to effectively minimize the tracking of soil by vehicles, including potentially implementing gravel driveways, wheel washes, and street sweeping.

- Wastes and Cleanup: The SWPPP would address washout, cleanup and disposal related to debris, trash, concrete, asphalt, paint, coatings, solvents, and other materials applicable to preparation and construction at the Project site.

- Other Reasonable BMPs: The SWPPP would implement other BMPs as needed to keep pollutants away from stormwater. The SWPPP would identify additional applicable measures to be implemented during the storm season and anticipated storms.

The County of Los Angeles, as part of normal project approval and construction practice, monitors compliance with these requirements. Therefore, construction-related impacts associated with sedimentation and erosion would be less than significant.

(b) Operation

During operations, the Project could result in a limited degree of soil erosion from vegetated areas. However, in accordance with NPDES permit requirements, the Project would be required to have a Standard Urban Stormwater Mitigation Plan (SUSMP) in place during the operational life of the Project. The SUSMP would include BMPs, developed, in part, based on the County's Low Impact Development (LID) Standards Manual, which would reduce on-site erosion from vegetated areas in the Development Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, Trail Area, and Water Tank Area. As such, on-site operational impacts associated with sedimentation and erosion would be less than significant.

In addition to compliance with these regulatory standards, County regulations require all projects to fully mitigate off-site drainage impacts caused by hydromodification and associated changes to water quality, flow velocity, flow volume, and depth/width of flow, or else obtain drainage acceptance letters from impacted downstream property owners. The Project's potential hydromodification impacts to Placerita Creek were evaluated. As part of this study, sediment transport analyses were conducted under pre- and post-Project conditions for various storm events to determine the long-term impacts to

the streambed. The Drainage Concept/SUSMP/LID Plan (Drainage Concept), provided as Appendix C of this Draft EIR, includes the Sediment Transport Analyses for Placerita Creek (Sediment Transport Analyses) prepared by JLC Engineering & Consulting in August 2011.

The study results indicate that for all six storm events evaluated, the streambed would experience downstream sedimentation increases of a maximum of 0.1 to 0.2 foot during post-Project conditions. Such increases in streambed elevation would not impact the creek's capacity, as all runoff would be contained within the natural channel. Thus, the sediment load transported downstream of the SR-14 culvert that abuts the Development Area is considered negligible and would not adversely impact downstream properties. Accordingly, Project operations would not have a significant impact with respect to downstream sedimentation. Furthermore, the soil cement improvements proposed for the creek banks within the Development Area would provide sufficient protection against scouring. Refer to Section V.B, Flood Hazards, and Section V.D, Water Quality, for further discussion.

(2) Off-Site Infrastructure Improvement Areas Impacts

Off-site impacts with respect to erosion and sedimentation associated with construction and operation would be generally the same as the on-site impacts discussed above. Further, as indicated above, Project activities within the Ranch would not have an adverse hydromodification impact on downstream (off-site) properties. With compliance with regulatory standards, impacts would be less than significant.

Threshold A-4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

There is some possibility that expansive clayey soils are located within the Placerita Creek floodplain.[38] However, where detrimental expansive clayey soils are encountered within the Project site, overexcavation to a level below the bottom of the proposed building footings and recompaction as engineered fill would be performed. As set forth in MM A-1, below, a design-level geotechnical investigation would be conducted to ensure the Project is designed in accordance with regulatory requirements. This final geotechnical investigation would determine site- and building-specific design measures to be

[38] *Ibid.*

implemented, such as the use of select grading measures, structures designed for expansive or cohesionless soils, soil improvement, and/or the use of pile foundations. These recommendations would be implemented as part of MM A-2, below. With implementation of the proposed mitigation measures, impacts with respect to expansive soils and differential settlement would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

Off-site impacts with respect to expansive soils would be generally the same as the on-site impacts discussed above. With compliance with regulatory standards, impacts would be less than significant.

Threshold A-5: Would the project have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The Project would not include any new septic tanks in the Development Area, Trail Area, Conditional Parking Areas, or the Water Tank Area. The existing private septic sewer systems that serve the other residential and office buildings on the Ranch would not be affected by the Project. The Project would remove the existing septic tank that services the Ranch foreman's mobile home and relocate the mobile home and install a new septic tank at one of two potential sites identified within the Ranch, east of the Development Area. In accordance with Los Angeles County Department of Public Health, Environmental Protection Bureau, the following conditions would be met as part of the installment of the new septic tank for the relocated mobile home, as required by MMs D-1 and D-2 provided in Section V.D, Water Quality:[39]

- Prior to the issuance of any building permit/installation of any on-site wastewater treatment system (OWTS), the Applicant would demonstrate to the Environmental Health section of County of Los Angeles Department of Public Health that the proposed relocation site is capable of supporting the installation of the OWTS.

- Prior to the issuance of any building permit/installation of any OWTS, the Applicant would submit a feasibility report in conformance with the requirements

[39] *Conditions as specified in correspondence from the Los Angeles County Department of Public Heath, Environmental Protection Bureau, included in Appendix A to this Draft EIR.*

outlined in the County of Los Angeles Department of Public Health's guidelines, "Onsite Wastewater Treatment System (OWTS) Guidelines" to the County of Los Angeles Department of Public Health.

- The design and installation of the OWTS would conform to rules, regulations and requirements of the County of Los Angeles Department of Public Health and other applicable regulatory agencies. The Applicant may also be required to obtain clearance from the Los Angeles Regional Water Quality Control Board (LARWQCB) and would comply, as applicable.

- In the event that the requirements of the County Plumbing Code cannot be met at either of the proposed relocation sites due to future grading or for any other reason, the Environmental Health section of County of Los Angeles Department of Public Health will not recommend issuance of a building permit.

Upon compliance with these conditions, the new septic system would be installed in accordance with conditions that ensure the system would be adequately supported by soils. Therefore, on-site impacts associated with soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

The Project would not include any new septic tanks in the Off-Site Infrastructure Improvement Areas. The off-site wastewater improvements would involve the installation of a new sewer main, referred to as the Oak Orchard Alignment. The improvements, which do not include septic tanks or alternative wastewater disposal systems, would be designed in accordance with applicable standards and constructed to the satisfaction of the County Sanitation Districts (including the Santa Clarita Valley Sanitation District), LACDPW, and the City of Santa Clarita Department of Public Works, as appropriate. Therefore, there would be no impact associated with off-site soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems.

Threshold A-6: Would the project conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element?

Threshold A-7: Would the project entail substantial grading and/or alteration of topography including slopes of over 25 percent?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

As discussed in Section V.N, Land Use, of this Draft EIR, the Santa Clarita Valley Area Plan (Area Plan), the local plan covering the Ranch and the surrounding area, designates different portions of the Ranch as Hillside Management (HM), Open Space/ National Forest (O-NF), and Floodway/Floodplain (W). As shown in Figure V.N-1 therein, the Area Plan designates the southern portion of the Development Area, the northern tip of the Development Area, and the entire Water Tank Area and Trail Area as HM. The HM designation applies to land classified as Non-Urban with slopes in excess of 25 percent. Development in HM areas is generally limited to the most suitable or least environmentally sensitive areas and should take into account compatibility with the natural resources and character of an area. Non-residential uses are permitted and may include agricultural and industrial uses, including those which require remote or secluded locations. As prescribed under the Hillside Management Area Ordinance, a conditional use permit in the hillside management area would not be required because the Project would not include residential uses exceeding the low density threshold established for an area with a natural slope of 25 percent or more located within a nonurban hillside management area. As discussed in detail in Section V.N, Land Use, of this Draft EIR, the Project would comply with the hillside requirements set forth in the General Plan and, thus, would support Conservation and Open Space Element policies regarding the protection of the natural and scenic character of hillside areas such as the Ranch.

As previously described, the Development Area and surrounding vicinity contain distinct and prominent topographic features, including Placerita Canyon, local mountain ridges, and Placerita Creek. To accommodate the Project, the entire Development Area would be cleared and mass graded at one time, in addition to relatively limited earthwork necessary in the Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas. In total, approximately 700,000 cubic yards of cut and 200,000 cubic yards of fill would be required within the Ranch, with approximately 500,000 cubic yards of export. Some of these earthwork activities would occur within areas designated as HM that have slopes of 25 percent or greater. In particular, alteration of sloping terrain along the creek banks would be necessary to stabilize the slopes. While grading of the hillside in the far northern portion of the Development Area would be needed to create a level development pad for the proposed substation, the finished grades would include a steep slope rising up from the new structure to the northeast, similar to existing conditions. Similarly, earthwork within the Water Tank Area and Trail Area would generally follow existing grades. All earthwork activities associated with the grading and export of soil would occur in accordance with County requirements, as specified in the Los Angeles County Building Code and through the grading plan review and approval process. Therefore, construction-related impacts associated with any conflict with hillside regulations or substantial alteration of slopes would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

The majority of the Off-Site Infrastructure Improvement Areas is located in the City of Santa Clarita. Therefore, the Hillside Management Area Ordinance, which is part of the Los Angeles County Code, would not apply to the off-site infrastructure improvements. In any case, the proposed utility line improvements and associated trenching would follow existing roadways which are generally flat and mostly paved. Any off-site improvements occurring within the County's jurisdiction (e.g., potential replacement power poles and roadway intersection improvements along Placerita Canyon Road) would comply with the Hillside Management Area Ordinance, as applicable. Therefore, construction-related impacts associated with any potential conflict with hillside regulations or substantial alteration of slopes would be less than significant.

4. CUMULATIVE IMPACTS

Due to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. Nonetheless, cumulative growth through 2020 (inclusive of the 14 related projects identified in Section III, Environmental Setting, of this Draft EIR) would expose a greater number of people to seismic hazards. However, as with the Project, related projects and other future development projects in the area would be subject to the same local, regional, State, and Federal regulations pertaining to geology and soils, including CBC and Los Angeles County Building Code requirements (or City of Santa Clarita Building Code requirements, as appropriate). Therefore, with adherence to such regulations, cumulative impacts with regard to geology and soils would be less than significant.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF A-1: During construction and operation of the Project, appropriate erosion control and drainage devices shall be implemented as specified in the Project's Stormwater Pollution Prevention Plan and Standard Urban Stormwater Mitigation Plan.

PDF A-2: Excavation and grading activities shall be scheduled during dry weather periods to the extent feasible. If grading occurs during the rainy season (October 15 through April 1), diversion dikes and channels shall be constructed to channel runoff around the site. Channels shall be lined with grass, jute mesh or berms to reduce runoff velocity.

PDF A-3: Stockpiled soil shall be covered with secured tarps or plastic sheeting or sprayed with a soil stabilizer when not in active use.

b. Mitigation Measures

MM A-1: Prior to the issuance of a grading permit(s), the Applicant shall submit to the County of Los Angeles Department of Public Works for review and approval a final Geotechnical Investigation Report based on final Project designs prepared by a registered civil engineer and certified engineering geologist, in compliance with the County's codes and policies, including GS051.0 and GS063.0 of the County of Los Angeles Department of Public Works Manual for Preparation of Geotechnical Reports, and consistent with the Preliminary Geotechnical Investigation Reports contained in Appendices B.1 and B.2 of the Draft EIR.

MM A-2: Project design and construction shall comply with all applicable building codes and standards, including those established by the California Geological Survey's "Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication No. 117;" the Uniform Building Code as adopted by the County of Los Angeles; State and County laws, ordinances and Code requirements; and the recommendations set forth in the final Geotechnical Investigation Report.

MM A-3: Prior to issuance of a grading permit, the Applicant shall submit a grading plan to the Soils Section of the County of Los Angeles Department of Public Works for verification of compliance with County codes and policies.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

As determined in this analysis, with implementation of the Project Design Features and Mitigation Measures, the Project would not result in significant impacts with respect to geology and soils.

V. Environmental Impact Analysis

B. Flood Hazards

V. ENVIRONMENTAL IMPACT ANALYSIS

B. FLOOD HAZARDS

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's potential impacts on surface water hydrology and summarizes information from the Drainage Concept/SUSMP/LID Plan (Drainage Concept) which was prepared by David Evans and Associates in August 2011 and approved by the County of Los Angeles Department of Public Works, Land Development Division, Engineering and Survey Branch, Storm Drain and Hydrology Section on August 22, 2011, provided as Appendix C to this Draft EIR. The Drainage Concept includes the Sediment Transport Analyses for Placerita Creek (Sediment Transport Analyses), prepared by JLC Engineering & Consulting in August 2011.

2. ENVIRONMENTAL SETTING

a. Local Topography, Land Use, and Drainage

The Ranch and the Project site, which includes the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, and the Off-Site Infrastructure Improvement Areas, including the locations of the SCE power pole replacements and several off-site roadway intersections, are located within the Placerita Canyon hydrologic region and specifically within the southeastern part of the Upper Santa Clara River Watershed region. The Upper Santa Clara River Watershed consists of the portion of the Santa Clara River Watershed located within the County. The major bodies of water in the region are the Santa Clara River and its tributaries. The principal tributaries are Castaic Creek, San Francisquito Creek, Bouquet Creek, and the South Fork of the Santa Clara River.

The Ranch is situated at the bottom of Placerita Canyon with relatively steep hillsides and ridgelines to the north, east, and south measuring approximately 600 feet in height. Placerita Canyon is an east-west running canyon that includes oak groves, a seasonal stream with mixed willow riparian woodland species, and various other plant and animal communities. The bottom of the canyon is relatively flat with topography descending gently toward the west. The Ranch contains two blue line streams as noted on U.S. Geological Survey (USGS) maps, Placerita Creek, which traverses the Ranch in an east-west direction and flows west through a 20-foot diameter culvert under SR-14 into the City of Santa Clarita, and Heil Creek, which extends into the central northern portion of the

Ranch and flows south to Placerita Creek. Placerita Creek flows east to west and is an ephemeral creek that receives water from naturally occurring runoff. The existing tributary area of Placerita Creek upstream of SR-14, which includes the 890-acre Ranch, is a watershed of approximately 6 square miles. Several small ephemeral drainage courses are also located within the southern portion of the Development Area and on the Ranch south of Placerita Canyon Road.

The Ranch has been used over the past several decades for motion picture and television film production, agriculture, horse breeding, cattle ranching, and some oil production activities. Approximately 225 acres are used for outdoor filming with some agricultural uses. The remaining areas of the Ranch, which consist mostly of undeveloped hillsides, are used primarily as a filming backdrop, with some agricultural and oil production uses. Within the Ranch, existing water wells are used for irrigation.

South of the Development Area, stormwater runoff generally flows in a south to north direction toward Placerita Creek.[1] There are three watersheds south of Placerita Canyon Road, referred to herein as Off-1a, Off-2a and Off-3a.[2] Watershed Off-1a and Watershed Off-2a, which include the Water Tank Area and a portion of the Trail Area, flow as sheet flow onto the Development Area through two cattle crossings situated under Placerita Canyon Road and are then routed to a small ephemeral drainage course that traverses the Development Area. These cattle crossings are 6-foot by 7-foot arch-type corrugated metal structures that cross under the roadway. Watershed Off-3a is a much smaller area and drains to a 24-inch corrugated metal pipe (CMP) that crosses under Placerita Canyon Road. Four small watersheds (Off-7a, Off-8a, Off-9a, and Off-10a) are located within the southernmost portion of the Development Area and include portions of Placerita Canyon Road. These areas drain towards Placerita Creek via sheet flow and the small ephemeral drainage course that traverses the Development Area. A separate drainage system installed by the California Department of Transportation (Caltrans) near the intersection of SR-14 and Placerita Canyon Road collects runoff from portions of both roadways and the SR-14 northbound off-ramp and discharges it to Placerita Creek through a 48-inch CMP that traverses the western portion of the Development Area. There are five

---

[1] *The area south of Placerita Canyon Road includes the Water Tank Area and associated access road, which would be graded and paved for all-weather access, to the satisfaction of Newhall County Water District, as part of the Project. In addition, an "Arizona" dip crossing would be constructed across the access road to accommodate an existing drainage course that sheet flows across the road under existing conditions during storms. These conditions, including the increase in pervious area along the access road, have been considered in the hydrology calculations in the Drainage Concept.*

[2] *These areas are located within the Ranch and are therefore technically part of the Project site. However, for the purposes of this analysis, they are referred to as off-site watersheds as they fall outside of the Development Area's main hydrologic system.*

minor watersheds in the northern portion of the Development Area (Off-4a, Off-5a, Off-6a, Off-11a, and Off-12a), from which runoff currently sheet flows to the south and southwest toward Placerita Creek. Please see Figure V.B-1 on page V.B-4 for an illustration of the existing off-site drainage areas and features.

The majority of the Off-Site Infrastructure Improvement Areas is located within the City of Santa Clarita, west of the Ranch and SR-14. The utility alignments proposed within these areas are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential and commercial development. The SCE power pole replacement areas are along Sierra Highway and potentially Placerita Canyon Road within existing road rights-of-way. Placerita Creek flows through a portion of the Off-Site Infrastructure Improvement Areas. These areas are generally flat with elevations ranging from approximately 1,290 feet above MSL at the lowest point along the proposed sewer line alignment (Oak Orchard Alignment) to approximately 1,550 feet above MSL at the highest point along the Dockweiler Drive water line alignment (Alternative A).[3] Drainage in these areas occurs primarily through infiltration and sheet flow to Placerita Creek.[4] In addition, Project Design Features and Mitigation Measures would require off-site roadway intersection improvements at the current Ranch main entrance/Placerita Canyon Road intersection and at the following intersections: Sierra Highway/SR-14 southbound ramps, Sierra Highway/Placerita Canyon Road, and the current Ranch main entrance/Placerita Canyon Road.

b. On-Site Hydrology

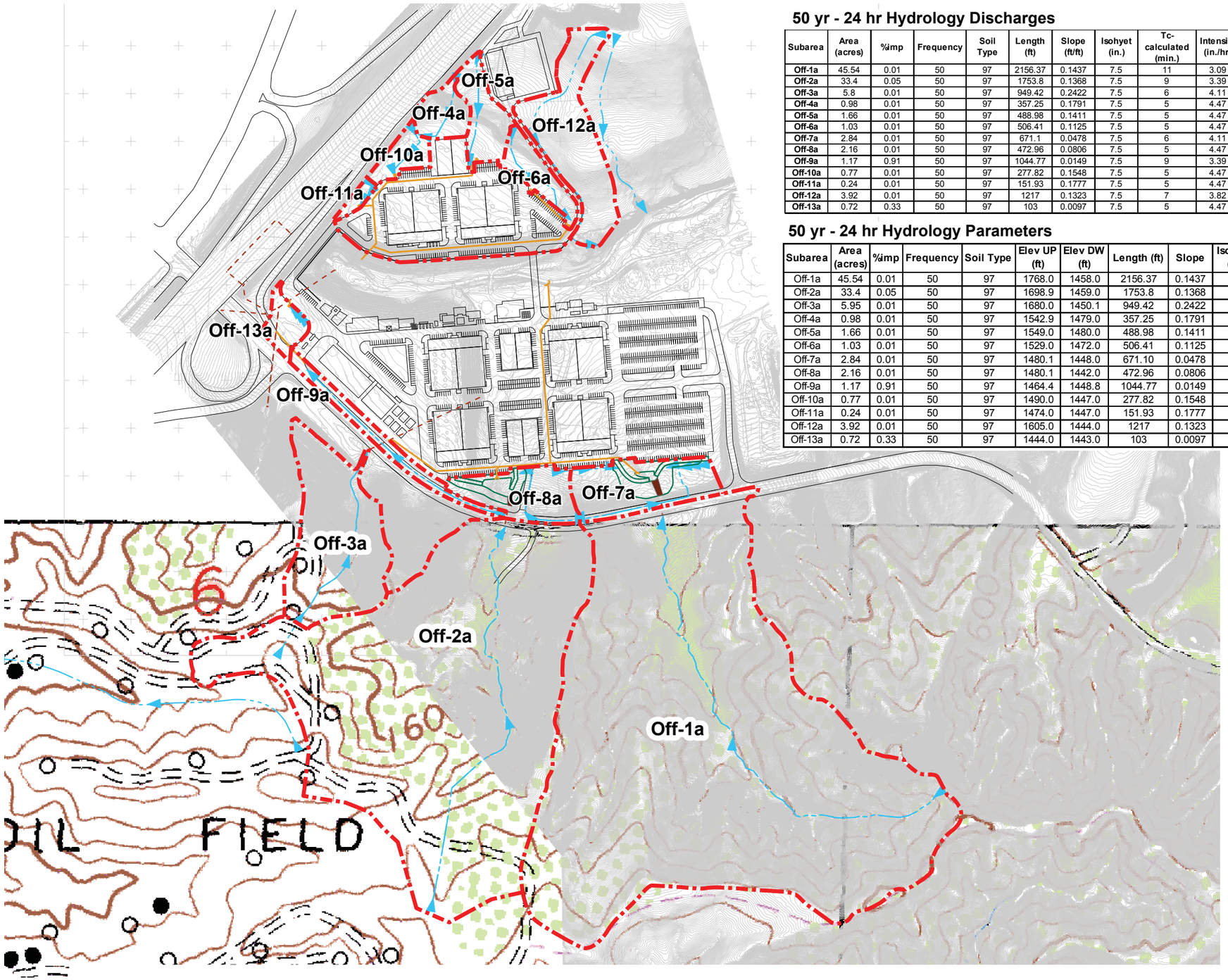
(1) Drainage Patterns and Flow Rates

The Development Area is comprised of approximately 58 acres in the westernmost portion of the Ranch, a substantial portion of which is located on two large, mostly barren, fill pads, referred to herein as the northern and southern fill pads. The northern portion of the Development Area, north of Placerita Creek which includes the northern fill pad, is comprised of roughly 18 acres and is bordered by SR-14 on the northwest, undeveloped hillsides on the northeast, and Placerita Creek on the south. The highest elevation within the Development Area is located within the northernmost portion of the Development Area at approximately 1,567 feet above Mean Sea Level (MSL). The northern fill pad, which gradually slopes into Placerita Creek, is approximately 12 acres in size with an average elevation of 1,476 feet above MSL. The pad drains in a southwesterly direction toward a

---

[3] *The point of connection of these systems to the proposed on-site system is at an elevation of approximately 1,450 feet MSL.*

[4] *David Evans and Associates, August 2011.*



50 yr - 24 hr Hydrology Discharges

Subarea	Area (acres)	%imp	Frequency	Soil Type	Length (ft)	Slope (ft/ft)	Isohyet (in.)	Tc-calculated (min.)	Intensity (in./hr)	Cu	Cd	Flow rate (cfs)	Fire Factor	Burned flow rate (cfs)	Volume (acre-ft)	Debris (cy)
Off-1a	45.54	0.01	50	97	2156.37	0.1437	7.5	11	3.09	0.73	0.73	102.72	0.34	107.83	6.91	9968
Off-2a	33.4	0.05	50	97	1753.8	0.1368	7.5	9	3.39	0.75	0.76	86.05	0.34	89.69	5.66	4281
Off-3a	5.8	0.01	50	97	949.42	0.2422	7.5	6	4.11	0.77	0.77	18.36	0.34	19.12	0.88	743
Off-4a	0.98	0.01	50	97	357.25	0.1791	7.5	5	4.47	0.78	0.78	3.42	0.34	N/A	0.15	N/A
Off-5a	1.66	0.01	50	97	488.98	0.1411	7.5	5	4.47	0.78	0.78	5.79	0.34	N/A	0.25	N/A
Off-6a	1.03	0.01	50	97	506.41	0.1125	7.5	5	4.47	0.78	0.78	3.59	0.34	N/A	0.16	N/A
Off-7a	2.84	0.01	50	97	671.1	0.0478	7.5	6	4.11	0.77	0.77	8.99	0.34	9.36	0.43	73
Off-8a	2.16	0.01	50	97	472.96	0.0806	7.5	5	4.47	0.78	0.78	7.53	0.34	7.83	0.33	56
Off-9a	1.17	0.91	50	97	1044.77	0.0149	7.5	9	3.39	0.75	0.89	3.53	0.34	n/a	0.61	30
Off-10a	0.77	0.01	50	97	277.82	0.1548	7.5	5	4.47	0.78	0.78	2.68	0.34	2.79	0.12	31
Off-11a	0.24	0.01	50	97	151.93	0.1777	7.5	5	4.47	0.78	0.78	0.84	0.34	N/A	0.04	N/A
Off-12a	3.92	0.01	50	97	1217	0.1323	7.5	7	3.82	0.76	0.76	11.38	0.34	N/A	0.61	N/A
Off-13a	0.72	0.33	50	97	103	0.0097	7.5	5	4.47	0.78	0.82	2.64	0.34	n/a	0.2	N/A

50 yr - 24 hr Hydrology Parameters

Subarea	Area (acres)	%imp	Frequency	Soil Type	Elev UP (ft)	Elev DW (ft)	Length (ft)	Slope	Isohyet (in)	Fire Factor	DPA	Bulking Factor	DP Rate (CY/MI^2)	DP RATE (CY/AC)
Off-1a	45.54	0.01	50	97	1768.0	1458.0	2156.37	0.1437	7.5	0.34	3	1.62	140000	219
Off-2a	33.4	0.05	50	97	1698.9	1459.0	1753.8	0.1368	7.5	0.34	5	1.47	82000	128
Off-3a	5.95	0.01	50	97	1680.0	1450.1	949.42	0.2422	7.5	0.34	5	1.47	82000	128
Off-4a	0.98	0.01	50	97	1542.9	1479.0	357.25	0.1791	7.5	0.34	5	1.47	82000	128
Off-5a	1.66	0.01	50	97	1549.0	1480.0	488.98	0.1411	7.5	0.34	5	1.47	82000	128
Off-6a	1.03	0.01	50	97	1529.0	1472.0	506.41	0.1125	7.5	0.34	5	1.47	82000	128
Off-7a	2.84	0.01	50	97	1480.1	1448.0	671.10	0.0478	7.5	0.34	9	1.27	16500	26
Off-8a	2.16	0.01	50	97	1480.1	1442.0	472.96	0.0806	7.5	0.34	9	1.27	16500	26
Off-9a	1.17	0.91	50	97	1464.4	1448.8	1044.77	0.0149	7.5	0.34	9	1.27	16500	26
Off-10a	0.77	0.01	50	97	1490.0	1447.0	277.82	0.1548	7.5	0.34	5	1.47	82000	128
Off-11a	0.24	0.01	50	97	1474.0	1447.0	151.93	0.1777	7.5	0.34	5	1.47	82000	128
Off-12a	3.92	0.01	50	97	1605.0	1444.0	1217	0.1323	7.5	0.34	5	1.47	82000	128
Off-13a	0.72	0.33	50	97	1444.0	1443.0	103	0.0097	7.5	0.34	9	1.27	82000	26

Source: David Evans and Associates, 2012.

matrix environmental

Figure V.B-1
Existing Drainage System

low point on the pad and then discharges to Placerita Creek via a concrete-lined v-ditch. The northern fill pad and the remaining northern portion of the Development Area are undeveloped with an imperviousness rate of approximately 1 percent. The existing discharge from the northern portion of the Development Area is estimated at approximately 30 cubic feet per second (cfs) during a 50-year storm.

The southern portion of the Development Area, south of Placerita Creek which includes the southern fill pad, is comprised of approximately 26 acres of land and bordered by Placerita Creek to the north, Placerita Canyon Road to the south, SR-14 to the west, and the current Ranch main entrance on the east. The southern fill pad is approximately 11.6 acres in size, with an elevation of approximately 1,456 feet above MSL, and also slopes down into Placerita Creek. There is a 60-foot drop in elevation on the eastern slope of the southern fill pad, extending into the remaining southern portion of the Development Area. The southern fill pad drains to a low point at the southwest corner of the pad and is then conveyed by an underground 36-inch drain pipe to Placerita Creek. The remaining southern portion of the Development Area (approximately 16 acres) drains as sheet flow northerly toward Placerita Creek. This southern area is mostly undeveloped, other than the Ranch Foreman's mobile home and an uninhabited structure, with an imperviousness rate of about 1 percent. The existing discharge from the southern portion of the Development Area is estimated at approximately 49 cfs during a 50-year storm.

The Potential Mobile Home Relocation Areas are situated in the southeast corner of the Ranch near an existing, developed area where the Ranch office, a barn, and a workshop are located. These areas are generally flat with elevations ranging from approximately 1,506 feet to 1,523 feet above MSL. The Potential Mobile Home Relocation Areas are undeveloped and have been used in the past for ranching and farming. Drainage occurs through infiltration and sheet flow to Placerita Creek.[5]

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed areas of the Ranch. These areas are generally flat with elevations ranging from 1,450 feet to about 1,470 feet above MSL within the southern lot (Conditional Lot 1) and an average elevation of approximately 1,440 feet above MSL within the northern lot (Conditional Lot 2). Conditional Lot 1 consists of a graded and compressed earth lot that is currently used for surface parking and staging for existing Ranch and filming operations. A large tent structure on a temporary asphalt pad occupies the center of the lot. Conditional Lot 2 is used intermittently for agriculture, and an elevated earthen

[5] *Ibid.*

access road cuts through it. Drainage in these areas occurs through infiltration and sheet flow to Placerita Creek.[6]

As previously mentioned, the Water Tank Area and a portion of the Trail Area are located in Watershed Off-2a, in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of the existing unpaved access road to 1,668 feet above MSL at the proposed water tank pad, while elevations within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The footprint of the proposed water tank and access road improvements generally encompass areas previously disturbed by past and current oil drilling operations. These disturbances include prior clearing and grading to create level pads, which remain readily evident today and are largely devoid of native vegetation. Two small ephemeral tributaries to Placerita Creek have been delineated within the Water Tank Area, one of which flows within an incised drainage channel then sheet flows across the existing access road and reconnects to its historic channel. The Trail Area comprises generally undisturbed land containing native vegetation, including chamise chaparral, coastal sage scrub, and oak woodlands; the associated trailhead/staging area, however, which would be located at the base of the water tank access road, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch and mostly contains non-native grasses. The Trail Area also includes portions of two small ephemeral tributaries to Placerita Creek.

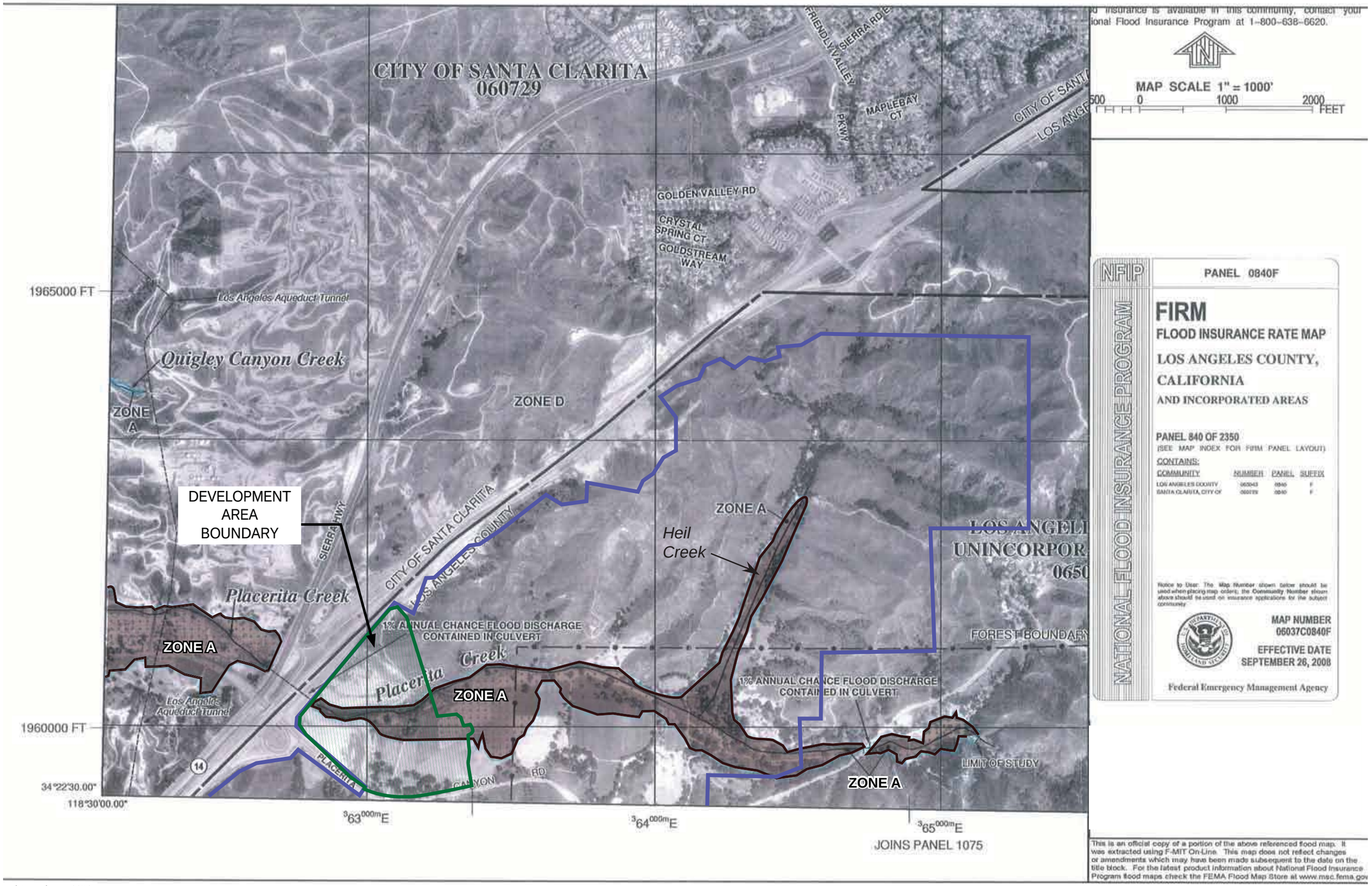
(2) Flood Zones

The Federal Emergency Management Agency (FEMA) is responsible for identifying and delineating flood hazard zones. Based on FEMA's most current Flood Insurance Rate Map (FIRM) for the general Project vicinity (FIRM 06037C0840 F, Panel 840, FIRM 06037C1075 F, Panel 1075, and FIRM 06037C0820 F, Panel 820, effective September 2008), portions of the Development Area and the Off-Site Infrastructure Improvement Areas, generally corresponding to Placerita Creek, fall within Zone A, as shown in Figure V.B-2 on page V.B-7. Zone A is defined as areas with a one percent annual chance of flooding (i.e., the 100-year flood zone), which are considered high-risk areas. Within the Ranch, the floodplain extends generally south of the creek approximately 100 to 1,000 feet in width.[7] Approximately the northern third of the southern portion of the Development

---

[6] *Ibid.*

[7] *A floodplain is the flat land area adjacent to a stream, composed of unconsolidated sedimentary deposits (alluvium) and subject to periodic inundation by the stream.*



Source: David Evans and Associates, 2012.

matrix environmental

Figure V.B-2
Existing Floodplain Map

Area east of the southern fill pad falls within Zone A. The northern Conditional Parking Area and a portion of the southern Conditional Parking Area also fall within Zone A. The Potential Mobile Home Relocation Areas, the Water Tank Area, and the Trail Area are located outside of Zone A. Within the Off-Site Infrastructure Improvement Areas, the land near Placerita Creek falls within Zone A. The SCE power pole replacement areas are along Sierra Highway and potentially Placerita Canyon Road within existing road rights-of-way and outside flood zones, floodways and floodplains. Similarly, the off-site roadway intersections to be improved are located outside flood zones, floodways and floodplains.

The County also adopted a floodplain and floodway for the Ranch area in October 2005.[8] The proposed areas to be developed within the Ranch are outside the County's adopted floodway. However, approximately the northern third of the southern portion of the Development Area east of the southern fill pad, the northern Conditional Parking Area, and a portion of the southern Conditional Parking Area are within the County's adopted floodplain. The Potential Mobile Home Relocation Areas, the Water Tank Area, the Trail Area, and most of the Off-Site Infrastructure Improvement Areas (other than those areas along Placerita Creek) are outside the County's adopted floodplain.[9]

(3) Groundwater

The Ranch and the Project site, which includes the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, the Conditional Parking Areas, and the Off-Site Infrastructure Improvement Areas, are located within the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin). The Basin encompasses an area of approximately 103 square miles. It is bordered by the Piru Mountains on the north, by impervious rocks of the Modelo and lower Saugus Formations on the west, by the San Gabriel Mountains on the south and east, and by the Santa Susana Mountains on the south. It is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek.

Groundwater in the vicinity of the Ranch tends to flow east to west, although cones of depression from groundwater pumping and mounding from irrigation can alter flow patterns over time. Based on soil boring tests performed in the Development Area, perched alluvial groundwater was encountered at a depth of 71.5 feet below the northern fill pad, at depths of 61 to 79 feet below the southern fill pad, and at depths of 11.5 to 16 feet below ground surface in the low lying areas east of the southern fill pad.

---

[8] *A floodway is the channel and adjacent shore areas under water during a flood, especially as determined for a flood of a given height.*

[9] *David Evans and Associates, August 2011.*

Comparable groundwater depths occur throughout the low-lying portions of the Ranch, including the Conditional Parking Areas and the Potential Mobile Home Relocation Areas. Given the higher elevation of the Water Tank Area and Trail Area, groundwater is anticipated to exist hundreds of feet below the ground surface.[10] Deeper groundwater exists below the Ranch and is accessed by the existing private wells; the approximate amount of such groundwater used each year is reported to the State Water Resources Control Board. Within the Off-Site Infrastructure Improvement Areas, including the SCE power pole replacement areas and off-site roadway intersections, groundwater depths vary to well over 100 feet below ground surface.[11,12]

According to the California Geological Survey (CGS), the historic high groundwater in the alluvial valley portion of the Development Area, the Conditional Parking Areas, and the Potential Mobile Home Relocation Areas was reported to be approximately 5 to 10 feet bgs. The portions of the Project site located in higher bedrock areas (i.e., the Water Tank Area, Trail Area, and portions of the Off-Site Infrastructure Improvement Areas) experience historic high groundwater depths of deeper than 50 feet bgs. The Off-Site Infrastructure Improvement Areas near Placerita Creek are located in a zone where the historic high groundwater deepens to the west from 10 to greater than 60 feet bgs. Historic high groundwater for the Off-Site Infrastructure Improvement Areas located northwest of the Development Area adjacent to Golden Valley Road varies between 5 and 25 feet bgs.

c. Regulatory Framework

(1) Federal Emergency Management Agency

In 1968, Congress passed the National Flood Insurance Act, which resulted in the National Flood Insurance Program (NFIP) administered by FEMA. The intent of this program is to reduce future flood damage through community floodplain management ordinances and to provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection. Through this program, hydrologic analyses are conducted to determine the magnitude of flood risk that exists in various communities throughout the country. FEMA identifies flood zones or

---

[10] *Ibid.*

[11] *Groundwater levels within the City of Santa Clarita are not available. However, using water surface elevation readings recorded from existing water wells in the area, one east of the proposed Tract No. 71216 and the other west of the proposed sewer point of connection, the average groundwater depth ranges from 1,421 to 1,092 feet above MSL, which is well below the invert elevations of the proposed sewer pipe alignment.*

[12] *David Evans and Associates, August 2011.*

areas subject to flooding through its Flood Insurance Rate Maps. The standard for flood protection established by FEMA, and used by the CEQA Guidelines, is the 1-in-100 annual exceedance probability (AEP), commonly referred to as the 100-year flood event.

On a state level, the Flood Plain Management Act encourages the sound development of land subject to recurring flooding, so that such areas are developed with economically-feasible flood control measures in place to prevent human and economic losses caused by excessive flooding. The State of California encourages local governments to implement effective land use regulations to accomplish floodplain management.

Since October 1990, the County has been a voluntary participant in FEMA's NFIP. As a participant, the County is responsible for the regulation of development in special flood hazard areas within the County. As a compliance requirement of the NFIP, the County enforces regulations upon developments within flood hazard zones to ensure that buildings are erected at a safe elevation to prevent potential damage to property.

(2) County Regulations

(a) County of Los Angeles Hydrology Manual

Drainage and flood control in the vicinity of the Ranch is regulated by the Los Angeles County Department of Public Works (LACDPW). LACDPW has jurisdiction over regional drainage facilities and local drainage facilities within the unincorporated portions of the County. The LACDPW Hydrology Manual requires a storm drain conveyance system be designed for a minimum 25-year storm event and the combined capacity of a storm drain and street flow system accommodate flows from a 50-year storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flows from a 50-year storm event.[13] The County also limits the allowable discharge into existing storm drain facilities. Any proposed drainage improvements of County-owned storm drain facilities, such as catch basins and storm drain lines, require review and approval from the County Flood Control District. The LACDPW Hydrology Manual also provides various analysis tools and calculation methodologies required for hydrologic evaluations.

---

[13] *Los Angeles County Department of Public Works Hydrology Manual, January 2006, http://ladpw.org/wrd/Publication/engineering/2006_Hydrology_Manual/2006%20Hydrology%20Manual-Divided.pdf, accessed March 19, 2009.*

(b) Low Impact Development Ordinance

On November 18, 2008, the Los Angeles County Board of Supervisors passed the Low Impact Development (LID) ordinance. The LID ordinance focuses on water resources and specifies stormwater handling and treatment requirements that protect streams, groundwater, surface water quality, and natural drainage characteristics. Chapter 12.84 of the County Code requires the use of LID principles in development projects. LID encourages site sustainability and smart growth in a manner that respects and preserves the characteristics of the County's watersheds, drainage paths, water supplies, and natural resources. LID builds on conventional design strategies by using every softscape and hardscape surface in a development to perform a beneficial hydrologic function by retaining, detaining, storing, changing the timing of, or filtering stormwater and urban runoff. LID encompasses the use of structural devices, engineered systems, vegetated natural designs, and education in order to distribute stormwater and urban runoff across a development site.

Over the past decade, LID has emerged along with technologies and practices that allow a sustainable stormwater management strategy to control stormwater and urban runoff at the source rather than centralized, end-of-pipe controls. LID relies on an integrated system of decentralized, small-scale control measures. These measures range from site design practices to technology driven LID best management practices (BMPs). The underlying principle of LID is that undeveloped land does not present a stormwater runoff or pollution problem. The evolved natural hydrology of any given site manages water in the most efficient manner. This most often translates to high rates of infiltration, vegetative interception, and evapotranspiration.

LID attempts to offset the effects of development and changes in land cover by preserving or restoring pre-development hydrology and water quality through a series of small-scale, decentralized, natural, and engineered controls at or near the point where the stormwater is generated. It is a source control option that minimizes stormwater pollution by recognizing that the greatest efficiencies are gained by minimizing stormwater generation. This is a process that begins with functional conservation of watershed resources, thus reducing the impacts of development, and then using innovative management practices to meet stormwater objectives. Site preservation practices coupled with small-scale BMPs that rely on the environmental services of vegetation and soils or systems that mimic these services comprise the control approach of LID. These practices, taken in aggregate, limit the observed hydromodification on a developed site and present a more comprehensive and beneficial control approach. Refer to Section V.D, Water Quality, for further discussion of the County's LID ordinance.

(c) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to flood hazards. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to flood hazards.

(d) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to flood hazards. As discussed in the policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to flood hazards.

(3) City of Santa Clarita Regulations

The majority of the Off-Site Infrastructure Improvement Areas are located within the City of Santa Clarita. Santa Clarita Municipal Code Chapter 10.04 details the City's requirements for stormwater and urban runoff pollution control. Refer to Section V.D, Water Quality, for further discussion of stormwater-related regulatory requirements for projects within the City of Santa Clarita.

3. ENVIRONMENTAL IMPACTS

a. Methodology

This analysis of hydrology impacts is based on information from the Drainage Concept/SUSMP/LID Plan prepared by David Evans and Associates and is provided in Appendix C of this Draft EIR. The report was prepared based on a review of documents from and methodologies specified by the LACDPW. A 50-year hydrology analysis was performed for the Project using the analysis methods specified in the LACDPW 2006 Hydrology Manual.[14]

b. Significance Thresholds

The potential for the Project to result in impacts associated with flood hazards is based on the CEQA significance criteria specified by the Los Angeles County Department

[14] *Run-off rates were calculated using the standard impervious percentages for different land uses as provided in the Los Angeles County Hydrology Manual.*

of Regional Planning. These significance criteria are based on Appendix G of the CEQA Guidelines and are as follows:

Threshold B-1: 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, in a manner which would result in substantial erosion or siltation on- or off-site?

Threshold B-2: 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Threshold B-3: Would the project 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?

Threshold B-4: Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or within a floodway or floodplain?

Threshold B-5: Would the project place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain?

Threshold B-6: Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Threshold B-7: Would the project place structures in areas subject to inundation by seiche, tsunami, or mudflow?

Threshold B-8: Would the project contribute or be subject to high erosion and debris deposition from run-off?

Threshold B-9: Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

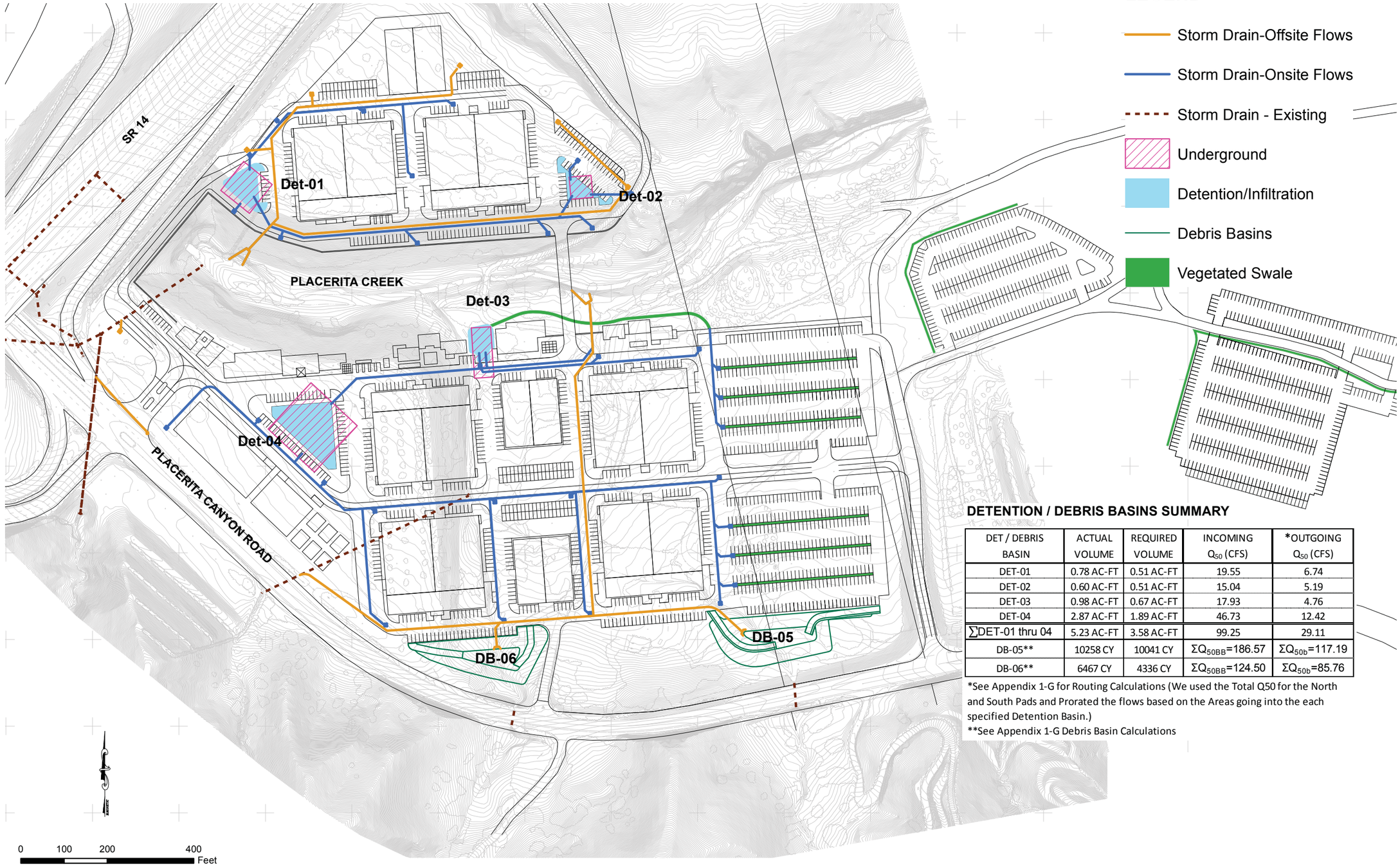
c. Project Design Elements

The grading for the Project would lower the elevation of the northern fill pad by approximately 30 feet and the northern portion of the southern fill pad by approximately 10 to 15 feet (average of 12 feet). Approximately 10 to 29 feet (maximum of 29 feet) of fill soils would be placed to the east of the existing southern fill pad to provide for relatively flat

building areas. This fill would cover an existing ephemeral drainage that currently runs along the east side of the fill pad. Additionally, the hillside in the far northern portion of the Development Area would be graded and lowered an average of 21 feet to create a pad for the proposed substation. A conceptual grading plan and site cross-section drawings for the Development Area are provided in Figures V.A-3 and V.A-4 in Section V.A, Geotechnical Hazards, and conceptual grading plans for the Water Tank Area, the Conditional Parking Areas, and the Trail Area are provided in Figures V.A-5, V.A-6, and V.A-7, respectively, therein.

With the grading changing the topography of the Development Area, the Project would require new on-site storm drain facilities to convey stormwater flows from the developed portions of the Development Area as well as from off-site areas that drain to the Development Area. Through a combination of sheet flow, concentrated drainage swales, localized catch basin inlets, and storm drain pipes, all stormwater runoff from the Development Area would flow to Placerita Creek. Surface runoff would be collected by a series of grate inlets designed and located to maximize interception and then conveyed by a combination of surface gutters and underground lines to on-site detention basins. Similarly, building downspouts would direct stormwater to the streets and storm drain system for discharge into on-site detention basins. The Project's storm drain system would be designed and sized to ensure that post-development peak flow rates would not exceed pre-development peak flow rates so as to prevent off-site downstream flooding caused by the Project. The system would include a total of two outlets along the embankments of Placerita Creek in order to generally maintain the historic drainage patterns, with headwalls or flared-end sections with rock slope protection. Refer to Figure V.B-3 on page V.B-15 for a depiction of the conceptual drainage system. The final number of outlets and proposed improvements (e.g., headwalls or flared-end sections with rock slope protection) would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.

Within the northern portion of the Development Area, half the area would drain to the southeastern corner to a detention basin (Det-02), and the other half would drain to the southwest to a second detention basin (Det-01). These detention basins would be composed of a vegetated aboveground portion and an underground detention system consisting of an approximately 60-inch-diameter perforated CMP, although the actual footprint and sizing shall be determined within the final design plans. The estimated total volume capacity provided by these underground detention pipe systems would be approximately 1.38 acre-feet, in excess of the required volume capacity of approximately 1.02 acre-feet necessary to maintain existing peak flows. The southern portion of the Development Area would drain northwest to a detention basin (Det-04), a portion of which would be aboveground and vegetated. This underground system would consist of an approximately 72-inch-diameter perforated CMP, although the actual footprint and sizing



DETENTION / DEBRIS BASINS SUMMARY

DET / DEBRIS BASIN	ACTUAL VOLUME	REQUIRED VOLUME	INCOMING Q_{50} (CFS)	*OUTGOING Q_{50} (CFS)
DET-01	0.78 AC-FT	0.51 AC-FT	19.55	6.74
DET-02	0.60 AC-FT	0.51 AC-FT	15.04	5.19
DET-03	0.98 AC-FT	0.67 AC-FT	17.93	4.76
DET-04	2.87 AC-FT	1.89 AC-FT	46.73	12.42
∑DET-01 thru 04	5.23 AC-FT	3.58 AC-FT	99.25	29.11
DB-05**	10258 CY	10041 CY	ΣQ_{50BB}=186.57	ΣQ_{50b}=117.19
DB-06**	6467 CY	4336 CY	ΣQ_{50BB}=124.50	ΣQ_{50b}=85.76

*See Appendix 1-G for Routing Calculations (We used the Total Q50 for the North and South Pads and Prorated the flows based on the Areas going into the each specified Detention Basin.)

**See Appendix 1-G Debris Basin Calculations

Source: David Evans and Associates, 2012.

matrix environmental

Figure V.B-3
Conceptual Drainage Conditions and Facilities

shall be determined within the final design plans. The estimated total volume capacity provided by this underground detention system would be approximately 2.87 acre-feet, which would exceed the required volume capacity of approximately 1.89 acre-feet necessary to maintain existing peak flows. The surface detention system overflow outlet would drain to Placerita Creek. The underground detention systems in the northern and southern portions of the Development Area would capture, detain, and infiltrate stormwater flow volumes and provide first flush mitigation before either infiltrating back into the local groundwater basin or draining via outlets to Placerita Creek. These features would mitigate peak flow rates but not hydrograph volumes. The final design of these improvements would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.

Stormwater runoff from the two parking areas within the LADWP transmission corridor would be intercepted within six landscaped islands approximately 5 feet wide and 1 foot deep located between the parking rows, which would function as vegetated drainage swales. Surface flows from the northern lot would be directed to the west to underground drainage lines and then would be conveyed north to a vegetated drainage swale approximately 8 feet wide and 1 foot deep running west approximately 500 feet along the top of the southern slope embankment of Placerita Creek to an aboveground and underground detention basin (Det-03), which would drain to Placerita Creek through an outlet structure east of the proposed bridge across Placerita Creek. These vegetated swales would incorporate stormwater treatment features and would function as water quality BMPs. Surface flows from the southern lot would be directed to the west to underground drainage lines that would drain into the other on-site detention basin (Det-04) further west. The final design of these improvements would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.

During Project construction, a 20-foot-wide temporary unpaved construction road around the base of the fill pad slopes into Placerita Creek, with a temporary creek crossing located approximately midway between the eastern and western sides of the Development Area (in the location of an existing unpaved crossing), would be constructed for access between the northern and southern portions of the Development Area and to stabilize the creek slopes. This crossing would be removed and this portion of the creek would be restored after the completion of grading and slope stabilization. Following disturbance of portions of Placerita Creek during Project construction, the reconstructed slopes of the creek would be stabilized with soil cement (resulting in a trapezoidal channel with a soft bottom) which would be buried to allow surface vegetation, and a permanent, paved 15-foot-wide access road would be introduced at the top of the slope stabilization. This access road would extend from the northern parking lot within the LADWP transmission corridor westerly to the edge of the Development Area, loop around to the northern side of the creek, and terminate near the easternmost parking area in the northern pad. The

access road is depicted in the site maps provided in Figure IV-14 and Figure IV-15 in Section IV, Project Description, and is labeled as “slope stabilization access road” in the cross section drawings therein. The road would allow for access to the proposed drainage outlets and would pass under the proposed bridge; however, the bridge footings would be placed above the banks of Placerita Creek. The creek would then be revegetated in accordance with a habitat restoration plan, discussed in Section V.F, Biological Resources, of this Draft EIR.

Off-site stormwater runoff that flows to the northern portion of the Development Area would be intercepted by drainage ditches and directed around the Development Area south to Placerita Creek. Energy dissipators and/or velocity reducers would be used at outlets in Placerita Creek, as determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final design drawings. Off-site flows from SR-14 would continue to be routed to an existing 48-inch storm drain constructed by Caltrans and would drain to the north toward Placerita Creek. This existing 48-inch storm drain pipe runs under the southern fill pad and is deep enough so that it would not interfere with Project construction. Off-site stormwater and debris flows (i.e., mudflows) from the hillsides south of Placerita Canyon Road, including the Water Tank Area and Trail Area, along with surface runoff from adjacent portions of the roadway, would be intercepted primarily by two debris basins proposed in the southern portion of the Development Area. One of these debris basins (DB-05) would be 16 feet deep with side slopes of 2:1 to allow for containment of approximately 10,258 cubic yards of debris flows and runoff from Subareas Off-1a and Off-7a. The other debris basin (DB-06) would be 14 feet deep with side slopes of 2:1 and would be able to contain approximately 6,467 cubic yards of debris flows and runoff from Subareas Off-2a and Off-8a. Stormwater from these two basins would then flow north in a proposed underground storm drain system through the Development Area to Placerita Creek. Subarea Off-site 3a would continue to drain to Placerita Creek, but a debris desilting inlet may be constructed on the southern side of Placerita Canyon Road to intercept the tributary debris flows. Refer to Figure 8 within the Drainage Concept for an illustration of the debris basins. The placement of these improvements would maintain the existing off-site drainage patterns as much as possible. While the on- and off-site systems would be separate, flows from each would be routed to the same creek outlets so as to minimize the number of outlets and disturbance to the creek banks. The final design of these improvements, including the debris basin slopes and the design of terrace drains, would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.

In compliance with LACDPW requirements, a variety of construction and operational BMPs would be implemented to both allow infiltration and treat stormwater runoff. The following Project design features would be implemented to comply with regulatory requirements:

- Cut and fill slopes would be constructed no steeper than 1:2 (vertical:horizontal) unless steeper slopes are approved at specific locations by LACDPW. All slopes would be stabilized in accordance with Los Angeles County Standard Erosion Control Policy.
- Design Pollution Prevention BMPs, such as concentrated flow conveyance systems, protection/velocity dissipation devices, and slope surface protection, would be employed.
- New slopes would be treated with erosion control materials such as native grasses, jute mesh, and soil stabilizers upon completion of grading.
- Retaining walls would be incorporated into the Project's design to reduce the steepness of slopes and/or to shorten slopes.
- Existing slopes would be disturbed only when necessary.
- Cut and fill areas would be minimized to reduce slope lengths.
- Benches or terraces would be provided on high cut and fill slopes to reduce the concentration of flows.
- Slopes would be rounded and shaped to reduce concentrated flows.
- Hard surfaces (slope paving) would be constructed beneath the proposed permanent single-span bridge as a slope stabilization feature; buried soil cement would be used along the creek banks to allow revegetation of the stabilized slopes. The bridge would be designed to limit work within flowing streams and minimize construction impacts to surface waters. The proposed bridge would span Placerita Creek, with no bridge footings or other permanent impermeable surfaces within areas of the creek subject to the jurisdiction of the U.S. Army Corps of Engineers.
- The Project would contain two drainage line outlets with headwalls or flared-end sections with rock slope protection, as required by LACDPW. These devices generally would be located along the Placerita Creek embankments to maintain historic drainage patterns. The final number of outlets and proposed improvements (e.g., headwalls or flared-end sections with rock slope protection) would be determined in the final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.
- Downspout Connection—The proposed building downspouts would direct stormwater to the streets and storm drain system, which would discharge into the on-site detention basins that would have infiltration capacity (thus reducing stormwater loads during precipitation events).
- Vegetated Swales—These engineered densely vegetated depressions would be implemented where appropriate to retain and filter the first flush of runoff from impervious surfaces such as parking lots or streets.
- Riparian Buffers—The existing riparian buffer adjacent to Placerita Creek would be expanded as part of the Project after stabilization of the fill pad slopes.

- Concentrated flow conveyance systems—Other new conveyance systems would include curb and gutter, a storm drain system, catch basins, manholes, asphalt-lined dikes, detention basin surface ponds, underground detention/infiltration chamber devices, and debris basins.

- Routine non-structural source control BMPs would include the following:

  - Educational materials for Property Owners, Tenants and Occupants regarding stormwater protection and pollution prevention;

  - Activity Restrictions;

  - Spill Contingency Plans;

  - Employee Training Programs regarding stormwater protection and pollution prevention;

  - Road Sweeping; and

  - Catch Basin Inspections.

- Routine structural source control BMPs would include the following:

  - Landscape Planning and Design;

  - Roof Runoff Controls;

  - Efficient Irrigation;

  - Protection of Slopes and Channels;

  - Storm Drain Signage;

  - Inlet Trash Racks;

  - Energy Dissipators; and

  - Trash Storage Areas and Litter Control.

- Erosion control—Measures would be employed to prevent the movement of soil by wind or water during construction and might include watering and erecting physical barriers to the movement of soil particles.

Additional design features and BMPs are provided in Section V.D, Water Quality, of this Draft EIR.

d. Impact Analysis

Threshold B-1: 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, in a manner which would result in substantial erosion or siltation on- or off-site?

Threshold B-3: Would the project 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?

Threshold B-8: Would the project contribute or be subject to high erosion and debris deposition from run-off?

Threshold B-9: Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

Project grading activities would alter the topography of the Development Area and may have the potential to cause short-term erosion. Limited grading would also occur within the Water Tank Area, Trail Area, and one of the two Potential Mobile Home Relocation Areas, as well as potentially within the Conditional Parking Areas, if developed, but would not substantially alter the existing topography of those areas. As discussed in Section V.D, Water Quality, during construction, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented to provide for temporary stormwater management. Aside from protecting water quality, these plans would prevent Project construction activities from adversely affecting the quality and amount of surface water flowing from the site to Placerita Creek. Additionally, steps would be taken during construction to stabilize the slopes within Placerita Creek in conjunction with the temporary creek crossing and temporary construction road around the base of the fill pad slopes. These temporary features would be removed and this portion of the creek would be restored after the completion of grading and slope stabilization. Further, the proposed drainage system would be designed so as to maintain historic drainage patterns and flow rates within the site.

As previously described, Project implementation would require construction of new stormwater drainage facilities within the Development Area. Installation of the on-site facilities, including detention basins (above ground and below ground), debris basins, various underground drainage lines, and outlets in Placerita Creek, would occur in

conjunction with installation of the on-site utility systems during Project construction. With respect to Threshold B-9, Project construction impacts, including those associated with the development of new stormwater drainage facilities on-site, are evaluated throughout this EIR in each of the Environmental Impact Analysis sections. As discussed in Section V.E.1, Air Resources—Air Quality, the Project would result in a significant impact with respect to regional air emissions during the most intense construction activities. However, such impacts are not necessarily due specifically to the construction of new stormwater drainage facilities.

The existing storm drain facilities that serve the SR-14/Placerita Canyon Road interchange are sufficiently deep and would remain in place during Project construction. As such, no off-site drainage infrastructure would be affected by the Project. In addition, the new on-site storm drain facilities would be constructed to support the development and would be in place and functioning as development progresses to serve their respective drainages. Therefore, no significant on-site drainage impacts would result during Project construction. Refer to Section V.D, Water Quality, for discussion of the potential for additional polluted runoff.

(b) Operation

(i) On-Site Hydrology and Drainage

Following Project construction, the Development Area would be transformed from a disturbed but mostly pervious area to a developed area with considerable impervious features (i.e., buildings, paved parking areas, and internal roadways). Although pervious areas in the form of landscaping and stormwater detention features would exist, the volume and rate of stormwater runoff generated on-site would be expected to increase due to the increase in imperviousness. The 50-year hydrology analysis provided in the Drainage Concept indicates that total runoff to Placerita Creek would increase by approximately 21 cfs as a result of changes in the Project site's imperviousness. As previously described, a new drainage system would be introduced in the Development Area using a combination of sheet flow, concentrated drainage swales, localized catch basin inlets, and storm drain pipes that would ultimately drain to Placerita Creek. This system would be designed and sized to ensure that post-development flow rates would not exceed pre-development flow rates, while maintaining existing drainage patterns. In particular, on-site detention of storm flows would be implemented to limit the discharge of peak flows. Refer to Figure V.B-3 on page V.B-15 for an illustration of the conceptual drainage conditions and facilities for the Project. As previously indicated, the final number of outlets and proposed improvements (e.g., headwalls or flared-end sections with rock slope protection) would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.

More specifically, the northern portion of the Development Area, north of Placerita Creek, would generate runoff flows of approximately 35 cfs, or an increase of approximately 5 cfs over existing conditions during a 50-year storm. The two detention basins (Det-01 and Det-02) to which this area would drain would have an estimated total volume capacity of approximately 1.38 acre-feet, well in excess of the required volume capacity of approximately 1.02 acre-feet necessary to mitigate peak flow rates. The underground detention systems would capture, detain, and infiltrate stormwater flow volumes and provide first flush mitigation before either infiltrating back into the local groundwater basin or draining via outlets to Placerita Creek. These features would mitigate peak flow rates but not hydrograph volumes. As a result, there would be no increase in the peak flow rates or quality of runoff as compared to pre-development conditions.

The southern portion of the Development Area, south of Placerita Creek, would generate runoff of approximately 65 cfs, or an increase of approximately 16 cfs over existing conditions during a 50-year storm. This area would drain to a detention basin system (Det-04) with an estimated volume capacity of approximately 2.87 acre-feet, which would exceed the required volume capacity of approximately 1.89 acre-feet necessary to mitigate peak flow rates. The surface detention system overflow outlet would drain to Placerita Creek, and the perforated underground detention system would detain and infiltrate peak flows and the first flush before they would reach Placerita Creek. As a result, there would be no increase in the peak rates or quality of runoff as compared to pre-development conditions.

Permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) would be used within the Development Area where appropriate, primarily for pedestrian walkways and along the bungalows, the administration building, and the commissary, as well as within the Conditional Parking Areas, if developed. In addition, permeable surfaces could potentially be used for parking areas that would not be used by trucks (e.g., single rows of parking with a limited number of spaces, such as those that would surround some of the proposed detention basins, or the parking row adjacent to the Administration building).

Also following Project construction, the land around the Potential Mobile Home Relocation Areas would remain undeveloped and vegetated, allowing for continued infiltration of stormwater runoff and/or sheet flow to Placerita Creek. If developed, the Conditional Parking Areas would be paved with permeable pavement to allow infiltration, with bioswales introduced on the downstream sides of the lots to intercept and treat sheet flows prior to discharge to Placerita Creek. The land surrounding the Conditional Parking

Areas would also remain vegetated, with new landscaping introduced. Drainage impacts associated with the Water Tank Area and Trail Area (all or portions of which, respectively, are located in Watershed Off-2a) are discussed below.[15]

In addition, LACDPW maintains culverts on Placerita Canyon Road at Mile Marker Nos. 2.32, 2.45, and 2.57. In particular, at Mile Marker No. 2.32 there is a 24-inch CMP that currently outlets on the south side of Placerita Canyon Road. Conceptual plans call for the extension of this 24-inch pipe underground through the Ranch and eventually to Placerita Creek, but a debris desilting inlet may be constructed on the southern side of Placerita Canyon Road to intercept the tributary debris flows. In order to maintain access for maintenance, an easement shall be provided in favor of the County.

In summary, the existing drainage patterns within the Development Area, the Potential Mobile Home Relocation Areas, and the Conditional Parking Areas would be maintained, as would peak flow rates through the use of on-site detention facilities and energy dissipators and/or velocity reducers at outlets in Placerita Creek, as necessary. The on-site drainage system would be designed and sized to accommodate Project runoff flows. As previously indicated, these features would mitigate peak flow rates but not hydrograph volumes. Therefore, no significant impacts associated with changes to drainage patterns, the capacity of stormwater drainage systems, or high erosion and debris deposition would result from buildout of the Project. Refer to Section V.D, Water Quality, for discussion of the potential for additional polluted runoff.

(ii) Off-Site Drainage

With regard to off-site drainage, off-site stormwater runoff flows (from areas north of the Development Area) to the northern fill pad would be intercepted by drainage ditches and directed around the northern portion of the Development Area to Placerita Creek, with energy dissipators and/or velocity reducers installed at the creek outlets. Off-site flows from the SR-14/Placerita Canyon Road interchange would continue to be routed to the existing 48-inch storm drain and conveyed to Placerita Creek. Off-site stormwater flows from the areas south of the Development Area (with the exception of stormwater from watershed Off-3a), including the Water Tank Area and Trail Area, along with surface runoff from adjacent portions of Placerita Canyon Road would be intercepted by two proposed debris basins (DB-05 and DB-06). Basin DB-05 would allow for the containment of approximately 10,258 cubic yards of debris flows and runoff from Subareas Off-1a and Off-7a, which would be sufficient to accommodate the estimated 10,041 cubic yards potentially

[15] *David Evans and Associates, August 2011.*

generated. Likewise, Basin DB-06 would be able to contain approximately 6,467 cubic yards of debris flows and runoff from Subareas Off-2a and Off-8a, which would adequately accommodate the estimated 4,336 cubic yards potentially generated. Stormwater from these two basins would then flow north in a proposed underground storm drain system through the Development Area to Placerita Creek. Flows from watershed Off-3a would continue to be intercepted by the 24-inch CMP pipe and conveyed to Placerita Creek, but a debris desilting inlet may be constructed on the southern side of Placerita Canyon Road to intercept the tributary debris flows. Overall, this proposed system would maintain the existing patterns for off-site drainage.

With respect to the Water Tank Area in particular, this area would involve limited grading to smooth and pave the existing access road to provide all-weather access, to the satisfaction of Newhall County Water District, in addition to a pad for the proposed water tank. Similarly, the Trail Area would involve limited earthwork that would generally follow existing grades. The land surrounding the Water Tank Area and Trail Area would remain vegetated and undeveloped, and the ephemeral drainage that currently sheet flows over the water tank access road would be directed to an Arizona dip crossing in the proposed paved access road. The increase in pervious area along the access road has been considered in the hydrology calculations in the Drainage Concept, and the proposed downstream debris basins, described above, would be designed to accommodate any limited increase in stormwater flows.[16]

The Project would increase the area of paving in the north lane of Placerita Canyon Road by less than 5,000 square feet. This increase in paved area is not considered substantial and would have no impact on peak flows, volumes, or water quality; however, the increase was still analyzed in the Drainage Concept irrespective of whether it is considered a substantial impact or not. Nevertheless, two inlets are proposed at the proposed main entrance of the Development Area to collect the flows generated by the improvements to Placerita Canyon Road prior to discharge to Placerita Creek via the 48-inch Caltrans storm drain. As the existing drainage patterns of the surrounding area would not be altered, associated impacts would be less than significant.

Additionally, the Project's potential hydromodification impacts to Placerita Creek were evaluated. As part of this study, sediment transport analyses were conducted under pre- and post-Project conditions for various storm events to determine the long-term impacts to the streambed. The Drainage Concept includes the Sediment Transport Analyses for Placerita Creek (Sediment Transport Analyses), prepared by JLC Engineering

---

[16] *Ibid.*

& Consulting in August 2011. The hydromodification modeling performed for Placerita Creek was conservative because the modeling did not consider the detention basins and other Low Impact Development measures implemented as part of the Project. The study results indicate for the six storm events evaluated, the streambed would experience downstream sedimentation increases of an estimated maximum of 0.1 to 0.2 feet during post-Project conditions. Such increases in streambed elevation would not impact the creek's capacity, which could experience a peak flow rate of approximately 5,800 cfs during a County 50-year storm event (bulk and burned) from a tributary watershed of almost 6 square miles, as runoff would still be contained within the natural channel. Thus, the sediment load transported downstream of the SR-14 culvert that abuts the Development Area after Project construction would not adversely impact streambed elevations and would not result in adverse impacts to downstream properties. Therefore, the Project would not substantially contribute or be subject to high erosion or debris deposition from runoff, and no significant impacts would result.[17]

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction

The majority of construction in the Off-Site Infrastructure Improvement Areas would occur on flat, previously disturbed and/or developed areas. Construction activities associated with the off-site water and sewer lines would consist primarily of trenching and laying pipe, after which the areas would be restored to their previous condition and repaved as necessary. These activities would progress quickly at a rate of approximately 75 to 100 linear feet per day (excavated and installed). The SCE power pole replacements would require minimal excavation to remove existing poles and install new poles. There would be limited grading of soil, estimated at a maximum of 7 cubic yards per pole for steel poles and 2 cubic yards for wood poles, some of which could be used to backfill the excavated holes, for a total of up to 63 cubic yards of export. Following installation, existing conditions would be restored, resulting in a negligible change in finished grades. As such, construction activities would not alter the topography of the Off-Site Infrastructure Improvement Areas or have the potential to cause erosion. Notwithstanding, during construction, a SWPPP would be implemented to provide for temporary stormwater management for these areas.

[17] *Furthermore, based on preliminary data the study determined the buried soil cement improvements proposed for the creek banks within the Development Area would provide sufficient protection against scouring. The bank protection will be designed (per improvement plans) to protect against scour.*

The Project would also include traffic infrastructure improvements as part of the Project Design Features and Mitigation Measures within the Caltrans right-of-way around the SR-14/Placerita Canyon Road on-ramps and off-ramps, as well as at the Sierra Highway/SR-14 southbound ramps, Sierra Highway/Placerita Canyon Road, and the current Ranch main entrance/Placerita Canyon Road. These improvements would involve cutting into an existing engineered slope adjacent to the SR-14 northbound off-ramp. Appropriate drainage infrastructure would be provided in order to maintain drainage patterns and flow rates, and a SWPPP would be implemented to provide for temporary stormwater management for these areas. Therefore, less than significant impacts would occur.

(b) Operation

There would be no change in drainage patterns associated with the Off-Site Infrastructure Improvement Areas because all improvements would be located in previously disturbed and/or developed areas that would be restored to their previous condition (with negligible change in finished grades) and repaved as necessary, which would not affect stormwater flows or stormwater infiltration. In addition, appropriate drainage infrastructure would be provided at the off-site intersections to be improved in order to maintain drainage patterns and flow rates. Therefore, no impacts associated with changes to drainage patterns, the capacity of stormwater drainage systems, or high erosion and debris deposition would result from the Project in the Off-Site Infrastructure Improvement Areas.

Threshold B-2: 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Threshold B-4: Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, or within a floodway or floodplain?

Threshold B-5: Would the project place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

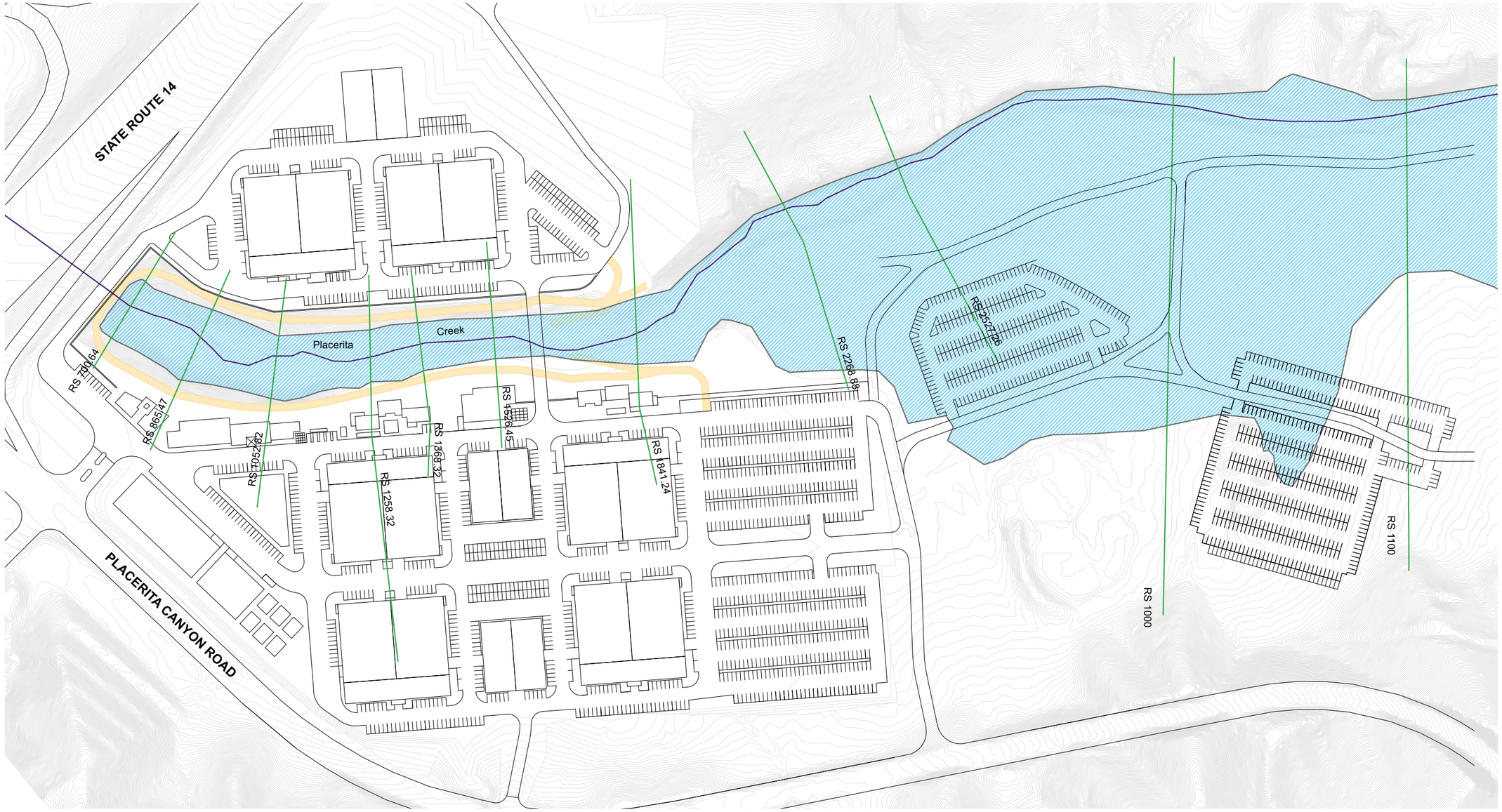
During Project construction, a 20-foot-wide temporary unpaved construction road around the base of the fill pad slopes into Placerita Creek, with a temporary creek crossing

located approximately midway between the eastern and western sides of the Development Area (in the location of an existing unpaved crossing), would be constructed for access between the northern and southern portions of the Development Area and to stabilize the creek slopes. This crossing would be removed and this portion of the creek would be restored after the completion of grading and slope stabilization (discussed further below).

Project grading within the Development Area would alter the 100-year floodplain boundary (FEMA Zone A) due to changes in the finished grade. Such changes to the site topography would be necessary to ensure all new buildings would be located outside of the 100-year flood zone. Similarly, a portion of the LADWP transmission corridor along Placerita Creek, which is currently within the 100-year flood zone and which would be used for surface parking, would be raised in elevation to be out of the future (post-project) 100-year flood zone. Following Project grading, a portion of the northern Conditional Parking Area would be within the 100-year flood zone, while all but the northernmost corner of the southern Conditional Parking Area would be outside the proposed 100-year flood zone. As discussed above, based on the applicable FEMA FIRM, the Potential Mobile Home Relocation Areas, Water Tank Area, and Trail Area are not located within the current or proposed 100-year flood zone.

Prior to the commencement of construction, the Applicant would obtain a Conditional Letter of Map Revision (CLOMR) from FEMA for the proposed change to Zone A, the 100-year flood zone, per the FIRM, which would be provided to the satisfaction of LACDPW as required as a CUP condition of approval and a condition of the vesting tentative tract map. As shown in Figure V.B-4 on page V.B-28, following Project grading, the portion of the floodplain located within the Development Area would be generally contained within Placerita Creek. While an increase in the floodplain contour would occur upstream within undeveloped land on the Ranch (including in the area near the Conditional Parking Areas), the new floodplain would not affect any structures. The post-Project floodplain limits depicted in Figure V.B-4 are approximate only and would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.

Project grading would change the County adopted floodway and floodplain. A conceptual floodway map revision would be adopted at the time of Project approval for the proposed alteration to the County adopted floodway and floodplain limits. The two Conditional Parking Areas, if developed, would be located outside the current and proposed County floodway, in accordance with LACDPW requirements. However, as mentioned above, a portion of the northern Conditional Parking Area would be within the proposed County floodplain, while all but the northernmost corner of the southern Conditional Parking Area would be outside the proposed County floodplain. Grading for these lots would maintain existing drainage patterns, and the lots would be designed such that no increase in peak flows would occur, through the use of porous paving materials and



	Floodplain Area* (Ac)
Existing Conditions	40.75
Proposed Conditions	29.06
Difference	11.69

* From Culvert to River Station 1100

LEGEND

- Water Surface Profile Cross Sections
- Placerita Creek
- Approximate Floodplain
- Access Roads

Source: David Evans and Associates Inc. 2012.

matrix environmental

Figure V.B-4
Post-Project Floodplain Map

vegetated drainage swales located around the parking areas. Further, Project construction would not subject any adjacent properties to flooding since all floodplain changes would occur within the Ranch, with no effect on downstream floodplain contours.

As discussed above, the existing storm drain facilities that serve the SR-14/Placerita Canyon Road interchange are sufficiently deep and would remain in place during Project construction. As such, no off-site drainage infrastructure would be affected by the Project. In addition, the new on-site storm drain facilities would be constructed to support the development and would be in place and functioning as development progresses to serve their respective drainages. Therefore, no significant flood impacts would result during Project construction, including flooding resulting from the alteration of the course of a stream or river.

(b) Operation

(i) On-Site Flooding

Following Project construction, the slopes of Placerita Creek within the Development Area would be reconstructed and stabilized with soil cement, which would be buried to allow surface vegetation, and a permanent, paved 15-foot wide access road (previously described) to be used by the County for maintenance purposes would be introduced at the top of the slope stabilization. The stabilized slopes would be replanted with native plant species. The on-site drainage system would include a total of two outlets along the embankments of Placerita Creek in order to generally maintain the historic drainage patterns, with headwalls or flared-end sections with rock slope protection. As previously indicated, the final number of outlets and proposed improvements would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design. In addition, the buried soil cement improvements would protect against scouring.

As discussed above, following grading for the Project, no structures would be placed within the 100-year floodplain. Further, the average water surface elevation in Placerita Creek during a County 50-year storm event is far below the future elevations within the Development Area. Accordingly, the Development Area would lie outside the floodplain for Placerita Creek and would not be subject to inundation. As also previously discussed, the Potential Mobile Home Relocation Areas, Water Tank Area, and Trail Area are not located within the current or proposed 100-year flood zone. Other than relocation of the Ranch foreman's mobile home, no housing would be developed as part of the Project. Therefore, no significant impacts associated with flooding would result from buildout of the Project, including flooding resulting from the alteration of the course of a stream or river.

(ii) Off-Site Flooding

With respect to downstream flooding, impacts would be less than significant since the Project's drainage systems for the conveyance of both on- and off-site generated flows would ensure post-development peak flow rates would not exceed pre-development peak flow rates.

Additionally, the Project's potential hydromodification impacts to Placerita Creek were evaluated. As part of this study, sediment transport analyses were conducted under pre- and post-Project conditions for various storm events to determine the long-term impacts to the streambed. As previously discussed, the hydromodification modeling performed for Placerita Creek was conservative because the modeling did not consider the detention basins and other Low Impact Development measures implemented as part of the Project. The study results indicate for the six storm events evaluated, the streambed would experience downstream sedimentation increases of an estimated maximum of 0.1 to 0.2 feet during post-Project conditions. Such increases in streambed elevation would not impact the creek's capacity, which could experience a peak flow rate of approximately 5,800 cfs during a County 50-year storm event (bulk and burned) from a tributary watershed of almost 6 square miles, as runoff would still be contained within the natural channel. Thus, the sediment load transported downstream of the SR-14 culvert that abuts the Development Area after Project construction would not adversely impact streambed elevations and would not result in adverse impacts to downstream properties. Therefore, no significant impacts associated with hydromodification or associated downstream flooding would result from buildout of the Project.[18]

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction

Based on the applicable FEMA Flood Insurance Rate Map, a portion of the Off-Site Infrastructure Improvement Areas, generally corresponding to Placerita Creek, falls within Flood Zone A. However, due to the temporary nature and timing of the off-site construction activities, it is not anticipated the Project would create a significant flood hazard to off-site construction activities. Less than significant impacts associated with flooding from the Off-Site Infrastructure Improvements would result.

---

[18] *Furthermore, based on preliminary data the study determined the buried soil cement improvements proposed for the creek banks within the Development Area would provide sufficient protection against scouring. The bank protection will be designed (per improvement plans) to protect against scour.*

(b) Operation

There would be no change in drainage patterns associated with the Off-Site Infrastructure Improvement Areas. Additionally, implementation of the off-site improvements would not place any structures which would impede or redirect flood flows. In the event Alternative B for the off-site water line alignment (described in Section V.L.1, Utilities and Service Systems—Water Supply) is implemented, the associated water booster pump would either be placed in a location outside of the limits of FEMA Zone A and the County adopted floodplain, or the finished grade of that location would be raised to elevate the structure outside of the floodplain. Therefore, no impacts associated with flooding would occur.

Threshold B-6: Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Threshold B-7: Would the project place structures in areas subject to inundation by seiche, tsunami, or be located in or subject to high mudflow conditions?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas—and Off-Site Infrastructure Improvement Areas Impacts

There are no major levees or dams near the Ranch that could expose people or structures to a significant risk of loss associated with flooding due to structure failure. Similarly, the Ranch is not located near any body of water large enough to potentially create seiches during seismic activity, nor is the Pacific Ocean close enough to pose a tsunami risk to the Development Area, the Potential Mobile Home Relocation Areas, the Conditional Parking Areas, the Water Tank Area, the Trail Area, the remainder of the Ranch, or the Off-Site Infrastructure Improvement Areas.

With regard to the potential for mudflows, the Project vicinity may be subject to inundation by mudflows due to the existing topography. Mudflows, also known as debris flows, are shallow water-saturated landslides that travel rapidly down slopes carrying rocks, brush, and other debris. A mudflow can occur naturally as a result of heavy rainfall on a slope that contains loose soil or debris. Human activity can also induce a slide, such as when soil becomes saturated from a broken water pipe or incorrect diversion of runoff concentrated from developed areas saturates soil. The path of a mudflow is determined by local topography and typically follows existing drainage patterns. As previously mentioned, the two debris basins (DB-05 and DB-06) proposed in the southern portion of the site would be designed and sized to accommodate both surface water and debris flows generated on the hillsides immediately south of Placerita Canyon Road (i.e., watersheds Off-1a and Off-

2a). The first debris basin (DB-05) depicted in Figure V.B-5 on page V.B-33, would be 16 feet deep with side slopes of 2:1 to allow for containment of approximately 10,258 cubic yards of debris flows. The second basin (DB-06) also depicted in Figure V.B-5, would be a 14-foot-deep basin with side slopes of 2:1 and would be able to contain approximately 6,467 cubic yards of debris flows. As indicated in the Drainage Concept and previously discussed, the basin capacities would be more than sufficient for the projected volume of debris.[19] Similarly during construction, as previously discussed, a SWPPP would be implemented to provide for temporary stormwater management, including water quality and debris protection. As a result, impacts related to mudflows would be less than significant.

4. CUMULATIVE IMPACTS

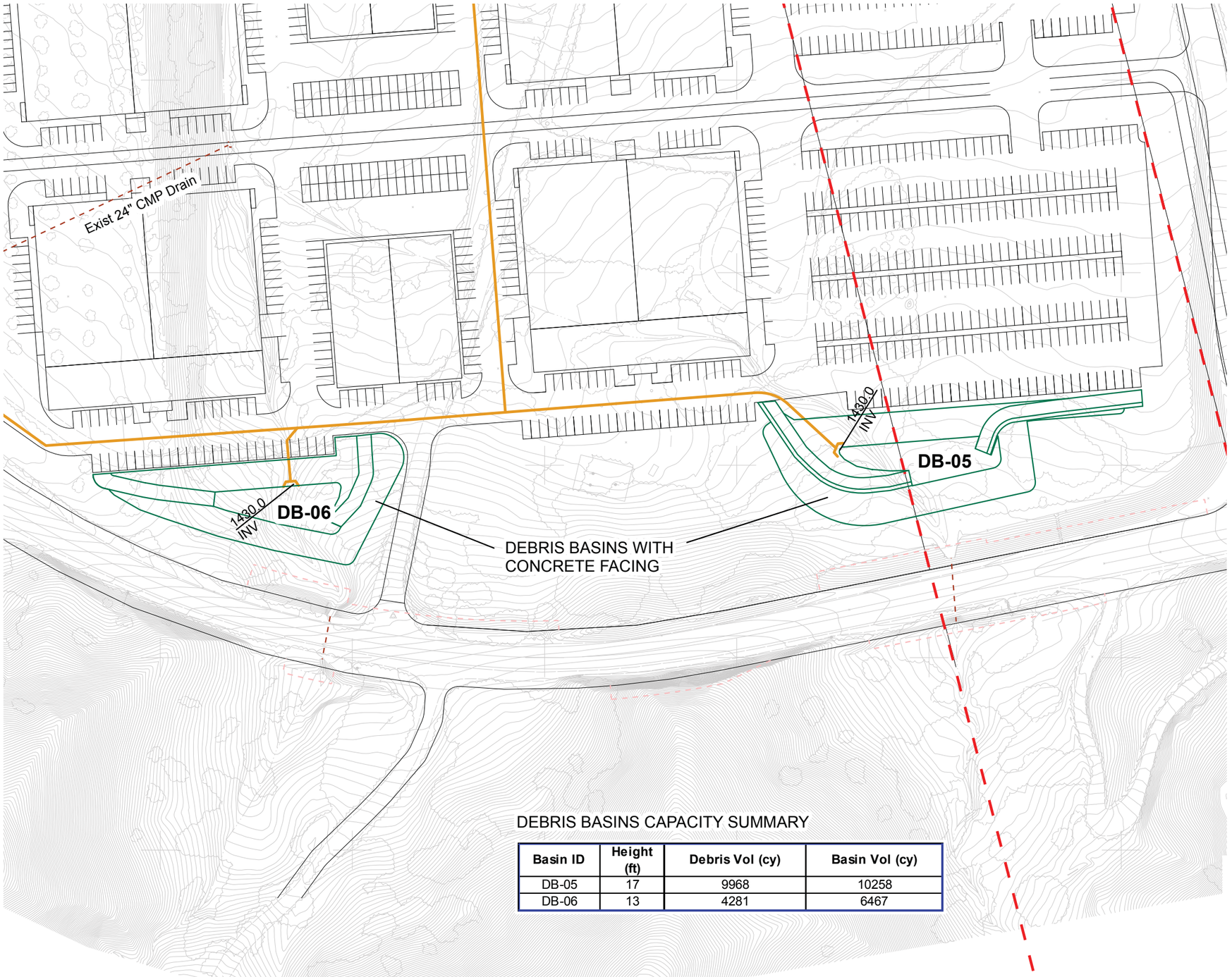
The geographic context for the cumulative impact analysis on surface water hydrology is the Placerita Creek watershed. Cumulative growth as identified in Section III, Environmental Setting, including forecasted growth through 2020 and various Related Projects that are anticipated to be developed within the vicinity of the Development Area, could subject people and property to flood hazards if either located within areas subject to flooding or if downstream flooding results. It is anticipated that individual buildings and facilities would be subject to project review, building permit issuance processes, and FEMA compliance, as appropriate, which would require design features and characteristics to reduce potential flood impacts on an individual, and thus, cumulative basis, to acceptable levels. Further, in accordance with County requirements, future development projects would be required to implement BMPs such that post-development peak stormwater runoff discharge rates would not exceed the existing pre-development rates. The Project would not contribute to any potentially significant cumulative impacts because it would not result in any increase in runoff flows, and it would neither subject on-site persons and property to inundation from 100-year floodwaters, nor subject downstream uses to floodwaters generated on-site. Therefore, cumulative impacts related to potential drainage and flood hazards would be less than significant.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF B-1: The Project's storm drain system shall be designed and sized to ensure that post-development peak flow rates will not exceed

[19] *As previously indicated, the final design of these improvements, including the debris basin slopes and the design of terrace drains, would be determined in the Final Hydrology and Hydraulics Study approved by LACDPW for the final Project design.*



DEBRIS BASINS CAPACITY SUMMARY

Basin ID	Height (ft)	Debris Vol (cy)	Basin Vol (cy)
DB-05	17	9968	10258
DB-06	13	4281	6467

0 50 100 200 Feet

Legend

- Debris Basins
- Existing Storm Drain - Off-site Flows
- Proposed Storm Drain-Off-Site Flows
- DWP Right of Way
- Slope Maintenance Easement

Source: David Evans and Associates, 2012.

matrix environmental

Figure V.B-5
Debris Basins

pre-development peak flow rates to prevent off-site downstream flooding caused by the Project.

PDF B-2: Flows from on- and off-site drainage systems shall be routed to the same creek outlets so as to minimize the number of outlets and disturbance to the Placerita Creek banks.

PDF B-3: In compliance with County of Los Angeles Department of Public Works requirements, a variety of construction and operational best management practices shall be specified in the Project's Stormwater Pollution Prevention Plan and Standard Urban Stormwater Mitigation Plan and implemented to allow infiltration and treat stormwater runoff, including the following:

- Cut and fill slopes shall be constructed no steeper than 1:2 (vertical:horizontal) unless steeper slopes are approved at specific locations by the County of Los Angeles Department of Public Works. All slopes shall be stabilized in accordance with Los Angeles County Standard Erosion Control Policy.
- Design Pollution Prevention best management practices, such as concentrated flow conveyance systems, protection/velocity dissipation devices, and slope surface protection, shall be employed.
- New slopes shall be treated with erosion control materials such as native grasses, jute mesh, and soil stabilizers upon completion of grading.
- Retaining walls shall be incorporated into the Project's design to reduce the steepness of slopes and/or to shorten slopes.
- Existing slopes shall be disturbed only when necessary.
- Cut and fill areas shall be minimized to reduce slope lengths.
- Benches or terraces shall be provided on high cut and fill slopes to reduce the concentration of flows.
- Slopes shall be rounded and shaped to reduce concentrated flows.
- Hard surfaces (slope paving) shall be constructed beneath the proposed permanent single-span bridge as a slope stabilization feature; buried soil cement shall be used along the creek banks to allow revegetation of the stabilized slopes. The bridge shall be designed to limit work within flowing streams and minimize construction impacts to surface waters. The proposed bridge shall span Placerita Creek, with no bridge footings or other permanent impermeable surfaces within areas of the creek subject to the jurisdiction of the U.S. Army Corps of Engineers.

- The Project shall contain two drainage line outlets with headwalls or flared-end sections with rock slope protection, as required by the County of Los Angeles Department of Public Works. These devices generally shall be located along the Placerita Creek embankments to maintain historic drainage patterns. The final number of outlets and proposed improvements (e.g., headwalls or flared-end sections with rock slope protection) shall be determined in the final Hydrology and Hydraulics Study approved by the County of Los Angeles Department of Public Works for the final Project design.
- Downspout Connection—The proposed building downspouts shall direct stormwater to the streets and storm drain system, which shall discharge into the on-site detention basins that would have infiltration capacity (thus reducing stormwater loads during precipitation events).
- Vegetated Swales—These engineered densely vegetated depressions shall be implemented where appropriate to retain and filter the first flush of runoff from impervious surfaces such as parking lots or streets.
- Riparian Buffers—The existing riparian buffer adjacent to Placerita Creek shall be expanded as part of the Project after stabilization of the fill pad slopes.
- Concentrated flow conveyance systems—Other new conveyance systems shall include curb and gutter, a storm drain system, catch basins, manholes, asphalt-lined dikes, detention basin surface ponds, underground detention/infiltration chamber devices, and debris basins.
- Routine non-structural source control best management practices shall include the following:
  - Educational materials for Property Owners, Tenants and Occupants regarding stormwater protection and pollution prevention;
  - Activity Restrictions;
  - Spill Contingency Plans;
  - Employee Training Programs regarding stormwater protection and pollution prevention;
  - Road Sweeping; and
  - Catch Basin Inspections.
- Routine structural source control best management practices shall include the following:

  - Landscape Planning and Design;
  - Roof Runoff Controls;
  - Efficient Irrigation;
  - Protection of Slopes and Channels;
  - Storm Drain Signage;
  - Inlet Trash Racks;
  - Energy Dissipators; and
  - Trash Storage Areas and Litter Control.
- Erosion Control—Measures shall be employed to prevent the movement of soil by wind or water during construction and might include watering and erecting physical barriers to the movement of soil particles.

Additional relevant Project Design Features are provided in Section V.D, Water Quality, of this Draft EIR.

b. Mitigation Measures

Based on the Project design features to be implemented as part of the Project, Project-level impacts on surface water hydrology would be less than significant. However, to ensure that impacts remain less than significant, the following mitigation measures would be implemented:

MM B-1: Prior to the issuance of a grading permit, the Applicant shall submit to the County of Los Angeles Department of Public Works for review and approval the final Hydrology and Hydraulic Study based on final Project designs in compliance with the County's codes and policies, including the County of Los Angeles Department of Public Works Hydraulic Design Manual, Sedimentation Manual, Low Impact Development Standards Manual, and consistent with the approved Drainage Concept/LID Plan/SUSMP Plan contained in Appendix C of the Draft EIR. The final Hydrology and Hydraulic Study shall demonstrate that relevant Project impacts remain less than significant.

MM B-2: Project design and construction shall comply with applicable County codes and policies and the final Hydrology and Hydraulic Study.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

As determined in this analysis, with implementation of the Project Design Features and Mitigation Measures, Project-level and cumulative impacts on surface water hydrology would be less than significant.

V. Environmental Impact Analysis

C. Noise

V. ENVIRONMENTAL IMPACT ANALYSIS

C. NOISE

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's potential noise and vibration impacts. Specifically, the analysis describes the existing noise environment within the Project area, estimates future noise and vibration levels at surrounding land uses resulting from construction and operation of the Project, identifies the potential for significant noise and vibration impacts, and provides mitigation measures to address significant impacts. An evaluation of the potential cumulative noise impacts of the Project and related projects is also provided. Noise calculation worksheets were prepared by Acoustical Engineering Services, Inc. (AES) and are included in Appendix D of this Draft EIR. A supplemental analysis of the Project's impacts relative to existing (2010) conditions was conducted based on the recent decision in *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351 and is provided in Appendix M of this EIR.

2. ENVIRONMENTAL SETTING

a. Noise and Vibration Basics

(1) Noise

(a) Fundamentals of Sound and Environmental Noise

Noise is commonly defined as sound that is undesirable because it interferes with speech communication and hearing, causes sleep disturbances, or is otherwise annoying (unwanted sound). The decibel (dB) is a conventional unit for measuring the amplitude of sound because it accounts for the large variations in sound pressure amplitude and reflects the way people perceive changes in sound amplitude.[1] The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human frequency-dependent response, the A-weighted system is used to adjust measured sound levels (dBA). The term "A-weighted" refers to filtering the noise signal in a manner that corresponds to the way the human ear perceives sound. Examples of various sound levels in different environments are shown in Table V.C-1 on page V.C-2.

---

[1] *All sound levels measured in decibel (dB), in this study are relative to $2x10^{-5}$ N/m^2.*

Table V.C-1
Typical Noise Levels

Common Outdoor Activities	Noise Levels, dBA	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 1,000 feet	—105—	
	—100—	
Gas Lawn Mower at 3 feet	—95—	
	—90—	
Diesel Truck at 50 feet at 50 mph	—85—	Food Blender at 3 feet
	—80—	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime	—75—	
Gas Lawn Mower at 100 feet	**—70—**	Vacuum Cleaner at 10 feet
Commercial Area	—65—	Normal Speech at 3 feet
Heavy Traffic at 300 feet	**—60—**	
	—55—	Large Business Office
Quiet Urban Daytime	**—50—**	Dishwasher Next Room
	—45—	
Quiet Urban Nighttime	**—40—**	Theater, Large Conference Room
Quiet Suburban Nighttime	—35—	(Background)
	—30—	Library
Quiet Rural Nighttime	—25—	Bedroom at Night, Concert Hall
	—20—	(Background)
	—15—	Broadcast/Recording Studio
	—10—	
	—5—	
Lowest Threshold of Human Hearing	**—0—**	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement (TeNS), 1998 and AES, 2011.

People commonly judge the relative magnitude of sound sensation using subjective terms such as “loudness” or “noisiness.” A change in sound level of 3 dB is considered “just perceptible,” a change in sound level of 5 dB is considered “clearly noticeable,” and an upward change of 10 dB is recognized as “twice as loud.”[2]

(b) Outdoor Sound Propagation

In an outdoor environment, sound levels attenuate through the air as a function of distance. Such attenuation is called “distance loss” or “geometric spreading,” and is based on the type of source configuration (i.e., a point source or line source). The rate of sound

[2] *Engineering Noise Control, Bies & Hansen, 1988.*

attenuation for a point source, such as a piece of equipment (e.g., air conditioner, electrical transformer or bulldozer), is 6 dB per doubling of distance from the noise source. For example, an outdoor condenser fan that generates a sound level of 60 dBA at a distance of five feet would attenuate to 54 dBA at a distance of 10 feet. The rate of sound attenuation for a line source, such as a constant flow of traffic on a roadway, is 3 dB per doubling of distance.[3]

Structures (e.g., buildings and solid walls) and natural topography (e.g., hills) that obstruct the line-of-sight between a noise source and a receptor further reduce the noise level if the receptor is located within the "shadow" of the obstruction, such as behind a sound wall. This type of sound attenuation is known as "barrier insertion loss." If a receptor is located behind the wall but still has a view of the source (i.e., line-of-sight is not fully blocked), some barrier insertion loss would still occur, but to a lesser extent. A receptor located on the same side of the wall as a noise source may actually experience an increase in the perceived noise level as the wall reflects noise back to the receptor, thereby compounding the noise. Noise barriers can provide noise level reductions ranging from approximately 5 dBA (where the barrier just breaks the line-of-sight between the source and receiver) to an upper range of 20 dBA with a more substantial barrier.[4]

(c) Environmental Noise Descriptors

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider the effect of noise both as total acoustical energy content and the time and duration of occurrence. The most frequently used noise descriptors, including those used by the County of Los Angeles and the City of Santa Clarita, are summarized below. All noise descriptors used in this noise analysis are based on the A-weighted sound pressure levels, dBA.

Equivalent Sound Level (L_{eq}). L_{eq} is a measurement of the acoustic energy content of noise averaged over a specified time period. Thus, the L_{eq} of a time-varying sound and that of a steady sound are the same if they deliver the same amount of energy to the receptor's ear during exposure. L_{eq} for minimum 15-minute periods, during the daytime or nighttime hours, and 24-hour periods are commonly used in environmental assessments. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during daytime or nighttime hours.

---

[3] *Caltrans, Technical Noise Supplement (TeNS), 1998.*

[4] *Ibid.*

Maximum Sound Level (L_{max}). L_{max} represents the maximum sound level measured during a measurement period.

Statistical Sound Level (L_n). L_n is a statistical description of the sound level that is exceeded over some fraction of a given period of time. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_8 and L_{25} represent the noise levels that are exceeded 8 and 25 percent of the time, respectively, or for 5 and 15 minutes during a 1-hour period, respectively. The County of Los Angeles noise limits are provided in terms of statistical sound levels.

Community Noise Equivalent Level (CNEL). CNEL is the time average of all A-weighted sound levels for a 24-hour period with a 10 dBA adjustment (upward) added to the sound levels that occur between the hours of 10:00 P.M. and 7:00 A.M., and a 5 dBA adjustment (upward) added to the sound levels which occur between the hours of 7:00 P.M. and 10:00 P.M. These penalties attempt to account for increased human sensitivity to noise environment during the quieter nighttime periods, particularly where sleep is the most probable activity. CNEL has been adopted by the State of California to define the community noise environment for development of the community noise element of a General Plan, as currently used by the County of Los Angeles and the City of Santa Clarita in their Noise Element.[5]

Day-Night Average Level (L_{dn} or DNL). L_{dn}, like CNEL, is the weighted 24-hour average noise level in an environment which accounts for people's increased annoyance to noise occurring in the nighttime hours. It is the average equivalent A-Weighted sound level during a 24-hour day, calculated after adding 10 decibels to sound levels which occur after 10:00 P.M. and before 7:00 A.M. Typically, L_{dn} levels are within 1 dBA of CNEL levels.

(2) Ground-Borne Vibration

Vibration is commonly defined as an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or the root-mean-square (RMS) velocity is commonly used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the squareroot of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human

[5] *State of California, General Plan Guidelines, 2003.*

response to ground-borne vibration. The RMS vibration velocity level can be presented in inch per second or in VdB (referenced to 1 micro-inch per second).[6] Ground-borne vibration generated by man-made activities (e.g., road traffic, construction operations) typically attenuates rapidly with distance from the source of the vibration.

b. Regulatory Framework

Government agencies have established various noise standards and guidelines regarding noise. The Ranch, including the Development Area and the other Ranch portions of the Project site, is located within the County of Los Angeles. The majority of the Off-Site Infrastructure Improvement Areas is located in the City of Santa Clarita, to the west of the Ranch and west of State Route 14 (SR-14). Therefore, applicable policies and regulations from the County of Los Angeles and the City of Santa Clarita are used herein to assess potential noise impacts from the Project.

(1) Noise Standards and Guidelines

(a) State of California

The State of California has adopted noise compatibility guidelines for general land use planning. The types of land uses addressed by the State standards and the acceptable noise categories for each land use are included in the *State of California General Plan Guidelines,* which is published and updated by the *Governor's Office of Planning and Research*. The level of acceptability of the noise environment is dependent upon the activity associated with the particular land use. Table V.C-2 on page V.C-6 provides the exterior noise standard associated with various land uses, as described by the State of California land use compatibility for community noise environment.

(b) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that are applicable to noise. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to noise.

(c) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that are applicable to noise. As discussed in the policy

[6] *VdB = 20*Log(Velocity level in micro inch per second)*

Table V.C-2
Land Use Compatibility for Community Noise Exposure

Land Use	Community Exposure Level, CNEL (dBA)			
	Normally Acceptable	**Conditionally Acceptable**	**Normally Unacceptable**	**Clearly Unacceptable**
Residential: Low-Density Single-Family, Duplex, Mobile Homes	50 to 60	55 to 70	70 to 75	Above 75
Residential: Multi-Family	50 to 65	60 to 70	70 to 75	Above 75
Transient Lodging: Motels, Hotels	50 to 65	60 to 70	70 to 80	Above 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 to 70	60 to 70	70 to 80	Above 80
Auditoriums, Concert Halls, Amphitheaters	—	50 to 70	—	Above 65
Sports Arena, Outdoor Spectator Sports	—	50 to 75	—	Above 70
Playgrounds, Neighborhood Parks	50 to 70	—	67 to 75	Above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 to 75	—	70 to 80	Above 80
Office Buildings, Business Commercial and Professional	50 to 70	67 to 77	Above 75	—
Industrial, Manufacturing, Utilities, Agriculture	50 to 75	70 to 80	Above 75	—

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Office of Planning and Research, State of California General Plan Guidelines, October 2003.

consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to noise.

(d) County of Los Angeles Noise Standards

The Noise Control Ordinance of the County of Los Angeles identifies exterior noise standards for any source of sound at any location within the unincorporated areas of the County, and specific noise restrictions, exemptions, and variances for exterior noise sources. While Section 12.08.570 of the Los Angeles County Code exempts motion picture

production and related activities from the provisions of the County Noise ordinance, several of the ordinance requirements are applicable to aspects of the Project and are discussed below.

The County of Los Angeles Noise ordinance (Section 12.08.010, *et seq.*, of the Los Angeles County Code) provides maximum exterior noise level standards for four general noise zones and establishes maximum exterior noise levels for each zone. These noise zones are:

1. Noise-Sensitive Areas—Noise-sensitive zones are designated by the County Health Officer.

2. Residential Properties—This category includes all types of residential developments and properties subject to residential zoning.

3. Commercial Properties—This category includes all types of commercial developments and also includes properties subject to commercial zoning classifications.

4. Industrial Properties—This category includes all properties developed with manufacturing uses and industrial zoning.

For each of these zones, the County Noise ordinance states that exterior operational noise levels caused by Project-related on-site fixed sources (i.e., point noise sources) shall not exceed the levels identified in Table V.C-3 on page V.C-8, or the ambient noise level, whichever is greater, when the ambient noise level is determined without the noise source operating.[7] These standards are based on the duration of the noise. Thus, the louder the noise, the shorter the duration that such noise can last. To define these specific durations of noise, the noise metrics used include L_{50}, L_{25}, $L_{8.3}$, $L_{1.7}$, and L_{max}. As described above, these metrics are based upon a 1 hour timeframe which indicates exceedences of 50, 25, 8.3, and 1.7 percent of the time, plus the maximum sound level during that time period.

The County Noise ordinance identifies specific restrictions regarding construction noise. Pursuant to the County Noise ordinance, the operation of equipment used in construction, drilling, repair, alteration or demolition work is prohibited between the hours of 7:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, and anytime on Sundays or legal holidays if such noise would create a noise

[7] *Ambient noise level is the existing background noise level at the time of measurement or prediction.*

Table V.C-3
County of Los Angeles Exterior Noise Standards

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level[a] dBA
I	Noise-Sensitive Area[b]	Anytime	45
II	Residential Properties	10:00 P.M. to 7:00 A.M. 7:00 A.M. to 10:00 P.M.	45 50
III	Commercial Properties	10:00 P.M. to 7:00 A.M. 7:00 A.M. to 10:00 P.M.	55 60
IV	Industrial Properties	Anytime	70

[a] *This Table is used by the County to develop noise standards based on the duration of the noise source. These standards are described below.*

Standard No. 1 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient L_{50} exceeds the forgoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.*

Standard No. 2 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Standard 1 plus 5 dBA; or, if the ambient L_{25} exceeds the forgoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2*

Standard No. 3 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable noise level from Standard 1 plus 10 dBA; or, if the ambient $LB_{8.3}$ exceeds the forgoing level, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.*

Standard No. 4 *shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable noise level from Standard 1 plus 15 dBA, or, if the ambient $L_{1.7}$ exceeds the forgoing level, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.*

Standard No. 5 *shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 4 shall be the applicable noise level from Standard 1 plus 20 dBA; or, if the ambient L_0 exceeds the forgoing level, then the ambient L_0 becomes the exterior noise level for Standard No. 4.*

[b] *Not defined in the County Noise ordinance. To be designated by the County Health Officer.*

Source: County of Los Angeles Ordinance No. 11743, §12.08.390

disturbance across a residential or commercial real-property line.[8] The County Noise ordinance further states the contractor must conduct construction activities in such a

[8] *County of Los Angeles Ordinance No. 11743, codified in Los Angeles County Code Section 12.08.440. Noise disturbance is defined in Los Angeles County Code Section 12.08.230 as "an alleged intrusive noise which violates an applicable noise standard as set forth in this chapter." Intrusive noise is defined in the same Code section as an "alleged offensive noise which intrudes over and above the existing ambient noise at the receptor property."*

manner that the maximum noise levels at the affected buildings will not exceed those listed in Table V.C-4 on page V.C-10. All mobile and stationary internal-combustion-powered equipment and machinery are also required to be equipped with suitable exhaust and air-intake silencers in proper working order.

The Los Angeles County Code also provides exemptions from the construction standards set forth under Chapter 12.12 of the County Code. Specifically, Section 12.12.050 of the Los Angeles County Code provides an exemption for construction work performed with the County Engineer's permission if the County Engineer can make the finding that: (1) the work proposed to be done is effected with a public interest; (2) hardship, injustice, or unreasonable delay would result from the interruption of construction activities; or (3) the building or structure involved is devoted or intended to be devoted to a use immediately incident to public defense. In addition, Section 12.12.060 of the Los Angeles County Code exempts construction work by public utilities that are subject to the jurisdiction of the Public Utilities Commission where such work is necessary for the preservation of life or property and where such necessity makes it necessary to construct, repair or excavate during prohibited hours.

(e) City of Santa Clarita Noise Regulations

The City of Santa Clarita adopted an ordinance to control point source noise. Sections 11.44.040, 11.44.070, and 11.44.080 of the ordinance are particularly pertinent to the Project.

In general, Section 11.44.040, Noise Limits, sets the following noise levels for residential, commercial, and manufacturing uses taking place on private property. Table V.C-5 on page V.C-11 provides the noise limits for the designated regions (land use) and time periods (daytime and nighttime). Wherever a boundary line occurs between a residential property and a commercial/manufacturing property, the noise level of the quieter zone is to be used.

Section 11.44.070 states, "any noise level from the use or operation of any machinery, equipment, pump, fan, air conditioning apparatus, refrigerating equipment, motor vehicle, or other mechanical or electrical device, or in repairing or rebuilding any motor vehicle, which exceeds the noise limits as set forth in Section 11.44.040 at any property line, or, if a condominium or rental units, within any condominium or rental unit within the complex, shall be a violation of this chapter."

Section 11.44.080 prohibits construction work requiring a building permit on sites within 300 feet of a residentially-zoned property from operating except between the hours of 7:00 A.M. and 7:00 P.M. Monday through Friday, and between 8:00 A.M. and 6:00 P.M. on

Table V.C-4
County of Los Angeles Construction Noise Limits

	Noise Limits, dBA (L_{eq})		
	Single-Family Residential	**Multi-Family Residential**	**Commercial[a]**
Residential Structures			
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment			
Daily, except Sundays and legal holidays, 7:00 A.M. to 8:00 P.M.	75	80	85
Daily, 8:00 P.M. to 7:00 A.M. and all day Sunday and legal holidays	60	64	70
Stationary Equipment: Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment			
Daily, except Sundays and legal holidays, 7:00 A.M. to 8:00 P.M.	60	65	70
Daily, 8:00 P.M. to 7:00 A.M. and all day Sunday and legal holidays	50	55	60
	All Structures		
Business Structures			
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment			
Daily, including Sundays and legal holidays, all hours	85		

[a] *Refers to residential structures within a commercial area. This standard does not apply to commercial structures.*

Source: County of Los Angeles Ordinance No. 11743, §12.08.390

Saturday. Construction work is prohibited on Sundays, New Years Day, Independence Day, Thanksgiving Day, Christmas Day, Memorial Day, and Labor Day. The Planning and Building Services Department of the City of Santa Clarita may issue a permit for work to be done outside of these hours provided that containment of construction noise is provided.

(2) Ground-Borne Vibration Standards

Policies and guidelines from federal, state, and other local governmental agencies are used to assess impacts due to ground-borne vibration. In most circumstances common

Table V.C-5
City of Santa Clarita Exterior Noise Limits

Region	Daytime (7:00 A.M. to 10:00 P.M.)	Nighttime (10:00 P.M. to 7:00 A.M.)
Residential Zone	65	55
Commercial and Manufacturing Zones	80	70

Source: Santa Clarita City Code, Section 11.44.040.

ground-induced vibrations related to roadway traffic and construction activities pose no threat to nearby buildings or structures.

(a) Federal Transit Administration Vibration Standards

The Federal Transit Administration (FTA) has published a technical manual titled, "Transit Noise and Vibration Impacts Assessment," that provides ground-borne vibration impact criteria with respect to human annoyance and building damage during construction activities.[9] With respect to human annoyance, the FTA provides criteria for various land use categories and based on the frequency of vibration events, as indicated in Table V.C-6 on page V.C-12. According to FTA, a vibration criterion of 72 VdB (produced by frequent events) should be used for residential land uses. With respect to potential building damage (primarily from construction activities), the FTA provides guidelines for the evaluation of potential ground-borne vibration damage applicable to various building categories.

Table V.C-7 on page V.C-12 provides the FTA vibration criteria applicable to construction activities. According to FTA guidelines, a vibration criterion of 0.20 inch per second (PPV) should be considered for non-engineered timber and masonry buildings. Furthermore, structures or buildings constructed of reinforced-concrete, steel, or timber, have vibration damage criteria of 0.50 inch per second (PPV) pursuant to the FTA guidelines. Buildings of historical nature are susceptible to ground vibrations and have a vibration criterion of 0.12 inch per second (PPV), pursuant to FTA criteria.

(b) Caltrans Vibration Standard

With respect to human annoyance, a study by the California Department of Transportation (Caltrans) shows vibration velocity levels greater than 0.04 inch per second

[9] *Federal Transit Administration, "Transit Noise and Vibration Impact Assessment," May 2006.*

Table V.C-6
FTA Vibration Impact Criteria—Typical Human Annoyance Levels

Land Use Category	Ground-Borne Vibration Impact VdB (referenced 1 micro-inch per second)		
	Frequent Events[a]	Occasional Events[b]	Infrequent Events[c]
Category 1: Buildings where vibration would interfere with interior operations	65 VdB[d]	65 VdB[d]	65 VdB[d]
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB

[a] *"Frequent Events" is defined as more than 70 vibration events of the same source per day.*
[b] *"Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.*
[c] *"Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.*
[d] *This criterion limit is based on the levels that are acceptable for most moderately sensitive equipment such as optical microscopes.*

Source: Federal Transit Administration, 2006.

Table V.C-7
FTA Vibration Impact Criteria—Typical Levels for Building Damage

Building Category	Construction Vibration Damage Criteria	
	PPV (inch per second)	RMS (VdB)
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration, 2006.

(PPV) are distinctly perceptible to humans and become strongly perceptible when reaching 0.10 inch per second (PPV) as shown in Table V.C-8 on page V.C-13. Caltrans provides guidelines/recommendations to limit ground-borne vibration based on the age and/or physical condition of the structures that are located in close proximity to construction activity. Therefore, the building damage threshold with respect to ground-borne vibration varies depending on the age and physical condition of the structure in question. Table V.C-9 on page V.C-13 presents the Caltrans guidelines with respect to vibration damage threshold criteria. While modern industrial/commercial buildings can endure

Table V.C-8
Caltrans Guidelines—Typical Vibration Annoyance Thresholds

Human Response	Maximum PPV (inch per second)	
	Transient Sources[a]	Continuous/Frequent Intermittent Sources[b]
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.90	0.10
Severe	2.00	0.40

[a] *Transient sources created by a single isolated vibration event, such as blasting or drop balls.*

[b] *Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.*

Source: Caltrans, 2004.

Table V.C-9
Caltrans Guidelines—Typical Vibration Damage Thresholds

Structure and Condition	Maximum PPV (inch per second)	
	Transient Sources[a]	Continuous/Frequent Intermittent Sources[b]
Extremely fragile buildings, ruins ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

[a] *Transient sources created by a single isolated vibration event, such as blasting or drop balls.*

[b] *Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.*

Source: Caltrans, 2004.

vibration levels up to a maximum of 0.5 inch per second (PPV), historical structures have a much lower vibration tolerance of 0.25 inch per second (PPV), pursuant to Caltrans thresholds criteria.

(c) Los Angeles County Vibration Standard

The Los Angeles County Noise ordinance section 12.08.350 provides a presumed perception threshold of 0.01 inch per second RMS; however, this applies to ground-borne vibrations from long-term operational activities, such as surface traffic and not to short-term activities such as construction. Therefore, the 0.01 inch per second RMS vibration criteria is used in connection with the Project's operation-related vibration impacts.

(d) City of Santa Clarita Vibration Standard

Section 17.15.050 of the City of Santa Clarita Municipal Code provides that within the Commercial and Industrial zones, no use, except a temporary construction operation, shall be permitted which generates inherent and recurrent ground vibration perceptible without instruments at the boundary of the lot on which the use is located.

c. Existing Local Noise Conditions

The existing noise environment in the Project vicinity is primarily comprised of auto traffic on local roadways, including SR-14, Placerita Canyon Road, and Sierra Highway. Noise from the Ranch is also generated by agricultural operations, outdoor filming activities, and outdoor activities associated with the two residences on the Ranch.

(1) Noise-Sensitive Receptors

Some land uses are considered more sensitive to intrusive noise than others based on the types of activities typically involved at the receptor location. The nearest existing noise sensitive receptor to the Ranch portions of the Project site is a single-family residential building located at 20821 Placerita Canyon Road, approximately 2,400 feet west of the Development Area and west of SR-14. Approximately 3,400 feet to the southwest of the Development Area is a single-family subdivision located south of Dockweiler Road and west of SR-14 and Sierra Highway. These single-family homes are shielded from the Ranch by existing natural landscape and topography as well as SR-14. Approximately 6,300 feet east of the Development Area is a small single-family subdivision located along Running Horse Road, north of Placerita Canyon Road. These single-family homes are shielded from the Ranch by existing hillsides and ridgelines. The Ranch also includes the Ranch manager's house, the Ranch foreman's mobile home, and a guest house.

Sensitive receptors in close proximity to the Off-Site Infrastructure Improvement Areas include residential uses along the proposed sewer alignment (Oak Orchard Alignment), which would be located within the public right-of-way along segments of Placerita Canyon Road, Placeritos Boulevard, Golden Oak Lane, Oak Orchard Road, and Quigley Canyon Road. The closest residential uses along this alignment would be

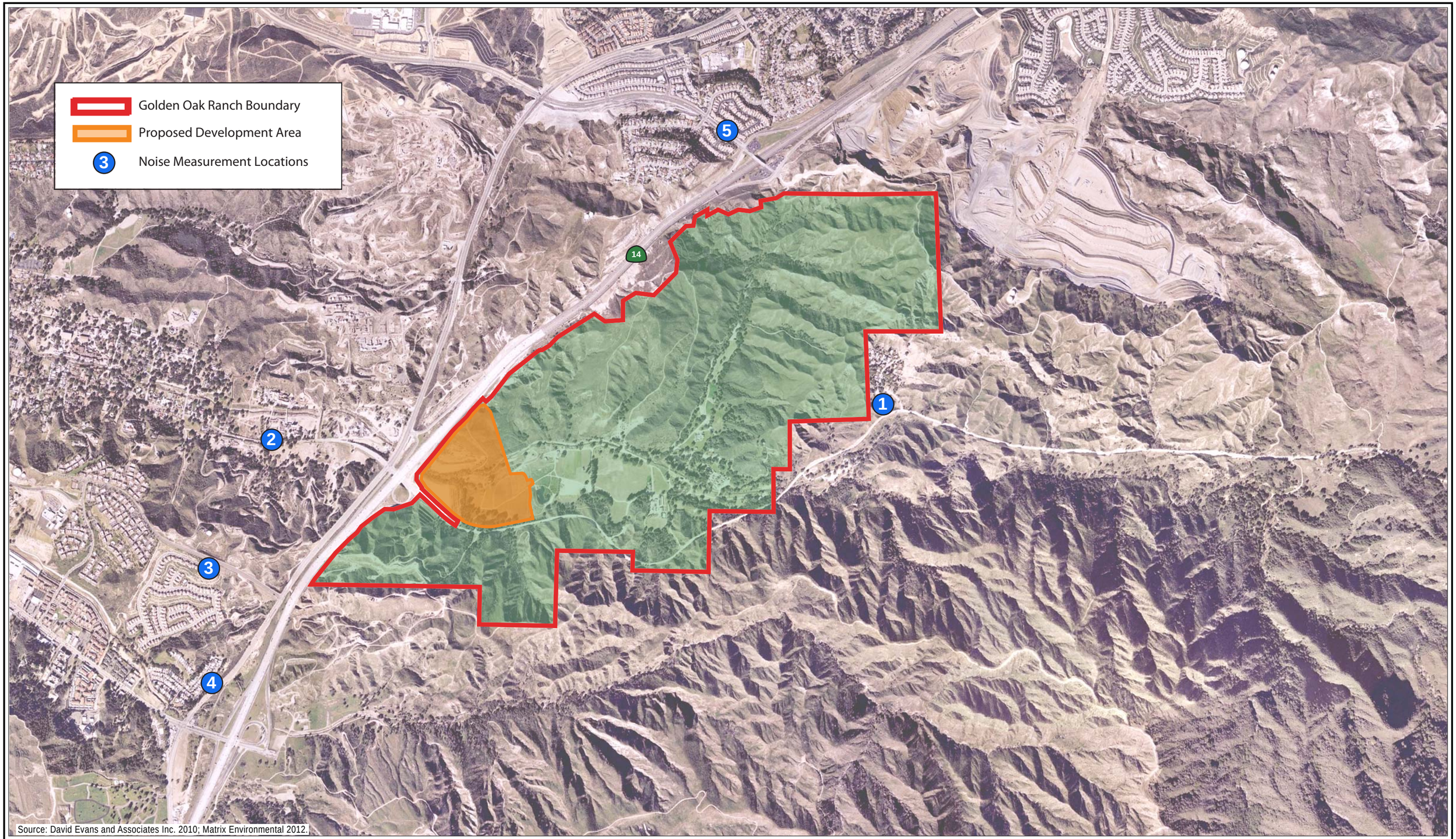
approximately 25 feet from the construction zone. Other sensitive receptors near the Off-Site Infrastructure Improvement Areas include residential uses south of Dockweiler Road, which would be approximately 75 feet from the potential water line alignment, and residential uses located at the corner of Kirsch Street and Deputy Jake Drive, which would be approximately 300 feet from the associated water booster pump. Under the second water line alignment option, the nearest sensitive receptor would be residential uses along Placerita Canyon Road, which would be located approximately 500 feet west of the construction area. In addition, the nearest noise sensitive receptor to the SCE power pole replacements is a single family use located at the northeast corner of Sierra Highway and Golden Valley Road, which is approximately 400 feet from the nearest SCE power pole replacement construction area. With respect to the roadway intersections to be improved off the Ranch, the nearest sensitive receptors would also be the residential uses along Placerita Canyon Road, the nearest of which is a single-family residential use located at 20821 Placerita Canyon Road, approximately 1,900 feet to the west.

(2) Ambient Noise Levels

Ambient noise measurements were completed at five locations that represent the closest noise sensitive land uses in the vicinity of the Development Area as depicted in Figure V.C-1 on page V.C-16. The ambient noise measurements were conducted on Wednesday, November 11, 2009, through Friday, November 13, 2009. In addition, three ambient noise measurements were conducted within the Development Area in May 2008. Noise measurements were recorded using a Quest 2900 Integrated Sound Level Meter (SLM). The Quest 2900 SLM is a Type 2 standard instrument as defined in the American National Standard Institute (ANSI) S1.4, which meets the noise measurement requirements set forth by the County of Los Angeles and the City of Santa Clarita. All instruments were calibrated and operated according to the manufacturer's specification. Consistent with the industry standard, the microphone was placed at approximately five feet above the local grade.

Table V.C-10 on page V.C-17 presents the existing noise environment in the Project's vicinity. Based on field observation and measured sound data, the existing noise environment in the vicinity of the Development Area is controlled primarily by auto traffic on adjacent roadways. As shown on Table V.C-10 the measured daytime ambient noise levels ranged from 40.2 dBA (L_{eq}) at location R1 to 72.5 dBA (L_{eq}) at location R4. In addition, the measured daytime ambient noise levels within the Development Area ranged from 49 dBA (L_{eq}) to 72 dBA (L_{eq}).

The existing traffic noise on local roadways in the surrounding areas near the Development Area was calculated to quantify the 24-hour CNEL noise levels. Five roadway segments were selected for the existing noise analysis, based on the proximate locations to noise sensitive uses along the roadway segments and potential increase in



Source: David Evans and Associates Inc. 2010; Matrix Environmental 2012.

Disney | ABC Studios at The Ranch

matrix environmental

N

0' 1500' 3000'
Approximate Scale in Feet

Figure V.C-1
Noise Measurement Locations

Table V.C-10
Measured Off-site Ambient Noise Levels

Location/Description	Measurement Date/Time	Measured Ambient Noise Levels, dBA		
		Daytime Hours (7:00 A.M.–10:00 P.M.)	Nighttime Hours (10:00 P.M.–7:00 A.M.)	CNEL (24-hour)
R1—Single-family subdivision at Running Horse Road/Placerita Canyon Road	11/12/2009 11/13/2009 11/14/2009	40.2–52.1 45.5–58.2 44.6–50.7	43.6–57.0 35.0–52.2 35.1–49.5	55.5[a] 53.7 52.1
R2—Single-family home at 20821 Placerita Canyon Road	11/12/2009 11/13/2009 11/14/2009	54.5–61.9 54.6–62.4 57.3–61.2	53.5–56.4 49.1–62.4 52.4–60.4	62.6[a] 64.6 64.3
R3—Single-family subdivision located south of Dockweiler Road and west of Sierra Highway	11/12/2009	60.2	55[b]	58[c]
R4—Located on west side of Sierra Highway, approximately 850 feet north of Newhall Avenue	11/12/2009	72.5	67[b]	71[c]
R5—Located on the north side of Golden Valley Road, approximately 550 feet west of the Antelope Valley Freeway (SR-14)	11/12/2009	70.2	65[b]	68[c]

[a] *Calculated based on the partial 24-hour measurements.*
[b] *Estimated based on the long-term measurements.*
[c] *Calculated based on the short-term measurements pursuant to FTA procedure.*
Source: AES, 2010.

traffic volumes from the Project. The traffic noise was calculated using a spreadsheet noise model constructed based on equations provided in the Caltrans Technical Noise Supplement (TeNS) document and traffic volume data from the Project's traffic analysis." The traffic noise prediction model calculates the 24-hour CNEL noise levels based on specific information including, average daily traffic volume (ADT), percentages of day, evening and nighttime traffic volumes relative to ADT, vehicle speed, and distance between the noise receptor and the roadway.

A traffic noise model calibration test was performed to establish the noise prediction model's accuracy. The traffic counts were entered into the noise model along with the observed speed, and approximate distance to the roadway to calculate the traffic noise levels. The results of the traffic noise model calibration are provided in Table V.C-11 on page V.C-18. As indicated, the noise model results are within 0.1 dBA of the measured noise levels, which is within the industry standard tolerance of the noise prediction model.

Table V.C-11
Traffic Noise Model Calibration

Roadway Segment	Traffic Counts During the 15-Minute Noise Readings			Measured Noise Levels, L_{eq} (dBA)	Predicted Noise Levels, L_{eq} (dBA)	Difference between Predicted and Measured Levels, dBA
	Auto	Medium Truck	Heavy Truck			
Sierra Highway north of Newhall Avenue	278	4	3	72.5	72.6	+0.1

Source: AES, 2010.

Table V.C-12 on page V.C-19 provides the calculated CNEL for the analyzed roadway segments based on existing traffic volumes. As shown therein, the existing CNEL due to street traffic volumes only, ranged from 55.6 CNEL (along Placerita Canyon Road west of Sierra Highway) to 70.8 CNEL (along Sierra Highway north of Placerita Canyon Road). With respect to noise compatibility, the existing traffic noise levels along the analyzed roadways fall between "normally acceptable" and "conditionally acceptable" categories for residential uses.

(3) Existing Ground-Borne Vibration Environment

Based on field observations, currently the primary source of ground-borne vibration in the Project vicinity is vehicular travel on local roadways. According to the FTA technical study, *"Federal Transit Administration: Transit Noise and Vibration Impacts Assessments,"* typical road traffic induced vibration levels are unlikely to be perceptible by people. In part, FTA indicates "it is unusual for vibration from traffic including buses and trucks to be perceptible, even in location close to major roadways."[10] Therefore, based on FTA published vibration data the existing ground vibration environment in the Project vicinity would be below the perceptible level.

3. ENVIRONMENTAL IMPACTS

a. Methodology

(1) On-Site Construction Noise

Construction noise impacts were evaluated by calculating the Project-related construction noise levels at nearby sensitive receptor locations and comparing these

[10] Federal Transit Administration *"Transit Noise and Vibration Impact Assessment," Chapter 7, 2006.*

Table V.C-12
Calculated Existing Roadway Traffic Noise Levels

	Adjacent Noise Sensitive Land Uses	Calculated Traffic Noise Levels[a] CNEL	Existing Noise Exposure Compatibility Category[b]
Sierra Highway			
North of Placerita Canyon Road	Mobile Home Park[e]	71.0	Normally Unacceptable
South of Placerita Canyon Road	Residential[d]	70.5	Normally Unacceptable
Placerita Canyon Road			
West of Sierra Highway	Residential	55.8	Normally Acceptable
Between SR-14 and Project Entrance Road	—	63.4	—
East of Project Entrance Road	Residential/Park	63.5	Conditionally Acceptable

[a] *Predicted noise levels at 25 feet from the edge of the roadway.*
[b] *Based on City of Santa Clarita Noise Element.*
[c] *Mobile Home Park located northwest of Sierra Highway and Newhall Avenue.*
[d] *Residential uses located north of Golden Valley Road.*
Source: AES, 2010.

construction-related noise levels to local ambient noise levels (i.e., noise levels without construction noise). Construction noise associated with the Project was analyzed using the anticipated construction equipment inventory, estimated construction durations, and estimated construction phasing. The Project construction noise model is based on construction equipment noise levels as published by Federal Highway Administration (FHWA) "Roadway Construction Noise Model (FHWA 2006)." The ambient noise levels at surrounding sensitive receptor locations were estimated based on the field measurement data described above. The construction noise level was then calculated for sensitive receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance.

(2) Off-Site Roadway Noise (During Construction and Project Operations)

Roadway traffic noise levels were calculated using a computer spreadsheet noise model constructed based on the FHWA-RD-77-108 methodology as described in the Caltrans TeNS procedure and traffic data provided in the Project's traffic study. Consistent with the level of Project-related technical information currently available, and to present a conservative analysis, the noise model assumes a "hard" site condition (i.e., providing for

the minimum amount of sound attenuation allowed by the traffic noise model, a 3 dBA noise reduction per doubling of distance) and assumes no barriers between the roadway and receivers. Traffic noise levels were calculated for sensitive receptors at distances of 25 feet from the nearest edge of the road. Roadway noise impacts were evaluated by comparing the roadway-noise under "future with Project" conditions with the baseline noise levels that would occur under the "future without project" conditions to determine significance.

(3) Stationary Point-Source Noise (During Project Operations)

Outdoor stationary noise impacts have been evaluated by identifying the noise levels generated by outdoor stationary noise sources at the Project, such as the electrical substation, central plant mechanical equipment, on-site surface lot parking and loading dock activities, calculating the hourly L_{eq} noise level from each noise source at surrounding sensitive receiver property line locations, and comparing such noise levels to the County's exterior noise standards. For the mechanical central plant equipment, a noise performance criterion is specified to meet the County's noise standards because detailed information for the aforementioned noise source is not available at this stage of the Project.

(4) Ground-Borne Vibration (During Construction and Project Operations)

Ground-borne vibration impacts were evaluated by identifying potential vibration sources, estimating the vibration levels at the affected receptor, and comparing them with the significance thresholds described below. The vibration source levels for various types of equipment, as used in this study, were based on data provided by the FTA (2006).

b. Significance Thresholds

The potential for the Project to result in impacts associated with noise is based on the CEQA significance thresholds specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the State CEQA Guidelines and are as follows:

Threshold C-1: Would the project result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

Threshold C-2: Would the project result in exposure of sensitive receptors (e.g., schools, hospitals, senior citizen facilities) to excessive noise levels?

Threshold C-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?

Threshold C-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?

Threshold C-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

Threshold C-6: For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Threshold C-7: Would the project site be located near a high-noise source (airports, railroads, freeways, industry)?

Threshold C-8: Is the proposed use considered sensitive (school, hospital, senior citizen facility) or are there other sensitive uses in close proximity?

Threshold C-9: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

With respect to Thresholds C-3 and C-4, “substantial” is not defined in CEQA. For purposes of this analysis, a “substantial noise increase” is defined as an increase of 3 dBA when the ambient noise level is greater than 45 dBA and an increase of 5 dBA or greater when the ambient noise level is 45 dBA or below. The 3 dBA threshold represents the minimum change in noise that is detectable by the average human listener, whereas 5 dBA represents the change in noise that is considered clearly noticeable. These noise thresholds shall apply where noise limits are not otherwise established by the County Noise ordinance.

The Ranch is not located within an airport land use plan or within 2 miles of a public or private airport or within the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels associated with a public or private airport or from a private airstrip. As such, no further analysis of Thresholds C-5 and C-6 is necessary.

c. Project Design Elements

The following Project Design Features (PDFs) have a potential to influence Project-related noise characteristics, and therefore, were taken into account in connection with the analysis of potential Project impacts.

(1) Project Construction

- The majority of Project construction-related truck trips would be scheduled outside of the A.M. peak (7:00 A.M. to 9:00 A.M.) and P.M. peak (4:00 P.M. to 6:00 P.M.) traffic hours.

- To expedite soil export activities, a second work shift from approximately 7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M. may occur. Activities scheduled during this night shift would be limited to loading trucks with soil and hauling and would ensure no noise disturbance at any residential property line due to these hauling activities. The Applicant would obtain an exemption from the County Engineer, as applicable, before any soil export activities could occur for the second work shift.

(2) Project Operations

- Building mechanical/electrical equipment would be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Santa Clarita Municipal Code Section 11.44.040, as applicable.

- Mechanical equipment buildings (e.g., the central plant) would be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control.

d. Impact Analysis

Threshold C-1: Would the project result in exposure of persons to, or generation of, noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 12, Chapter 12.08), or applicable standards of other agencies?

Threshold C-2: Would the project result in exposure of sensitive receptors (e.g., schools, hospitals, senior citizen facilities) to excessive noise levels?

Threshold C-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas?

Threshold C-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems?

Threshold C-8: Is the proposed use considered sensitive (school, hospital, senior citizen facility) or are there other sensitive uses in close proximity?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

Construction of the Project may occur in phases, with completion as early as 2015 or as late as 2020. Construction would start with clearing the site, including removal of existing on-site structures, followed by site mass grading. Approximately 700,000 cubic yards of cut and 350,000 cubic yards of fill would be required within the Ranch, with approximately 350,000 cubic yards of soil export.[11] Based on rough grading estimates, the northern portion of the Development Area would require approximately 443,000 cubic yards of cut and 5,000 cubic yards of fill; the southern portion would require approximately 252,000 cubic yards of cut and approximately 336,000 cubic yards of fill, including fill to be placed east of the southern fill pad. An estimated 4,050 cubic yards of cut and 7,560 cubic yards of fill would be needed to create the development pad for the water tank and to smooth and pave the existing unpaved maintenance road to the tank. Construction of the proposed trail would involve approximately 700 cubic yards of cut which would be used elsewhere within the Ranch and would not require export. Earthwork necessary for the Conditional Parking Areas, if constructed, would involve limited surface grading, with less than 1,000 cubic yards of cut and less than 1,000 cubic yards of fill; the use of excess soil from the Development Area would be used as fill, as necessary and if possible based on timing. Limited fine grading would also be necessary at the selected of the two Potential Mobile Home Relocation Areas for the Ranch foreman's mobile home and the associated new septic system. This analysis assumes concurrent earthwork for all Ranch areas of the Project, with the exception of the Trail Area, which is addressed separately below.

Noise impacts from construction activities occurring within the Development Area and other portions of the Ranch, would be a function of the noise generated by construction equipment, the equipment location, the timing and duration of the noise-generating activities, and the relative distance to noise sensitive receptors. Construction activities

[11] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated herein.*

typically include site demolition, grading, foundation, building construction, and site work. Each stage involves the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics.

Individual pieces of construction equipment that would be used for Project construction produce maximum noise levels of 76 dBA to 101 dBA at a reference distance of 50 feet from the noise source, as shown in Table V.C-13 on page V.C-25. The construction equipment reference noise levels are based on the FHWA Roadway Construction Noise Model User's Guide (RCNM, 2006), which is a report containing actual measured noise data for various construction equipment used in major construction sites.[12] These maximum noise levels would occur when equipment is operating under full power conditions. However, equipment used on construction sites typically operates at less than full power. The acoustical usage factor is the percentage of time that particular equipment is anticipated to be in full power operation during a typical construction day. These values are estimates and will vary based on the actual construction process and schedule.

To characterize construction-period noise levels, the average (Hourly L_{eq}) noise level associated with each construction stage was calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment operating simultaneously. Information with respect to the type and quantity of equipment anticipated to be used is provided in Appendix D.

The nearest noise sensitive receptor to construction activities on the Ranch is the single family residential use located at 20821 Placerita Canyon Road (represented by receptor R2), which is approximately 2,400 feet to the west and on the other side of SR-14. All off-site noise sensitive receptors in the vicinity of the Development Area would be shielded from the construction activities by the existing natural topography, landscape, and SR-14. Table V.C-14 on page V.C-26 presents the estimated construction-related noise levels (in terms of hourly L_{eq}) at the nearby noise sensitive receptors during Project construction. The noisiest construction equipment would only be used during the foundation stage of construction activities. As indicated in Table V.C-14, the construction-related noise levels at all off-site sensitive receptors would be well below the significance threshold of 60 dBA (L_{eq}) and the existing ambient noise levels. In addition, the composite construction noise levels (i.e., Project-related construction noise added to the existing ambient noise levels) would result in a maximum increase of 1 dBA at receptor R1 and 2 dBA at receptor R2 during the noisiest construction stage (i.e., during the construction of

[12] *FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01.*

Table V.C-13
Noise Levels Generated by Typical Construction Equipment

Type of Equipment	Acoustical Use Factor (%)	Reference Maximum Noise Levels at 50 Feet, L_{max} (dBA)
Air Compressor	40	78
Backhoe	40	78
Compactor	20	83
Concrete Pump	20	79
Concrete Truck	40	81
Crane, Mobile	16	81
Dozer	40	82
Drill Rig	20	79
Excavator	40	84
Forklift	20	75
Generator	50	81
Paver	50	77
Pile Driver (Impact &Vibratory)	20	101
Roller	20	80
Loader	40	79
Vibrator	20	80
Dump/ Haul/ Delivery Truck	40	76
Water Truck	40	76

Source: FHWA Roadway Construction Noise Model User's Guide, Table 1, 2006.

foundations when pile driving activities would occur). During other construction stages, the maximum increase in ambient noise levels would be less than 1 dBA. The estimated maximum increase of 2 dBA is considered negligible in an outdoor environment.

In addition, the short-term intermittent maximum noise level from pile driving at receptor R2, the closest receptor to the proposed construction activities on the Ranch, was also estimated.[13] This nearest off-site sensitive receptor (R2) would be exposed to a maximum noise level of 57 dBA (Lmax) during impact pile driving activities. This maximum noise level would also be less than the 60 dBA threshold and would be similar to existing daytime ambient noise levels at receptor R2. Noise levels from pile driving activities would

[13] *This maximum noise level is different from the average L_{eq} noise level presented in Table V.C-14.*

Table V.C-14
Construction Noise Impacts from On-Site Activities

Location	Distance from Nearest Receptor to Project Construction Area (feet)	Existing Daytime Ambient Noise Levels, L_{eq} (dBA)	Estimated Construction Noise Levels by Construction Stages, L_{eq} (dBA)					Maximum Increase in Daytime Ambient Noise Levels, L_{eq}[a] (dBA)	Significance Threshold, L_{eq}[b] (dBA)
			Demolition	Site Grading	Foundation[c]	Building Construction	Site Work		
R1	6,300	40	21	24	32	28	19	1	60
R2	2,400	55	39	42	51	47	37	2	60
R3	3,700	60	25	29	37	33	24	0	60
R4	5,500	73	22	25	34	29	20	0	60
R5	4,500	70	24	27	35	31	22	0	60

[a] *The maximum increase in ambient noise levels is calculated based on the foundation stage of construction activities, which produces that highest noise levels.*

[b] *Per County of Los Angeles Ordinance No. 11743, §12.08.390, as shown in Table V.C-4 on page V.C-10, for construction noise limits at residential uses for construction activity which last longer than 10 days.*

[c] *Pile driving activities would only be used during the foundation stage.*

Source: AES, 2011.

be less at the remaining receptors due to their increased distances from the Development Area. Therefore, noise impacts associated with on-site construction activities would be less than significant.

Construction activities associated with the Project's Studio Office Option would be similar to the Project (i.e., the Soundstage Option), as the overall development areas would be similar (555,950 gross square feet under the Project compared with 510,000 gross square feet under the Studio Office Option). Therefore, construction-related noise impacts under the Studio Office Option would be similar to the Project (Soundstage Option), and would be less than significant as analyzed above.

As part of the Project, a public multi-use trail would be constructed south of Placerita Canyon Road (south of the Development Area) in an area referred to as the Trail Area. The trail improvements would not be developed concurrently with the Project's earthwork activities elsewhere within the Ranch (refer to Mitigation Measure (MM) E.1-9 in Section E.1, Air Resources—Air Quality). Construction of the trail would involve limited grading of approximately 700 cubic yards, as the trail would be designed with switchbacks to accommodate the local terrain. However, a series of small retaining walls would be constructed along the proposed trail. The closest noise sensitive receptor to the Trail Area is receptor R2, which is approximately 2,600 feet to the west. It is estimated that construction of the trail would generate noise levels of up to 46 dBA (L_{eq}) at receptor R2. When added to the existing ambient noise levels, these noise levels would result in a maximum increase of 1 dBA at receptor R2. In addition, the estimated construction noise level at receptor R2 would be well below the significance threshold of 60 dBA. Receptors R1, R3, R4 and R5 are located at a greater distance from the Trail Area (i.e., a minimum 4,000 feet away) and are shielded from the Trail Area by topography. Therefore, noise associated with construction of the trail would not result in a measurable increase in noise levels at those locations, and potential noise impacts would be well below the significance threshold. As such, noise impacts associated with construction of the proposed trail would be less than significant. Refer to Section V.F, Biological Resources, of this Draft EIR, for a discussion of potential construction-related noise impacts on wildlife.

In addition to on-site construction noise, delivery/haul trucks and construction workers would require access to the Development Area during various construction stages. However, major noise sources would be from haul trucks as construction worker-related traffic is typically limited to certain daytime hours (early morning arrival at the site and early evening departure from the site). The peak period of truck movements would occur during site excavation activities when there would be up to 385 round truck trips during the work day), or approximately 32 round truck trips per hour assuming a uniform distribution of trips

throughout an 12-hour workday, based on a single daytime work shift.[14] Alternatively, based on an 8-hour workday, an average of approximately 48 round truck trips per hour would occur.[15] Construction trucks would generally enter/leave the site via Placerita Canyon Road to access SR-14 and then would proceed either north or south on this freeway. It is estimated that the Project's haul trucks (based on 48 round truck trips per hour) would generate a noise level of approximately 74 dBA (hourly L_{eq}) along Placerita Canyon Road between the Development Area and SR-14. There would also be delivery and concrete mixer trucks during the course of Project construction. However, the number of delivery and concrete mixer trucks would be lower than the haul trucks analyzed. Furthermore, there are no known noise sensitive receptors along the short haul route between the Development Area and SR-14. The nearest noise-sensitive receptor to the Project site within the Project vicinity is the single-family home at 20821 Placerita Canyon Road (receptor R2), which is approximately 2,000 feet from the haul route (i.e., SR-14 freeway on ramp). The noise contribution from the haul trucks at receptor R2 would be approximately 39 dBA (hourly L_{eq}), which would be well below the existing daytime ambient noise level of 55 dBA (hourly L_{eq}) at this receptor location. Thus, Project construction-related haul trucks would not increase the existing ambient noise levels at the closest sensitive receptor within the Project vicinity. Noise levels from construction traffic would be further reduced at the remaining receptors in the Project vicinity due to their increased distances from the haul route. Thus, potential impacts associated with construction traffic noise at off-site receptors in the vicinity of the Development Area would be less than significant.

Residential uses located outside of the Project vicinity along SR-14 have the potential to be exposed to noise from Project-related haul trucks traveling on the freeway. It is estimated that the existing daytime traffic volumes on SR-14 in the vicinity of the Project site include approximately 8,760 cars and 415 trucks per hour.[16] Therefore, when accounting for the existing traffic volumes on SR-14, the Project-related haul trucks (32 round truck trips per hour) along SR-14 would result in an increase of less than 1 dBA (hourly L_{eq}) at the residential uses along SR-14. Therefore, daytime noise impacts associated with Project- related off-site construction traffic outside of the Project vicinity would be less than significant.

---

[14] *These estimates assume the use of 16 cubic yard haul trucks and a 12-hour workday (in accordance with the County's permitted daytime construction hours) during hauling activities.*

[15] *This estimate assumes an 8-hour workday based on the Project's anticipated typical construction hours.*

[16] *Estimated based on Caltrans' 2010 Traffic Counts for State Route 14 south of Placerita Canyon Road, which included 149,000 average daily trips, and Caltrans' 2009 Truck Traffic Volumes for State Route 14 at San Fernando Road, which accounted for approximately 4.5 percent of the average daily trips. Also assumes that 80 percent of the daily traffic would occur during the hours of 7 A.M. and 8 P.M.*

Construction of the Project may include nighttime hauling for soil export activities, which would reduce the overall duration of the earthwork phase by up to two months. If implemented, this second work shift would occur from approximately 7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M. and would involve up to approximately 300 haul truck round trips per night, with approximately 40 haul truck round trips per hour (i.e., approximately 80 total truck trips per hour when accounting for trips to and from the Development Area). Construction trucks would generally enter/leave the site via Placerita Canyon Road to access SR-14 and then would proceed either north or south on this freeway. The haul truck noise contribution at receptor R2, the closest sensitive receptor in the Project vicinity, would be approximately 38 dBA (hourly L_{eq}), which would be well below the lowest nighttime ambient noise level of 49 dBA (hourly L_{eq}), as measured between 2:00 or 3:00 A.M. at this receptor location. When added to the existing ambient noise level, the noise associated with haul trucks would increase the ambient noise levels at Receptor R2 by less than 0.5 dBA. Noise levels from construction traffic would be lower at the remaining receptors in the Project vicinity due to their increased distances from the proposed haul route. Nighttime construction activities are prohibited by the County Noise ordinance if such activities would create a noise disturbance at a residential property line. Based on the maximum increase of 0.5 dBA at Receptor R2, the haul truck traffic noise activities would comply with the Noise ordinance.

As part of the Project (PDF C-2), the Applicant would obtain an exemption from the County Engineer under County Code Section 12.12.050, as applicable, in order to allow nighttime hauling.[17] The County Engineer may grant such an exemption if he or she finds "the work proposed to be done is effected with a public interest." As the proposed nighttime hauling activities would reduce the overall duration of the earthwork phase by up to two months and decrease the number of haul trucks using local roadways during daytime peak hours, and Project construction would create a substantial number of construction jobs. Based on these reasons, the County Engineer would need to determine whether such a finding could be made.

As indicated above, residential uses are located outside of the Project vicinity along the SR-14 freeway that have the potential to be exposed to noise from Project-related haul trucks traveling on the freeway. It is estimated that the existing non-Project related traffic volumes (average during the nighttime hours) on the SR-14 freeway in the vicinity of the Project site include approximately 2,590 cars and 125 trucks per hour.[18] When accounting

---

[17] *Under County Code Section 12.12.060, construction of the off-site utilities, some of which would occur at night, would be exempt from the noise requirements specified in County Code Section 12.12.*

[18] *Estimated based on Caltrans' 2010 Traffic Counts for State Route 14 south of Placerita Canyon Road, which included 149,000 average daily trips, and Caltrans' 2009 Truck Traffic Volumes for State Route 14*
(Footnote continued on next page)

for the existing traffic volumes on the SR-14 freeway, the Project-related haul trucks (40 round truck trips per hour) along the SR-14 freeway would result in an increase of less than 1 dBA (hourly L_{eq}) at the residential uses along the SR-14 freeway. This estimated maximum increase due to the haul trucks along the SR-14 freeway outside of the Project vicinity would be negligible. As such, noise impacts from potential nighttime hauling activities would be less than significant.

(b) Operation

(i) Electrical Substation

The Project includes a new electrical substation, located within the northern portion of the Development Area. The proposed substation would receive power from an existing Southern California Edison (SCE) 66 kilovolt (kV) overhead line for conversion to a 16.5 kV underground distribution system on-site. The substation would include a variety of electrical equipment, including electrical power transformers, circuit breakers, and an enclosed control room to house the protective relays, controls, and communication equipment for the substation. The main noise source associated with the substation would be the electrical power transformers. There would be two power transformers located at the center of the substation yard to step down the voltage from 66 kV to 16.5 kV. The pair of transformers would be designed to provide redundant backup. Each power transformer would be sized at 28 megavolt amperes (MVA).

The proposed power transformer is estimated to generate a noise level of approximately 77 dBA at a distance of 50 feet, based on published noise ratings from the National Electrical Manufacturers' Association (NEMA).[19,20] The nearest off-site sensitive receptor (R2) is approximately 3,200 feet from the proposed substation. Based on a distance loss (6 dB per doubling of distance), the transformer noise level at the nearest sensitive receptor (R2) would be approximately 41 dBA, which would be 8 dBA below the measured nighttime ambient noise level of 49 dBA. The transformer noise levels at other off-site sensitive receptors, which are located further and shielded from the proposed substation, would be even lower. Therefore, noise impacts associated with the proposed substation would be less than significant.

---

at San Fernando Road, which accounted for approximately 4.5 percent of the average daily trips. Also assumes that 20 percent of the daily traffic would occur during the hours of 8 P.M. and 7 A.M.

[19] *NEMA Standards Publications No. TR 1-1993 (R2000).*

[20] *Southern California Edison Tehachapi Renewable Transmission Project, Draft EIR, Sec. 4.12 Noise, 2009.*

(ii) Building Mechanical Equipment

Operation of the Project would require building services mechanical equipment to condition and ventilate the indoor air environment. This equipment would be expected to include air handling units, cooling towers, chillers, pumps, and exhaust-air fans to support the intended functions of the Project. A central utility plant of approximately 20,000 square feet would house the major mechanical equipment including the chillers, pumps, and other associated equipment. The central utility plant would be predominantly enclosed with exception of louver openings for air ventilation. Outdoor mechanical equipment associated with the central utility plant would include cooling towers. The central utility plant would be visually screened from views from Placerita Canyon Road.

Detailed information regarding mechanical equipment and design schemes is not currently available as the building design is still in progress. Therefore, the noise analysis is based on a reverse design of the facility in order to maintain the existing ambient noise levels at nearby receptors, which would ensure that the Project's would not exceed the significance threshold. The nearest noise sensitive receptor (R2) is located approximately 2,400 feet from the Development Area. In compliance with the Code requirements cited above, in order to meet the existing nighttime ambient noise level of 49 dBA at receptor R2, the noise generated by the Project's outdoor mechanical equipment, including the central plant, should not exceed 82 dBA at a distance of 50 feet. Therefore, the central utility plant would be designed such that exterior noise levels would not exceed 82 dBA at a distance of 50 feet. With implementation of this feature, impacts associated with mechanical equipment would be less than significant.

(iii) Soundstages and Mills

The Project's buildings include soundstages where film productions would take place and mills for set construction. The soundstage shell structures would be designed to provide sound insulation required to meet the Project-intended functions. Sound generation within the interior of the soundstages (including amplified sound) would be contained within the shell structures. Similarly, the shell structures of the mills would be designed with a minimum sound insulation of STC 35, to contain set construction-related noise within each building. Therefore, noise impacts associated with the operation of proposed soundstages and mills would be less than significant. As the operation of the bungalows, the administration building and commissary would result in lower noise levels than the soundstages and mills, the noise impacts associated with the operation of these uses also would be less than significant.

In addition, noise generated by existing filming activities within the Ranch would continue. Sound insulation of the proposed soundstages would ensure that the Project-intended functions would not be affected by existing noise.

(iv) Parking

Parking for the Project would be provided within on-site surface lots adjacent to the soundstages and office buildings and within the eastern portion of the Development Area. Sources of noise associated with these surface parking areas would include automobile movements, which would generate a noise level of approximately 65 dBA at a distance of 25 feet.[21] Car alarm and horn noise (intermittent events) would generate maximum noise levels of as high as 75 dBA at a reference distance of 25 feet. The nearest sensitive receptor, R2, is located approximately 2,400 feet from the Development Area. Based on distance attenuation, the parking-related noise would be approximately 35 dBA at receptor R2, which would be well below the existing ambient noise levels. Therefore, operation of the proposed surface parking areas would result in less than significant noise impacts at all off-site noise-sensitive receptor locations.

(v) Loading Dock/Trash Compactor

The Project would include loading docks and trash compactors to be located at various locations within the Development Area. Based on measured noise levels from such operations, loading dock facilities and trash compactors would generate noise levels of approximately 71 dBA and 65 dBA at a distance of 50 feet, respectively.[22] The nearest sensitive receptor, R2, is located approximately 2,400 feet from the Development Area. The loading dock and trash compactor noise levels would be attenuated (due to distance alone) to approximately 31 dBA and 37 dBA at receptor R2, respectively. Thus, the estimated noise levels would be well below the existing ambient noise levels. As such, noise impacts associated with loading dock/trash compactor operation would be less than significant.

(c) Composite Noise Impacts from Project Operations

An evaluation of noise from all Project sources (i.e., composite noise levels) was conducted to conservatively ascertain the potential maximum Project-related noise level increase that may occur at the noise-sensitive receptor locations. Based on a review of the noise-sensitive receptors and the Project's noise sources, the primary noise-sensitive location wherein composite noise impacts could occur is receptor R2. Due to a combination of distance and the presence of site topography, other off-site sensitive receptors are effectively shielded from the Project-related noise sources, with the exception of off-site roadway traffic, which is fully analyzed below. As analyzed above, noise from

---

[21] *Based on measurement of previous projects (See Appendix D for list of previous projects).*

[22] *Ibid.*

individual components (i.e., the substation, soundstages, surface parking lot, loading docks and trash compactors) of the Project operation are well below the existing ambient noise level at the nearest off-site residential receptor (R2). The Project-related mechanical equipment would be designed to meet the County's exterior noise standard (i.e., to meet the existing ambient noise levels). Therefore, the composite noise level (all Project-related noise sources) at the nearest sensitive receptor (R2) would meet the County's noise standard. As such, composite noise impacts associated with operation of the Project would be less than significant.

(2) Off-Site Traffic Noise Associated with On-Site Operations

Future off-site traffic noise levels were calculated along five off-site roadway segments in the vicinity of the Development Area. Off-site traffic noise at Project buildout was analyzed according to the Project's traffic study. The Project is expected to generate a daily net increase of 3,323 one-way trips and 3,477 one-way trips to/from the Development Area under the Soundstage Option and the Studio Office Option, respectively. As indicated in the traffic study, Project-related traffic would increase the traffic volumes along the analyzed roadway segments when compared with future conditions without the project. This increase in roadway traffic was analyzed to determine if any traffic-related noise impacts would result from the Project. Table V.C-15 on page V.C-34 provides a summary of the off-site roadway noise analysis for the Soundstage Option. The CNEL levels are calculated at a 25-foot distance from the edge of the roadway and do not account for presence of any sound barriers or intervening structures. As shown in Table V.C-15, the Soundstage Option would result in a maximum of 1.7 dBA increase in traffic noise along Placerita Canyon Road between SR-14 and the Project entrance roadway. At all other analyzed roadway segments, the increase due to Project-related traffic would be lower (less than 1 dBA). The incremental change in Project-related traffic noise level would be below both the 3 dBA (CNEL) and 5 dBA (CNEL) "substantial noise increase" significance thresholds defined above. Therefore, off-site traffic noise impacts due to the Project would be less than significant under the Soundstage Option.

Table V.C-16 on page V.C-34 presents the off-site roadway noise impacts for the Studio Office Option. As indicated therein, the Studio Office Option would result in a maximum increase of 1.8 dBA (CNEL) along Placerita Canyon Road adjacent to the Development Area. Furthermore, the maximum increase in traffic noise levels at all other analyzed roadway segments would be less than 1.0 dBA (CNEL). Therefore, off-site traffic related noise impacts under the Studio Office Option would be less than significant.

Table V.C-15
Off-Site Roadway Traffic Noise Impacts—Soundstage Option

Roadway Segments	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL[a]		Increase in Noise Levels due to Project, (CNEL)
		2020 Without Project (Baseline)	2020 With Project	
Sierra Highway				
North of Placerita Canyon Road	Residential	72.1	72.1	0.0
South of Placerita Canyon Road	Mobile Home Park	71.6	71.6	0.0
Placerita Canyon Road				
West of Sierra Highway	Residential	56.8	57.3	0.5
Between SR-14 and Project Entrance Road	—	64.5	66.2	1.7
East of Project Entrance Road	Residential/Park	64.5	64.6	0.1

[a] *Calculated noise level at 25 feet from roadway traffic only. Detailed calculation worksheets, are included in Appendix D.*

Source: AES, 2010.

Table V.C-16
Off-Site Roadway Traffic Noise Impacts—Office Studio Option

Roadway Segments	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL[a]		Increase in Noise Levels due to Project, (CNEL)
		2020 Without Project (Baseline)	2020 With Project	
Sierra Highway				
North of Placerita Canyon Road	Residential	72.1	72.1	0.0
South of Placerita Canyon Road	Mobile Home Park	71.6	71.6	0.0
Placerita Canyon Road				
West of Sierra Highway	Residential	56.8	57.3	0.5
Between SR-14 and Project Entrance Road	—	64.5	66.3	1.8
East of Project Entrance Road	Residential/Park	64.5	64.6	0.1

[a] *Calculated noise level at 25 feet from roadway traffic only. Detailed calculation worksheets, are included in Appendix D.*

Source: AES, 2010.

(3) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction

The Project involves off-site utility improvements that include construction of new infrastructure (e.g., sanitary sewer and water lines and a new water tank). Construction of these off-site utilities is expected to start in 2013 and would last approximately 9 to 12 months. These improvements may occur concurrently with on-site improvements. The Project would also include the replacement of approximately nine SCE power poles along Sierra Highway and possibly Placerita Canyon Road near the Development Area, construction of which would last several weeks, concurrent with construction of the substation in the Development Area. In addition, roadway infrastructure improvements are proposed at four intersections off of the Ranch, with construction expected to start in June 2014 and last approximately seven months. Construction noise impacts associated with these improvements are evaluated below.

(i) Wastewater Improvements

As discussed in Section V.L.2, Utilities and Service Systems—Wastewater/Sewage Disposal, of this Draft EIR, the proposed sewer alignment (Oak Orchard Alignment) to provide wastewater service to the Development Area would be via a new sewer line that would connect to existing facilities in the Santa Clarita Valley Sanitation District of Los Angeles County, using a gravity sewer system. The proposed gravity sewer system would extend approximately 9,800 feet from the Development Area, with a point of connection at Placeritos Boulevard and Meadview Avenue.

The sewer trenches would be a maximum of 4 feet wide with varying depths of approximately 3 to 14 feet, based on final system design and alignment. The construction of the proposed gravity sewer system would occur during the daytime hours, using open-cut-trenching techniques. Construction using open-cut-trenching techniques typically would proceed in the following general order: demolition and cutting, excavation and installation of piping, backfill and paving. Where the sewer line crosses the Los Angeles Aqueduct, it would be encased and constructed above ground. Where the sewer line crosses Placerita Creek (at two locations), a tunnel would be created using a jack-and-bore construction method. Construction using jack-and-bore techniques would typically be accomplished with an auger boring machine by inserting a casing pipe through the earth in a horizontal manner. Construction of the sewer lines would proceed at a rate of approximately 75 to 100 linear feet per day (excavated and installed), depending on the trenched depth.

The proposed alignment would travel through the public right-of-way along Placerita Canyon Road, Placeritos Boulevard, Golden Oak Lane, Oak Orchard Road, and Quigley

Canyon Road. There are residential uses along this alignment that are approximately 25 feet from the construction zone. These residential uses would be exposed to noise levels up to 86 dBA during peak construction periods when the construction activities take place directly in front of these residential properties. Thus, the estimated construction noise levels for the sewer improvements would exceed the County's significance threshold of 75 dBA (for activities less than 10 days, since construction of the utility line would last fewer than 10 days along any given roadway segment). Construction noise would be reduced to approximately 74 dBA at 100 feet from the construction zone. As described above, construction of the sewer lines would proceed at 75 to 100 linear feet per day. Therefore, construction-related noise impacts would be limited to few days at any given residential property. In addition, there would be up to 8 to 10 haul trucks per day associated with the sewer line construction. Noise generated by haul trucks would be approximately 60 dBA (hourly L_{eq}) along the construction routes. In summary, short-term significant noise impacts on residential receptors are expected from the construction of the sewer improvements.

(ii) Water Improvements

As discussed in Section V.L.1, Utilities and Service Systems—Water Supply, of this Draft EIR, two water alignment options are proposed to provide water service to the Project. The first option would include the construction of a water main from a point of connection to the existing water main at the intersection of Oakhurst Drive and Dockweiler Road. The proposed water main would then run easterly along Dockweiler Drive to Sierra Highway, then northerly along Sierra Highway to Placerita Canyon Road, and then easterly to the Development Area for a total length of approximately 6,300 feet. A water tank would be constructed on the Ranch on a hilltop south of Placerita Canyon Road. A water main along an existing unpaved maintenance road from the proposed water tank to Placerita Canyon Road and the Development Area's on-site water system would be constructed for a total length of 2,300 feet. To supply the proposed water tank, a booster pump station would be constructed on Newhall County Water District property next to the two existing water tanks located west of the point of connection at Dockweiler Drive and north of Deputy Jake Drive.

A second option for water service to the Development Area would include a point of connection to the existing water main that currently terminates near the City of Los Angeles Department of Water and Power (LADWP) aqueduct along Placerita Canyon Road west of Sierra Highway. This water line would be extended easterly along Placerita Canyon Road to the Development Area for a total length of approximately 3,100 feet. A booster pump station would be constructed along Placerita Canyon Road past all residential service connections in the lower pressure zone to provide the required pressure to the distribution system. Like the first water service option, a water tank would be constructed on a hilltop

south of Placerita Canyon Road with a new water main connection from the tank to the Development Area.

Construction of the new water main lines would include construction activities that would be similar to those of the sewer improvements. Similar to the sewer lines, the trenches for the water line would be a maximum of 4 feet wide and approximately 6 feet deep. Under the first option, the nearest sensitive receptor to the water main alignment would be R3 (representing residential uses south of Dockweiler Road), which would be approximately 75 feet away. These residential uses would be exposed to noise levels of up to 76 dBA at peak construction periods when the construction activities take place near these residential properties. Thus, the County's significance threshold of 75 dBA would be exceeded. Other off-site sensitive receptors are a minimum 1,500 feet from these improvements and thus would be exposed to a maximum construction noise level of up to 51 dBA, which would result in a less than significant noise impact. However, construction of the associated water booster pump near an existing water tank would generate a noise level of up to 67 dBA at the nearest residential uses (located at the corner of Kirsch Street and Deputy Jake Drive, approximately 300 feet away). Thus, the estimated construction noise level associated with construction of the booster pump would exceed the County's significance threshold of 60 dBA (for construction activities lasting more than 10 days, since construction of the booster pump would likely last longer than 10 days).

Under the second option, the nearest sensitive receptor to the construction activities would be R2 (representing residential uses along Placerita Canyon Road). These uses are located approximately 500 feet west of the construction area. Thus, construction of the water line would generate noise levels of up to 62 dBA at receptor R2, which would be below the County's significance threshold of 75 dBA. However, the proposed location of the necessary water booster pump would likely result in construction noise levels for residential uses along Placerita Canyon Road that would exceed the County's significance threshold of 60 dBA (for construction activities lasting more than 10 days, since construction of the booster pump would likely last longer than 10 days). Thus, potential construction noise impacts under this water service option would be significant.

(iii) SCE Power Pole Replacements

As part of the proposed substation and associated improvements, SCE would replace an estimated nine existing overhead distribution poles along public roadway rights-of-way on Sierra Highway and possibly Placerita Canyon Road with galvanized tubular steel poles and taller wood poles. The SCE power pole replacements may extend along Sierra Highway from Placerita Canyon Road to Golden Valley Road. The exact location of the replacement poles has not been determined by SCE, but the poles are expected to be placed in approximately the same locations as the existing poles (within three feet). Overall, the replacement activities are anticipated to last several weeks, with the installation

of wood poles lasting approximately one day and the installation of steel poles lasting one to two weeks due to the need for concrete foundations, plus a few weeks to remove the old poles and realign (i.e., reconnect) the power lines. Construction equipment associated with the SCE power pole replacements would include a truck-mounted drill rig, a small crane, and a small compaction machine and/or a roller. Assuming the power pole replacements could occur as far north as Golden Valley Road, the nearest noise sensitive receptor to the SCE power pole replacements would be a single family use located at the northeast corner of Sierra Highway and Golden Valley Road, which is approximately 400 feet from the northernmost construction area.

Construction noise levels associated with replacement of the SCE power poles are estimated to be 62 dBA (L_{eq}) at the nearest residential use. This estimated construction noise level would exceed the significance threshold of 60 dBA (L_{eq}) for construction activities lasting more than 10 days; however, it would not exceed the significance threshold of 75 dBA (L_{eq}) for construction activities lasting less than 10 days.[23] In addition, this noise level would be lower than the existing daytime ambient noise level (based on the measured daytime ambient noise level of 70.2 dBA (L_{eq}) at receptor R5, which is located along Golden Valley Road east of Sierra Highway and demonstrates daytime noise characteristics most similar to the nearest residential use due to proximity to Golden Valley Road). The next closest noise sensitive receptor to the proposed SCE power pole replacements construction areas is receptor R2, which is approximately 1,800 feet to the west. At receptor R2, construction activities associated with the replacement power poles would generate noise levels of up to 41 dBA (L_{eq}).[24] The estimated construction-related noise level at receptor R2 would be below the significance threshold of 60 dBA for construction activities lasting more than 10 days, below the significance threshold of 75 dBA (L_{eq}) for construction activities lasting less than 10 days, as well as below the lowest measured daytime ambient noise level of 55 dBA at R2. Therefore, noise impacts associated with replacement of the off-site SCE power poles during daytime hours would be less than significant.

As the SCE power poles to be replaced are located along Sierra Highway, which is within Caltrans' jurisdiction, the power pole replacements may occur during the nighttime

---

[23] *The 10-day thresholds are based on construction activities at a given fixed point (in this case, at a given power pole location). Therefore, the applicable threshold will depend on the precise number of days during which construction occurs at the specific power pole(s) to be replaced in proximity to Golden Valley Road.*

[24] *Noise calculations for receptor R2 include the standard sound attenuation of 6 dB per doubling of distance and additional sound attenuation of 1.5 dB per doubling of distance due to attenuation associated with soft ground surfaces (i.e., ground surfaces with soft dirt and vegetation) as set forth in Caltrans' 2009 Technical Noise Supplement.*

hours. The estimated construction noise level of 41 dBA (L_{eq}) at receptor R2 would be below the lowest measured nighttime ambient noise level of 49 dBA (L_{eq}), below the nighttime significance threshold of 50 dBA for construction activities lasting more than 10 days, and below the significance threshold of 60 dBA (L_{eq}) for construction activities lasting less than 10 days. In addition, the estimated construction noise level of 41 dBA, when added to the existing ambient noise level of 49 dBA, would result in an increase of less than 1 dBA at receptor R2. However, the estimated construction noise level of 62 dBA (L_{eq}) at the residential use northeast of Sierra Highway and Golden Valley Road due to potential replacement of power poles as far north as Golden Valley Road would exceed the County's nighttime construction noise limit of 50 dBA (L_{eq}) for construction activities lasting more than 10 days, and the significance threshold of 60 dBA (L_{eq}) for construction activities lasting less than 10 days, as well as the nighttime ambient noise level (estimated to be 50 dBA (L_{eq}), based on the measured ambient noise levels at receptor R2, which demonstrates nighttime noise characteristics most similar to the residential use near Sierra Highway and Golden Valley Road).[25] Therefore, significant noise impacts would be expected at the nearest residential use located northeast of Sierra Highway and Golden Valley Road. However, these noise impacts would be short-term and temporary, as the replacement of the power poles would require a maximum of a few weeks (and could be as short as several days at any given location). Additionally, replacement of only those power pole(s) near Golden Valley Road would result in such impacts; replacement activities associated with poles located further to the south would generate lower noise levels at the sensitive receptor as distance increases.

(iv) Roadway Improvements

As discussed more thoroughly in Section V.J, Traffic, Access and Parking, of this Draft EIR, the Project Design Features and Mitigation Measures include roadway infrastructure improvements at the following intersections: Placerita Canyon Road/State Route 14 Northbound Ramps, Sierra Highway/SR-14 Southbound Ramps, Sierra Highway/Placerita Canyon Road, and current Ranch main entrance/Placerita Canyon Road. The Project would also pay its fair share toward the cost of additional improvements at the following intersections: Sierra Highway/SR-14 Southbound Ramps and Sierra Highway/Placerita Canyon Road. Construction of these improvements would involve less than one acre of disturbed area per day at any of the intersections and proceed in the following general order: demolition and cutting, grading, and paving. Construction equipment associated with the improvements is anticipated to include a backhoe,

[25] *Nighttime noise levels at receptor R5, when limited traffic occurs long Golden Valley Road, are more strongly influenced by traffic on SR-14, which is fairly distance from the residential use in question. R2 exhibits more similar nighttime noise characteristics based on a location more distant from the freeway. Additionally, use of the lower nighttime ambient at R2 presents a more conservative analysis.*

compactor, roller, paver, pavement grinder, and dump truck. To represent a worst-case scenario, this analysis assumes that construction activities would occur concurrently at all four intersections.

As previously indicated, the nearest sensitive receptor to the proposed roadway improvements is a single-family residential use located at 20821 Placerita Canyon Road (receptor R2), approximately 1,900 feet to the west. Construction noise levels associated with the roadway improvements are estimated to be a maximum of 48 dBA (L_{eq}) at receptor R2.[26] This estimated noise level would be below the significance threshold of 60 dBA (for construction activities lasting more than 10 days) and below the lowest measured daytime ambient noise level at R2 of 55 dBA (L_{eq}). When added to the existing ambient noise level of 55 dBA, the estimated construction noise would result in a maximum increase of 0.8 dBA. Therefore, noise impacts associated with construction of the proposed roadway infrastructure improvements would be less than significant at the nearest noise sensitive use (receptor R2) during daytime hours.

However, as three of the four intersections to be improved are located within Caltrans' jurisdiction (i.e., those intersections along Sierra Highway and at the SR-14 ramps), construction of these improvements would be expected to occur during nighttime hours.[27] Conservatively assuming that all four intersections would be improved concurrently, the estimated construction noise level of 48 dBA (L_{eq}) at receptor R2 generated by the construction activities would be below the County's nighttime noise standard for stationary equipment (i.e., for activities lasting more than 10 days) of 50 dBA. In addition, when added to the existing nighttime ambient noise level, the estimated construction noise would result in a maximum increase of 2.5 dBA during nighttime hours, and thus would not constitute a substantial temporary increase (i.e., 3 dBA). As such, noise impacts associated with nighttime construction of the proposed roadway infrastructure improvements would be less than significant at receptor R2.

Other noise sensitive receptors (i.e., receptors R1, R3, R4 and R5) are located at a greater distance than R2 (a minimum of 3,400 to 6,500 feet from the construction activities) and would be shielded from the roadway improvements by existing topography. Consequently, noise associated with construction of the off-site roadway improvements

---

[26] *Noise calculations for receptor R2 include the standard sound attenuation of 6 dB per doubling of distance and additional sound attenuation of 1.5 dB per doubling of distance due to attenuation associated with soft ground surfaces (i.e., ground surfaces with soft dirt and vegetation), as set forth in Caltrans' 2009 Technical Noise Supplement.*

[27] *For roadways under Caltrans' jurisdiction, construction hours are from 11:00 P.M. to 5:00 A.M. Monday through Friday.*

would not result in a measurable increase at those locations, and potential noise levels would be below the applicable significance thresholds (both daytime and nighttime). Therefore, noise impacts associated with construction of the proposed roadway infrastructure improvements would be less than significant.

(b) Operation

The majority the Off-Site Infrastructure Improvements would not result in operational noise as the improvements are not associated with any noise-producing uses (i.e., underground water/sewer lines). In addition, the off-site roadway intersection improvements would not represent a change in use from existing conditions. However, as described in Section IV, Project Description, of this Draft EIR, a booster pump station would be constructed next to two existing water tanks located west of the point of connection at Dockweiler Drive and north of Deputy Jake Drive or along Placerita Canyon Road east of the residential service connections. Detailed information regarding the booster pump station is not currently available as the booster pump station has not been fully designed. However, in accordance with MM C-5, below, the proposed booster pump station would be designed and constructed such that noise levels at the nearest residential receptor do not exceed the City of Santa Clarita's noise limit of 55 dBA during nighttime hours (between 10:00 P.M. and 7:00 A.M.) and 65 dBA during daytime hours (between the 7:00 A.M. and 10:00 P.M.) or the lowest measured ambient noise level. Based on the conceptual alignments of the water infrastructure systems, the nearest residential use would be located approximately 300 feet from the possible Deputy Jake Drive location for the booster pump station and approximately 150 feet from the Placerita Canyon Road location. In order to meet the requirements set forth in MM C-5, the booster pump station would be designed to not exceed the City's nighttime noise limit of 55 dBA at a distance of 50 feet, assuming that the booster pump station is located approximately 150 from the nearest residence. Therefore, implementation of MM C-5 would ensure that potential impacts associated with operation of the booster pump station would be less than significant.

Threshold C-7: Would the project site be located near a high noise source (airports, railroads, freeways, industry)?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

As discussed above, the existing noise environment in the Project site vicinity is primarily comprised of auto traffic on local roadways, including SR-14, Placerita Canyon Road, and Sierra Highway. The Development Area is located adjacent to the SR-14 freeway. The nearest proposed buildings (i.e., soundstages and mills) would be approximately 175 feet from SR-14. With respect to noise compatibility, the existing freeway noise levels at the proposed buildings would be within the "conditionally acceptable" categories for the proposed uses (i.e., commercial and professional). As

described above, the soundstage shell structures would be designed to provide sound insulation required to meet the Project's intended functions. As such, freeway noise would be attenuated to the interior of the soundstage shell structures. Therefore, significant noise impacts would not be anticipated for the proposed buildings located near SR-14. In addition, two existing residential buildings (an unoccupied house and a mobile home) are located within the Development Area approximately 1,100 feet from SR-14. The unoccupied house would be removed as part of the Project, and the mobile home would be relocated within the Ranch, east of the Development Area (approximately 4,000 feet from SR-14). As the Potential Mobile Home Relocation Areas would be located further away from SR-14, the freeway noise at these locations would be reduced. With respect to noise compatibility, the existing traffic noise levels along the analyzed roadways fall between "normally acceptable" and "conditionally acceptable" categories for residential uses. Therefore, significant noise impacts would not be expected.

(2) Off-Site Infrastructure Improvement Areas Impacts

The Off-Site Infrastructure Improvement Areas include primarily utility improvements (i.e.. underground pipelines for water and sewer service) and would occur entirely on local roads. Once implemented, nearly all the utility improvements would be underground, and the Off-Site Infrastructure Improvement Areas would be restored to existing conditions. Similarly, replacement of approximately nine SCE power poles would occur within existing road rights-of-way, and existing conditions would be restored following installation. In addition, there would not be any personnel associated with operation of the Off-Site Infrastructure Improvements. Therefore, the Off-Site Infrastructure Improvements would not place people near high-noise sources, and impacts would be less than significant.

Threshold C-9: Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

Construction activities can generate varying degrees of ground vibration, depending on the construction procedures and the construction equipment used. The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receptor buildings. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne

vibrations from construction activities rarely reach the levels that damage structures. As described above, the FTA has published standard vibration velocities for construction equipment operations. The reference vibration levels (peak particle velocities, PPV) for construction equipment pieces anticipated to be used during Project construction are listed in Table V.C-17 on page V.C-44. With regard to the Project, high levels of ground-borne vibration would be generated primarily during the foundation phase, where impact pile drivers would likely be used for installing piles.

As indicated in Table V.C-17, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.003 inch per second (PPV) for a small bulldozer to 1.518 inch per second (PPV) for impact pile driver, at 25 feet from the equipment. Ground-borne vibration decreases rapidly with distance. Estimated vibration levels at the nearest off-site structure (the Antelope Valley Freeway SR-14 overpass at Placerita Canyon Road, approximately 200 feet from the primary Project construction area) and the nearest on-site building structure are shown in Table V.C-17. As shown therein, the nearest off-site structure, the SR-14 overpass, would be exposed to a maximum vibration level of 0.067 inch per second (PPV) during the Project's pile driving activities. The nearest off-site residential receptors are located approximately 2,400 feet away and would be exposed to a maximum vibration level of 0.002 inch per second (PPV). These vibration values are well below the 0.2- and 0.5-inch per second (PPV) significance thresholds described above. Therefore, vibration impacts associated with the Project's on-site construction would be less than significant.

(b) Operation

Project operations would include typical commercial-grade stationary mechanical and electrical equipment, such as air handling units, chillers, cooling towers, electrical power transformers, and emergency generators, which would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the proposed surface lots. As the nearest off-site residential uses (R2) is approximately 2,400 from the Development Area, the potential vibration impacts from all Project sources would be well below the significance threshold of 0.01 inch per second RMS for perceptibility. As such, vibration impacts associated with operation of the Project would be below the significance threshold and vibration impacts during operation would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction

With respect to off-site construction activities, as described above, there are residential buildings that are located approximately 25 feet from proposed construction

Table V.C-17
Construction Vibration Impacts

Construction Equipment	Reference Vibration Levels at 25 Feet, PPV (inch/second)[a]	Estimated Vibration Levels at Indicated Distance, PPV (inch/second)[b]		
		200 Feet (Nearest Off-site Structure)[c]	600 Feet (Nearest On-Site Buildings)[d]	2,400 Feet (Nearest Off-Site Buildings)[e]
Impact Pile Driver	1.518	0.067	0.013	0.002
Large Bulldozer	0.089	0.004	0.001	<0.001
Caisson Drilling	0.089	0.004	0.001	<0.001
Loaded Trucks	0.076	0.003	0.001	<0.001
Small Bulldozer	0.003	<0.001	<0.001	<0.001

[a] *FTA, Transit Noise and Vibration Impact Assessment, Table 12-2, 2006.*
[b] *PPV at distance D = PPVref x $(25/D)^{1.5}$.*
[c] *Nearest off-site structure includes the Antelope Valley Freeway overpass at Placerita Canyon Road.*
[d] *Nearest on-site structure within the Disney Golden Oak Ranch.*
[e] *Residential building at 20821 Placerita Canyon Road.*
Source: AES, 2010.

activities associated with the off-site infrastructure improvements. Construction of these improvements would generate vibration levels of up to 0.089 inch per second (PPV) at a 25 feet distance. The estimated vibration levels would be below the 0.2 inch per second (PPV) significance threshold. Thus, such impacts would be less than significant.

(b) Operation

Implementation of the Off-Site Infrastructure Improvements Areas would not result in noticeable vibration levels. Therefore, no impacts would result.

4. CUMULATIVE IMPACTS

The Project together with the Related Projects and future growth would contribute to cumulative noise impacts. The potential for cumulative noise impacts to occur is specific to the distance between each Related Project and their stationary noise sources including the cumulative traffic that these projects would add to on the surrounding roadway network.

(1) Construction Noise and Vibration

As indicated in the Project's traffic study, a total of 14 Related Projects are identified in the vicinity of the Development Area, ranging from approximately 600 feet to nearly

4 miles away. Noise from construction of development projects is typically localized and has the potential to affect areas immediately within 500 feet from the construction site. Therefore, noise from construction activities from projects within 1,000 feet of each other could contribute to a cumulative noise impact for receptors located between the two construction sites. While most of the 14 Related Projects are located more than 5,000 feet from the Development Area, Related Project No. 3 (a mixed-use office development) is located approximately 600 feet from the Development Area at the southwest corner of Sierra Highway and Placerita Canyon Road. The nearest sensitive receptor to the Development Area, receptor R2, is located approximately 1,500 feet from the Related Project No. 3 and 2,400 from the Proposed Development Area.

Since the timing of the construction activities for the Related Projects cannot be defined, any quantitative analysis that assumes multiple, concurrent construction projects would be entirely speculative. Nevertheless, if Related Project No. 3 were to occur concurrently with Project construction, the construction noise from this Related Project and from the Project could increase noise levels at the noise-sensitive receptors closest to the Development Area (receptor R2). The maximum cumulative increase from the Project would be approximately 3 dBA, assuming similar construction activities at both construction sites. This would increase the estimated Project related on-site construction noise at receptor R2 from 51 dBA to 54 dBA, which would still be below the County's significance threshold of 60 dBA. Thus, to the extent no other Related Project would be located in close proximity to the Development Area, cumulative construction noise impacts during on-site construction activities would be less than significant. However, when accounting for construction noise associated with nearby Related Projects in the vicinity of the off-site infrastructure improvements, short-term significant cumulative noise impacts on sensitive uses would occur at the sensitive uses in these areas.

As previously discussed, the existing traffic volumes along the SR-14 freeway are estimated to include 8,760 cars and 415 trucks per hour. Daytime construction activities associated with the Project would generate up to 32 round haul truck trips per hour. The construction-related truck volumes and specific construction durations for the related projects are not available, However, in order to increase the traffic noise along the SR-14 freeway by 3 dBA, the total traffic volumes would need to be doubled (i.e., 17,520 cars and 830 trucks per hour). Based on the number of related projects proposed, construction of these projects would not be anticipated to generate traffic equivalent to the amount necessary to generate a 3 dBA increase in trips. Thus, cumulative noise impacts associated with truck traffic from the Project and related projects are anticipated to be less than significant.

Due to the rapid attenuation characteristics of ground-borne vibration and distance of the related projects to the Project, there is no potential for a cumulative construction-period impact to occur with respect to ground-borne vibration.

(2) Long-Term Operations

Development of the Project and Related Projects would generate noise that would contribute to cumulative noise from a number of community noise sources including off-site vehicle traffic and on-site mechanical equipment. Noise levels would be less than significant at the property line for each Related Project due to the County's provisions for projects located within the County's boundary and the City's provisions for project located within the City's boundary that limit on-site stationary-source noise such as outdoor air-conditioning equipment. Thus, like the Project, on-site stationary-source impacts associated with Related Projects would be less than significant and cumulative stationary-sources noise impacts would be less than significant. However, the Project and other Related Projects in the area would produce traffic volumes (off-site mobile sources) that are capable of generating roadway noise.

Cumulative noise impacts due to traffic were analyzed by comparing the projected increase in traffic noise levels associated with existing conditions with "future cumulative" conditions and then comparing this change with the applicable significance threshold(s). Future cumulative conditions include traffic volumes from future ambient growth, related development projects, and the Project. The calculated off-site traffic noise levels under "existing" and "future cumulative" conditions for Project's Soundstage and Soundstage/ Studio Office Options are presented in Table V.C-18 on page V.C-47 and Table V.C-19 on page V.C-47, respectively. Cumulative traffic volumes would result in a maximum increase of 8.5 dBA (CNEL) along Placerita Canyon Road (west of Sierra Highway), under the both Soundstages and Office Studio Options. At all other analyzed roadway segments, the increase in cumulative traffic noise would be less than the 3 dBA significance threshold. While significant cumulative noise impacts would result along Placerita Canyon Road (west of Sierra Highway), the Project's contribution to the cumulative impacts along this roadway segment would be less than 1.0 dBA and below the 3.0 dBA thresholds of significance. Noise mitigation such as sound walls would not be feasible for the existing residential uses along Placerita Canyon Road, as these homes front the street and the addition of a sound wall would interfere with access to the properties. As the maximum increase in cumulative off-site vehicle traffic noise levels would exceed the Project's significance threshold, cumulative noise impacts due off-site vehicle traffic would be significant and unavoidable.

Table V.C-18
Cumulative Off-Site Roadway Traffic Noise Impacts—Soundstages Within Northern Portion of the Site Option

	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL[a]		Increase in Noise Levels due to Project, CNEL
		Existing	2020 Cumulative[b]	
Sierra Highway				
North of Placerita Canyon Road	Mobile Home Park	71.0	72.4	1.4
South of Placerita Canyon Road	Residential	70.5	72.1	1.6
Placerita Canyon Road				
West of Sierra Highway	Residential	55.8	64.3	8.5
Between SR-14 and Project Entrance Road	—	63.4	66.2	2.8
East of Project Entrance Road	Residential/Park	63.5	64.6	1.1

[a] *Calculated noise level at 25 feet from roadway traffic only. Detailed calculation worksheets, are included in Appendix D.*

[b] *Includes traffic volumes from existing condition plus future growth, known related projects and Project-related.*

Source: AES, 2010.

Table V.C-19
Cumulative Off-Site Roadway Traffic Noise Impacts—Studio Offices within Northern Portion of the Site Option

	Adjacent Land Uses	Calculated Traffic Noise Levels, CNEL[a]		Increase in Noise Levels due to Project, CNEL
		Existing	2020 Cumulative[b]	
Sierra Highway				
North of Placerita Canyon Road	Mobile Home Park	71.0	72.4	1.4
South of Placerita Canyon Road	Residential	70.5	72.1	1.6
Placerita Canyon Road				
West of Sierra Highway	Residential	55.8	64.3	8.5
Between SR-14 and Project Entrance Road	—	63.4	66.3	2.9
East of Project Entrance Road	Residential/Park	63.5	64.6	1.1

[a] *Calculated noise level at 25 feet from roadway traffic only. Detailed calculation worksheets, are included in Appendix D.*

[b] *Includes traffic volumes from existing condition plus future growth, known related projects and Project-related.*

Source: AES, 2010.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF C-1: The majority of Project construction-related truck trips shall be scheduled outside of the A.M. peak (7:00 A.M. to 9:00 A.M.) and P.M. peak (4:00 P.M. to 6:00 P.M.) traffic hours.

PDF C-2: To expedite soil export activities, a second work shift from approximately 7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M. may occur. Activities scheduled during this night shift shall be limited to loading trucks with soil and hauling and shall ensure no noise disturbance at any residential property line due to these hauling activities. The Applicant shall obtain an exemption from the County Engineer, as applicable, before any soil export activities can occur for the second work shift.

PDF C-3: Building mechanical/electrical equipment shall be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control and the City of Santa Clarita Municipal Code Section 11.44.040, as applicable.

PDF C-4: Mechanical equipment buildings (e.g., the central plant) shall be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control.

b. Mitigation Measures

The following measures are recommended to minimize construction-related noise impacts to the extent feasible and to ensure that operational noise impacts would be less than significant:

MM C-1: With the exception of short-term nighttime hauling activities during the grading phase (if an exemption is obtained from the County Engineer, as applicable) and work by Caltrans and Southern California Edison, exterior noise-generating construction activities shall be limited to Monday through Friday from 7:00 A.M. to 7:00 P.M., and from 8:00 A.M. to 6:00 P.M. on Saturdays. No construction activities shall occur on Sundays or any legal holidays.

MM C-2: Power construction equipment shall be equipped with noise shielding and muffling devices. All equipment shall be properly maintained in accordance with manufacturers' specifications to assure that no additional noise, due to worn or improperly maintained parts is generated.

MM C-3: At least 72 hours prior to the construction of the off-site water and sewer improvements, the Applicant shall provide written notification to residences within a 100-foot radius of the construction zone of these improvements.

MM C-4: The central utility plant shall be designed and constructed such that exterior noise levels do not exceed 82 dBA at a distance of 50 feet from the utility plant in compliance with County noise standards.

MM C-5: The booster pump station associated with the water infrastructure improvements shall be designed and constructed such that noise levels at the nearest residential receptor do not exceed the City of Santa Clarita's ambient noise limits of 55 dBA during nighttime hours (between 10:00 P.M. and 7:00 A.M) and 65 dBA during daytime hours (between the 7:00 A.M. and 10:00 P.M.) or the lowest measured ambient noise level.

MM C-6: For construction of segments of the proposed off-site utility lines located within the jurisdiction of the County of Los Angeles or the City of Santa Clarita, construction shall be permitted from 7:00 A.M. to 7:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday. For segments under Caltrans' jurisdiction, construction hours shall be from 11:00 P.M. to 5:00 A.M. Monday through Friday.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Construction

As analyzed above, construction noise impacts for the Project's on-site construction activities would be less than significant; however, significant noise impacts would be expected from the off-site infrastructure installations, including the replacement of power poles. Compliance with the recommended Mitigation Measures and Project Design Features would reduce construction noise impacts at the sensitive receptors near the off-site infrastructure improvement construction areas, to the greatest extent feasible. With the exception of nighttime hauling and infrastructure work within Caltrans' and SCE's jurisdiction, MM C-1 would preclude construction noise impacts from occurring during the noise-sensitive nighttime periods or at any time on Sundays. Noise level reductions attributable to Mitigation Measures C-2 and C-3, although not easily quantifiable, would ensure the noise impacts associated with construction activities would be reduced to the extent practicable. Nevertheless, construction noise impacts during construction of the off-site infrastructure improvements would remain significant and unavoidable even with implementation of the proposed mitigation measures. Short-term cumulative construction noise impacts associated with construction of the off-site infrastructure improvements and construction of nearby Related Projects in the vicinity of sensitive receptors would also

remain significant. Thus, construction of the Off-Site Infrastructure Improvements in conjunction with the Related Projects would result in significant and unavoidable construction and cumulative construction noise impacts.

b. Operation

Implementation of the Project Design Features and Mitigation Measures set forth above would ensure that potential operational noise impacts of the Project would be less than significant.

As discussed above, cumulative off-site traffic volumes would result in a significant noise impact affecting the existing residential development along Placerita Canyon Road (west of Sierra Highway). There are no feasible mitigation measures to reduce this impact since vehicular access to and from the single-family residential uses is provided via driveways along Placerita Canyon Road and construction of a noise barrier wall at these locations would interfere with property access. Therefore, cumulative off-site traffic would result in a significant and unavoidable impact for the existing residential homes along Placerita Canyon Road (west of Sierra Highway).

V. Environmental Impact Analysis

D. Water Quality

V. ENVIRONMENTAL IMPACT ANALYSIS

D. WATER QUALITY

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's impacts on water quality and summarizes information from the Drainage Concept/SUSMP/LID Plan (Drainage Concept), which was prepared by David Evans and Associates in August 2011 and approved by the County of Los Angeles Department of Public Works, Land Development Division, Engineering and Survey Branch, Storm Drain and Hydrology Section on August 22, 2011, and is provided as Appendix C to this Draft EIR. The Drainage Concept includes the Sediment Transport Analyses for Placerita Creek (Sediment Transport Analyses), prepared by JLC Engineering & Consulting in August 2011.

2. ENVIRONMENTAL SETTING

a. Local Topography, Hydrology, and Water Quality

The Ranch and the Project site, which includes the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, and the Off-Site Infrastructure Improvement Areas, including the locations of the SCE power pole replacements and several off-site roadway intersections, are located within the Placerita Canyon hydrologic region and specifically within the southeastern part of the Upper Santa Clara River Watershed region. The Upper Santa Clara River Watershed consists of the portion of the Santa Clara River Watershed located within the County. The major bodies of water in the region are the Santa Clara River and its tributaries. The principal tributaries are Castaic Creek, San Francisquito Creek, Bouquet Creek, and the South Fork of the Santa Clara River.

The Ranch is situated at the bottom of Placerita Canyon with relatively steep hillsides and ridgelines to the north, east, and south measuring approximately 600 feet in height. Placerita Canyon is an east-west running canyon that includes oak groves, a seasonal stream with mixed willow riparian woodland species, and various other plant and animal communities. The bottom of the canyon is relatively flat with topography descending gently toward the west. The Ranch contains two designated blue line streams, Placerita Creek, which traverses the Ranch in an east-west direction, and Heil Creek, which connects with Placerita Creek on the east and extends to the north. Placerita Creek flows east to west and is an ephemeral creek that receives water from naturally occurring

runoff. The existing tributary area of Placerita Creek upstream of SR-14, which includes the 890-acre Ranch, is a watershed of approximately 6 square miles. Several small ephemeral drainage courses are also located within the southern portion of the Development Area and within the Ranch south of Placerita Canyon Road (i.e., within or near the Water Tank Area and Trail Area).

The Ranch has been used over the past several decades for motion picture and television film production, agriculture, horse breeding, cattle ranching, and some oil production activities. Approximately 225 acres of the Ranch are used for outdoor filming with some intermittent agricultural uses. The remaining areas of the Ranch, which consist mostly of undeveloped hillsides, are used primarily as a filming backdrop with some intermittent agricultural and oil production uses. Within the Ranch, existing water wells are used for irrigation.

South of the Development Area, including the Water Tank Area and Trail Area, off-site stormwater runoff generally flows in a south to north direction toward Placerita Creek.[1] There are three watersheds south of Placerita Canyon Road, referred to herein as Off-1a, Off-2a and Off-3a.[2] Watershed Off-1a and Watershed Off-2a, which include the Water Tank Area and a portion of the Trail Area, flow as sheet flow onto the Development Area through two cattle crossings situated under Placerita Canyon Road and are then routed to a small ephemeral drainage course that traverses the Development Area. These cattle crossings are 6-foot by 7-foot arch-type corrugated metal structures that cross under the roadway. Watershed Off-3a is a much smaller area and drains to a 24-inch corrugated metal pipe (CMP) that crosses under Placerita Canyon Road. Four small watersheds (Off-7a, Off-8a, Off-9a, and Off-10a) are located within the southernmost portion of the Development Area and include portions of Placerita Canyon Road. These areas drain toward Placerita Creek via sheet flow and the small ephemeral drainage course that traverses the Development Area. A separate drainage system installed by the California Department of Transportation (Caltrans) near the intersection of SR-14 and Placerita Canyon Road collects runoff from portions of both roadways and the SR-14 northbound off-ramp and discharges it to Placerita Creek through a 48-inch CMP that traverses the

---

[1] *The area south of Placerita Canyon Road includes the proposed Water Tank Area and associated access road, which would be paved for all-weather access, to the satisfaction of Newhall County Water District, as part of the Project. In addition, an "Arizona" dip crossing would be constructed across the access road to accommodate an existing drainage course that sheet flows across the road during storms under existing conditions. These conditions, including the increase in pervious area along the access road, have been considered in the calculations in the Drainage Concept.*

[2] *These areas are located within the Ranch, but are referred to as off-site watersheds in the Drainage Concept as they fall outside of the Development Area's main hydrologic system.*

western portion of the Development Area. There are five minor watersheds in the northern portion of the Development Area (Off-4a, Off-5a, Off-6a, Off-11a, and Off-12a), from which runoff currently sheet flows to the southwest toward Placerita Creek. Please see Figure V.B-1 in Section V.B, Flood Hazards, for an illustration of the existing off-site drainage areas and features.

The receiving waters for the Development Area and the remainder of the Ranch have been identified as Placerita Creek and ultimately the South Fork of the Santa Clara River, which flow into the Santa Clara River (Reach 6). As indicated in the Drainage Concept, Placerita Creek is not listed as an impaired waterway, but the Santa Clara River (Reach 6) is listed as impaired for Chloride, Chlorpyrifos, Coliform, Diazinon, and Toxicity on the most recent State Clean Water Act Section CWA 303(d) list of impaired water bodies.

Existing oil production operations are confined to a 63-acre area within the southwest corner of the Ranch near the Water Tank Area. Ten active wells and five inactive or abandoned wells are currently located on this portion of the Ranch, along with three aboveground storage tanks (ASTs). The third-party that owns the mineral rights and has surface right of access or any associated party that has been conveyed such access rights is responsible for the safe operation and abandonment of these tanks in accordance with all applicable laws and regulations. In addition, based on review of DOGGR maps, two plugged and abandoned oil wells exist within the westernmost portion of the Development Area.[3] Several plugged and abandoned dry holes also have been mapped within the Ranch to the east of the Development Area.[4]

The majority of the Off-Site Infrastructure Improvement Areas is located within the City of Santa Clarita, west of the Ranch and SR-14. The improvements proposed within these areas are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential and commercial development. Similarly, the SCE power pole replacement areas are located along Sierra Highway and potentially Placerita Canyon Road within existing road rights-of-way. Placerita Creek flows through a portion of the Off-Site Infrastructure Improvement Areas. Drainage in these areas occurs primarily through infiltration and sheet flow to Placerita Creek.[5] In addition, Project Design Features and Mitigation Measures would require

---

[3] *Division of Oil, Gas, and Geothermal Resource Map, ftp://ftp.consrv.ca.gov/pub/oi/maps/dist2/251/Map251.pdf, accessed December 1, 2010.*

[4] *Ibid.*

[5] *David Evans and Associates, August 2011.*

off-site roadway intersection improvements at the current Ranch main entrance/Placerita Canyon Road intersection and at the following intersections: Sierra Highway/SR-14 southbound ramps, Sierra Highway/Placerita Canyon Road, and the current Ranch main entrance/Placerita Canyon Road.

b. On-Site Conditions

(1) Drainage Patterns and Flow Rates

The Development Area is comprised of approximately 58 acres in the westernmost portion of the Ranch, a substantial portion of which is located on two large, mostly barren fill pads, referred to herein as the northern and southern fill pads. The northern portion of the Development Area, north of Placerita Creek, which includes the northern fill pad, is comprised of roughly 18 acres and is bordered by SR-14 on the northwest, undeveloped hillsides on the northeast, and Placerita Creek on the south. The highest elevation within the Development Area is located within the northernmost portion of the Development Area at approximately 1,567 feet above Mean Sea Level (MSL). The northern fill pad, which gradually slopes into Placerita Creek, is approximately 12 acres in size with an average elevation of 1,476 feet above MSL. The pad drains in a southwesterly direction toward a low point on the pad and then discharges to Placerita Creek via a concrete-lined v-ditch. The northern fill pad and the remaining northern portion of the Development Area are undeveloped with an imperviousness rate of approximately one percent. The existing discharge from the northern portion of the Development Area is estimated at 17 cubic feet per second (cfs).

The southern portion of the Development Area, south of Placerita Creek, which includes the southern fill pad, is comprised of approximately 25.6 acres of land and bordered by Placerita Creek to the north, Placerita Canyon Road to the south, SR-14 to the west, and the current Ranch main entrance on the east. The southern fill pad is approximately 11.6 acres in size, with an elevation of approximately 1,456 feet above MSL, and also slopes down into Placerita Creek. There is a 60-foot drop in elevation on the eastern slope of the southern fill pad, extending into the remaining southern portion of the Development Area. The southern fill pad drains to a low point at the southwest corner of the pad and is then conveyed by an underground 36-inch drain pipe to Placerita Creek. The remaining southern portion of the Development Area (approximately 14 acres) drains as sheet flow northerly toward Placerita Creek. This southern area is mostly undeveloped, other than the Ranch Foreman's mobile home and an uninhabited structure, with an imperviousness rate of about one percent. The existing discharge from the southern portion of the Development Area is estimated at 48 cfs.

The Potential Mobile Home Relocation Areas are situated in the southeast corner of the Ranch near an existing, developed area where the Ranch office, a barn, and a

workshop are located. These areas are generally flat with elevations ranging from approximately 1,506 feet to 1,523 feet above MSL. The Potential Mobile Home Relocation Areas are undeveloped and have been used in the past for ranching and farming. Drainage occurs through infiltration and sheet flow to Placerita Creek.[6]

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed areas of the Ranch. These areas are generally flat with elevations ranging from 1,450 feet to about 1,470 feel above MSL within the southern lot (Conditional Lot 1) and an average elevation of approximately 1,440 feet above MSL within the northern lot (Conditional Lot 2). Conditional Lot 1 consists of a graded and compressed earth lot that is currently used for surface parking and staging for existing Ranch and filming operations. Conditional Lot 2 is used intermittently for agriculture, and an elevated earthen access road cuts through it. Drainage in these areas occurs through infiltration and sheet flow to Placerita Creek.[7]

As previously mentioned, the Water Tank Area and a portion of the Trail Area are located in Watershed Off-2a, in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of the existing unpaved access road to 1,668 feet above MSL at the proposed water tank pad, while elevations within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The footprint of the proposed water tank and access road improvements generally encompass areas previously disturbed by past and current oil drilling operations. These disturbances include prior clearing and grading to create level pads, which remain readily evident today and are largely devoid of native vegetation. Two small ephemeral tributaries to Placerita Creek have been delineated within the Water Tank Area, one of which flows within an incised drainage channel then sheet flows across the existing access road and reconnects to its historic channel. The Trail Area comprises generally undisturbed land containing native vegetation, including chamise chaparral, coastal sage scrub, and oak woodlands; the associated trailhead/staging area, however, which would be located at the base of the water tank access road, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch and mostly contains non-native grasses. The Trail Area also includes portions of two small ephemeral tributaries to Placerita Creek.

---

[6] *Ibid.*

[7] *Ibid.*

(2) Groundwater

The Ranch and the Project site, including the Development Area, the Potential Mobile Home Relocation Areas, the Conditional Parking Areas, the Water Tank Area, the Trail Area, and the Off-Site Utility Improvements Areas, are located within the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin). The Basin encompasses an area of approximately 103 square miles. It is bordered by the Piru Mountains on the north, by impervious rocks of the Modelo and lower Saugus Formations on the west, by the San Gabriel Mountains on the south and east, and by the Santa Susana Mountains on the south. It is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek. The Basin is the sole source of local groundwater for the City of Santa Clarita's urban water supply. Most groundwater infiltration within the Basin is in the form of winter storm flows. However, the Basin is also replenished by deep percolation of agricultural land, urban irrigation, percolation from septic tanks and leach field systems, and treated effluent from water reclamation plants.

Natural or soft bottom drainage channels and natural floodways and floodplains maximize groundwater recharge and help to replenish aquifers. Placerita Creek, which is a soft bottom stream, and the generally undeveloped nature in the vicinity of the Development Area allow unencumbered infiltration of precipitation to the subsurface and provide an opportunity for groundwater recharge.

Groundwater in the vicinity of the Ranch tends to flow east to west, although cones of depression from groundwater pumping and mounding from irrigation can alter flow patterns over time. Based on soil boring tests performed on the Development Area, perched alluvial groundwater was encountered at a depth of 71.5 feet below the northern fill pad, at depths of 61 to 79 feet below the southern fill pad, and at depths of 11.5 to 16 feet below ground surface in the low lying areas east of the southern fill pad. Comparable groundwater depths occur throughout the low-lying portions of the Ranch, including the Conditional Parking Areas and the Potential Mobile Home Relocation Areas. Given the higher elevation of the Water Tank Area and Trail Area, groundwater is anticipated to exist hundreds of feet below the ground surface.[8] Deeper groundwater exists below the Ranch and is accessed by the existing private well; the approximate amount of such groundwater used each year is reported to the State Water Resources Control Board (SWRCB). The existing land uses and facilities on the Ranch use well water for domestic water supply and irrigation purposes and would continue to do so after Project implementation. Local groundwater would not be used for domestic water for the Project.

---

[8] *Ibid.*

Within the Off-Site Infrastructure Improvement Areas, including the SCE power pole replacement areas and off-site roadway intersections, groundwater depths vary to well over 100 feet below ground surface (bgs).[9,10]

According to the California Geological Survey (CGS), the historic high groundwater in the alluvial valley portion of the Development Area, the Conditional Parking Areas, and the Potential Mobile Home Relocation Areas was reported to be approximately 5 to 10 feet bgs. The portions of the Project site located in higher bedrock areas (i.e., the Water Tank Area, Trail Area, and portions of the Off-Site Infrastructure Improvement Areas) experience historic high groundwater depths of deeper than 50 feet bgs. The Off-Site Infrastructure Improvement Areas near Placerita Creek are located in a zone where the historic high groundwater deepens to the west from 10 to greater than 60 feet bgs. Historic high groundwater for the Off-Site Infrastructure Improvement Areas located northwest of the Development Area adjacent to Golden Valley Road varies between 5 and 25 feet bgs.

(3) Water Quality

There are no known surface water quality issues within the Ranch or the Project site. The groundwater under the Ranch naturally has high sulfur content.

c. Regulatory Setting

(1) Federal Regulations

(a) Clean Water Act

The Clean Water Act was first introduced in 1948 as the Water Pollution Control Act, with several major amendments enacted in 1961, 1966, 1970, 1972, 1977, and 1987. The Clean Water Act authorizes federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. The primary goals of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. As such, the Clean Water Act forms the basic national framework for the management of water quality and the control of pollutant discharges.

---

[9] *Groundwater levels within the City of Santa Clarita are not available. However, using water surface elevation readings recorded from existing water wells in the area, one east of the proposed Tract No. 71216 and the other west of the proposed sewer point of connection, the average groundwater depth ranges from 1,421 to 1,092 feet above MSL, which is well below the invert elevations of the proposed sewer pipe alignment.*

[10] *David Evans and Associates, August 2011.*

The Clean Water Act sets forth a number of objectives in order to achieve the above-mentioned goals, including regulating pollutant and toxic pollutant discharges, providing for water quality which protects and fosters the propagation of fish, shellfish, and wildlife, developing waste treatment management plans, and developing and implementing programs for the control of non-point sources of pollution.[11] The SWRCB and the Regional Water Quality Control Board (RWQCB) are the primary state agencies responsible for implementing the Clean Water Act and the state's Porter-Cologne Water Quality Act (discussed below) and regulating the activities and factors that affect or have the potential to affect water quality in the state.

The Clean Water Act provides the legal framework for several water quality regulations including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, anti-degradation policy, non-point source discharge programs, and wetlands protection. As discussed further below, a NPDES permit is required for all discharges of pollutants to waters of the United States from any point source. Federal regulations issued in November 1990 and revised in 2003 expanded the original scope of the NPDES program to include the permitting of stormwater discharges from construction sites that disturb areas larger than one acre.

In addition to regulating non-stormwater discharges, the Clean Water Act sets forth water quality standards and criteria based on a water body's designated beneficial uses. Water quality standards define the goals for a water body by designating its uses, setting criteria to protect those uses, and establishing provisions to protect water bodies from pollutants. Water quality criteria must be adopted to protect designated uses, including numeric pollutant concentrations and/or narrative statements that represent the quality of water that is necessary to support beneficial uses. Section 303(d) of the Clean Water Act requires the identification and listing of water quality-limited or "impaired" water bodies where water quality standards or beneficial uses are not met. Once a water body is listed as impaired, total maximum daily loads (TMDLs) must be established for the pollutants or flows causing the impairment.[12] A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. The USEPA oversees the 303(d) program and either the USEPA or the SWRCB

---

[11] *Non-point sources of pollution are carried through the environment via elements such as wind, rain, or stormwater and are generated by diffuse land use activities (such as runoff from streets and sidewalks or agricultural activities) rather than from an identifiable or discrete facility.*

[12] *33 U.S.C. § 1313(d)(c).*

establishes the TMDL schedule for individual constituents. TMDL records for the Santa Clara River watershed are included in the Drainage Concept.

In addition to trash and debris, common pollutants of concern that have the potential to affect water quality generally fall into one of the following seven categories: sediments, nutrients, bacteria/viruses, oil/grease, metals, organic compounds, and pesticides. These pollutants of concern are described below:

- Sediment is a common component of stormwater and can be a pollutant. Sediment can be detrimental to aquatic life (primary producers, benthic invertebrates, and fish) by interfering with photosynthesis, respiration, growth, reproduction, and oxygen exchange in water bodies. Sediment can transport other pollutants that are attached to it, including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids, a common water quality analytical parameter.

- Nutrients including nitrogen and phosphorous are the major plant nutrients used for fertilizing landscapes and are often found in stormwater. These nutrients can result in excessive or accelerated growth of vegetation, such as algae, resulting in impaired use of water in lakes and other sources of water supply. In addition, un-ionized ammonia (one of the nitrogen forms) can be toxic to fish.

- Pathogens, such as bacteria and viruses, are common contaminants of stormwater. For separate storm drain systems, sources of these contaminants include animal excrement and sanitary sewer overflow. High levels of indicator bacteria in stormwater have led to the closure of beaches, lakes, and rivers to contact recreation such as swimming.

- Oil and grease include a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Sources of oil and grease include leakage, spills, cleaning and sloughing associated with vehicle and equipment engines and suspensions, leaking and breaks in hydraulic systems, restaurants, and waste oil disposal.

- Metals including lead, zinc, cadmium, copper, chromium, and nickel are commonly found in stormwater. Many of the artificial surfaces of the urban environment (e.g., galvanized metal, paint, automobiles, or preserved wood) contain metals, which enter stormwater as the surfaces corrode, flake, dissolve, decay, or leach. Over half the trace metal load carried in stormwater is associated with sediments. Metals are of concern because they are toxic to aquatic organisms, can bioaccumulate (accumulate to toxic levels in aquatic animals such as fish), and have the potential to contaminate drinking water supplies.

- Organic compounds may be found in stormwater in low concentrations. Often synthetic organic compounds (e.g., adhesives, cleaners, sealants, solvents, etc.) are widely applied and may be improperly stored and disposed. In addition, deliberate dumping of these chemicals into storm drains and inlets causes environmental harm to waterways.

- Pesticides (including herbicides, fungicides, rodenticides, and insecticides) have been repeatedly detected in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. As pesticide use has increased, so too have concerns about the adverse effects of pesticides on the environment and human health. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for biomagnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them, such as fish and birds.

(b) Federal Anti-Degradation Policy

The federal Anti-Degradation Policy requires states to develop statewide anti-degradation policies and identify methods for implementing them.[13] Pursuant to the CFR, state anti-degradation policies and implementation methods must, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource. State permitting actions must be consistent with the federal Anti-Degradation Policy.

(2) State and Regional Regulations

(a) Porter-Cologne Water Quality Control Act (California Water Code)

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) was enacted in 1969 by the State of California. This Act includes provisions to address the requirements of the Clean Water Act, including NPDES permitting, dredge and fill programs, and civil and administrative penalties. Regulations promulgated as a result of the Porter-Cologne Act are codified in Sections 13000–14958 of the California Water Code. The Porter-Cologne Act is broad in scope and addresses issues relating to the conservation, control, and utilization of the water resources of the state. Under the Porter-Cologne Act, the quality of

[13] *40 Code of Federal Regulations Section 131.12.*

all the waters of the state (including groundwater and surface water) must be protected for the use and enjoyment by the people of the state.

The Act divided the state into nine RWQCBs, each of which implements and enforces provisions of the Porter-Cologne Act and the Clean Water Act subject to policy guidance and review by the SWRCB. In California, the NPDES program, discussed below, is also administered by the local RWQCBs. The Ranch is located in Region 4, which is under the jurisdiction of the Los Angeles RWQCB (LARWQCB).

Section 13050 of the California Water Code defines “pollution,” “contamination,” and “nuisance.” Briefly defined, “pollution” means an alteration of water quality such that it unreasonably affects the beneficial uses of water, which may be for drinking, agricultural supply, or industrial uses. “Contamination” means an impairment of water quality to the degree that it creates a hazard to public health. “Nuisance” is defined as anything that is injurious to health, is offensive to the senses, or is an obstruction to property use and which affects a considerable number of people.

(b) California Anti-Degradation Policy

The California Anti-Degradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Anti-Degradation Policy, the California Anti-Degradation Policy applies to all waters of the state, not just surface waters. Under the policy, whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality must be maintained and discharges to that water body must not unreasonably affect any present or anticipated beneficial use of the water resource.

(c) California Toxic Rule

In 2000, the California Toxic Rule was established to set water quality criteria for certain toxic substances to be applied to waters in the state. The California Environmental Protection Agency (CalEPA) promulgated this rule based on the determination that numeric criteria are necessary in the state to protect human health and the environment. The California Toxic Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

(d) National Pollutant Discharge Elimination System

(i) Construction

The Clean Water Act requires coverage under a NPDES construction permit for stormwater discharges to surface waters associated with various construction activities, except activities that result in disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale. The NPDES construction permit requires implementation of Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology to reduce or eliminate pollutants in stormwater runoff. The NPDES construction permit also includes additional requirements necessary to implement applicable water quality standards.

A new General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit) was adopted in 2009 by the SWRCB and became effective July 1, 2010.[14] The Construction General Permit regulates construction activities, such as clearing, grading, and excavation, resulting in soil disturbance of at least one acre of total land area.[15] The Construction General Permit prohibits the discharge of materials other than stormwater and authorized non-stormwater discharges, and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established in 40 CFR Section 117.3 and 40 CFR Section 302.4, unless a separate NPDES permit has been issued to regulate those discharges. The recent changes to the Construction General Permit were designed to increase water quality protection and added a Risk-Based Permitting Approach by establishing three levels of risk possible for a construction site and imposing more stringent requirements. Each project is evaluated for sediment discharge risk and receiving water risk. These factors combine to determine the project Risk Level or LUP Segment Risk Type (1, 2, or 3). LUPs can be multiple segments with different Risk Types. Permit requirements progressively increase with risk level/type.

In order to obtain coverage under the Construction General Permit, Permit Registration Documents (PRD) must be electronically filed for all new projects using the Stormwater Multiple Applications and Report Tracking System (SMARTS), and must include: a Notice of Intent (NOI), Risk Assessment, Site Map, and Stormwater Pollution Prevention Plan (SWPPP). PRDs will be publically available through SMARTS.

---

[14] *State Water Resources Control Board NPDES General Permit for Discharges Associated with Construction Activity (Water Quality Order No. 2009-0009-DWQ).*

[15] *Soil disturbance activities include clearing, grading, and disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.*

The SWPPP identifies potential pollutant sources that may affect the quality of discharge associated with construction activity, eliminate or reduce non-stormwater discharges using Source Control Measures approved by the County; and design the use and placement of BMPs to effectively prohibit the entry of pollutants from the project site into the public storm drain system during construction. The BMPs typically address minimization of erosion during construction, stabilization of construction areas, sediment control, control of pollutants from construction materials, and post-construction management (e.g., the minimization of impermeable surfaces, treatment of runoff, etc). The SWPPP must include a discussion of the program to inspect and maintain all BMPs. As construction progresses and as conditions warrant, the SWPPP may require modification by the construction contractor.

Once construction of a project is complete, a Notice of Termination must be filed with the SWRCB certifying that all state and local requirements have been met in accordance with the requirements of the Construction General Permit.

(ii) Operation

In accordance with Section 402(p) of the Clean Water Act, municipal NPDES permits prohibit the discharge of non-stormwater except under certain conditions and require controls to reduce pollutants in discharges to the maximum extent practicable. Such controls include BMPs, as well as system, design, and engineering methods. A municipal NPDES permit was issued to the County and 84 incorporated cities in December 2001.[16] The Los Angeles County Municipal NPDES Permit requires implementation of the Storm Water Quality Management Program prepared as part of the NPDES approval process. The Storm Water Quality Management Program requires the County and the 84 incorporated cities to:

- Implement a public information and participation program to conduct outreach on stormwater pollution;
- Control discharges at commercial/industrial facilities through tracking, inspecting, and ensuring compliance at facilities that are critical sources of pollutants;
- Implement a development planning program for specified development projects;
- Implement a program to control construction runoff from construction activity at all construction sites within the relevant jurisdictions;

[16] *Los Angeles County Municipal NPDES Permit (Order No. 01-182, NPDES No. CAS0041).*

- Implement a public agency activities program to minimize stormwater pollution impacts from public agency activities; and

- Implement a program to document, track, and report illicit connections and discharges to the storm drain system.

Under the Los Angeles County Municipal NPDES Permit, permittees are required to implement a development planning program to address stormwater pollution. These programs require project applicants for certain types of projects to implement a Standard Urban Stormwater Mitigation Plan (SUSMP) throughout the operational life of the project. The purpose of the SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs which must be incorporated into the design plans of new development and redevelopment. In combination, these treatment control BMPs must be sufficiently designed and constructed to treat or filter the first 0.75 inch of stormwater runoff from a storm event.

A project is subject to SUSMP if it falls under one of the categories listed below:

- Single-family hillside residential developments of one acre or more of surface area;

- Housing developments of 10 units or more;

- A industrial/commercial development involving 100,000 square feet or more impervious surface area;

- Automotive service facilities with 5,000 square feet or more of surface area;

- Retail gasoline outlets with 5,000 square feet or more impervious surface area and with projected averaged daily traffic of 100 or more vehicles;

- Restaurants of 5,000 square feet or more of surface area;

- Parking lots of 5,000 square feet or more of surface area or with 25 or more parking spaces;

- Projects located adjacent to or discharging directly to an Environmentally Sensitive Area that meets the following threshold conditions: discharge stormwater and urban runoff that is likely to impact a sensitive biological species or habitat; and create 2,500 square feet or more of impervious surface area; and

- Redevelopment projects in subject categories that meet redevelopment thresholds.

To minimize the impact of stormwater discharges from industrial facilities, the NPDES program also includes an industrial stormwater permitting component. Operators of industrial facilities are required to have authorization under a NPDES industrial stormwater permit. None of the existing or proposed activities on the Ranch or Development Area require coverage under the General Industrial Permit.

(e) Los Angeles Basin Plan

As required by the California Water Code, the LARWQCB has adopted a plan entitled Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan designates beneficial uses for bodies of water, sets quantitative and/or qualitative water quality objectives necessary to protect the beneficial uses, addresses localized water quality problems, and establishes a plan to protect water quality. The Basin Plan includes implementation provisions, programs, and policies to protect all waters in the Los Angeles region. General discharge permits issued by the LARWQCB under the Basin Plan are used to regulate polluted stormwater runoff, treated groundwater, non-hazardous soil disposal, and other discharges.

As previously indicated, the receiving waters for the Ranch, including the Development Area, have been identified as Placerita Creek and the South Fork of the Santa Clara River, which flow into the Santa Clara River (Reach 6). According to the Basin Plan, beneficial functions associated with the Santa Clara River and the South Fork include municipal and domestic water supply, agricultural supply, groundwater recharge, freshwater replenishment, recreation, wildlife habitat, and warm freshwater habitat.

(3) County Regulations

(a) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to water quality. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to water quality.

(b) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to water quality. As discussed in the policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to water quality.

(c) Low Impact Development Ordinance

On November 18, 2008, the Los Angeles County Board of Supervisors passed the Low Impact Development (LID) ordinance. Chapter 12.84 of the County Code requires the use of LID principles in development projects. LID encourages site sustainability and smart growth in a manner that respects and preserves the characteristics of the County's watersheds, drainage paths, water supplies and natural resources. LID builds on conventional design strategies by using every softscape and hardscape surface in the development to perform a beneficial hydrologic function by retaining, detaining, storing, changing the timing of, or filtering stormwater and urban runoff. LID encompasses the use of structural devices, engineered systems, vegetated natural designs, and education in order to distribute stormwater and urban runoff across a development site.

Over the past decade, LID has emerged along with technologies and practices that allow a sustainable stormwater management strategy to control stormwater and urban runoff at the source rather than centralized, end-of-pipe controls, LID relies on an integrated system of decentralized, small-scale control measures. These measures range from site design practices to technology driven LID BMPs. The underlying principle of LID is that undeveloped land does not present a stormwater runoff or pollution problem. The evolved natural hydrology of any given site manages water in the most efficient manner. This most often translates to high rates of infiltration, vegetative interception, and evapotranspiration.

LID attempts to offset the effects of development and changes in land cover by preserving or restoring predevelopment hydrology and water quality through a series of small-scale, decentralized, natural, and engineered controls at or near the point where the stormwater is generated. It is a source control option that minimizes stormwater pollution by recognizing the greatest efficiencies are gained by minimizing stormwater generation. This is a process that begins with functional conservation of watershed resources, reducing impacts of development, and then using innovative management practices to meet the stormwater objective. Site preservation practices coupled with small-scale BMPs that rely on the environmental services of vegetation and soils or systems that mimic these services comprise the control approach of LID. These practices, taken in aggregate, limit the observed hydromodification on a developed site and present a more comprehensive and beneficial control approach.

To appropriately implement LID, it is important to assess its role in water quality protection. LID is one part of a toolkit that can be used to better manage natural resources and limit the pollution delivered to waterways. It is not independent of watershed planning. To gain optimal benefits, LID must be integrated with appropriate land use programs. LID, by itself, will not deliver the water quality outcomes desired; yet, it provides enhanced stormwater treatment and mitigates excess volume and flow rates. However, if not

integrated in a comprehensive fashion, LID techniques can end up as a series of uncoordinated innovative BMPs that have limited water quality benefits.

The following site design elements are used to frame the LID approach to stormwater. These elements are addressed through a combination of BMPs.

- Conserve natural areas, soils, and vegetation—Protect areas outside grading limits, incorporate plants to suit soil and drainage conditions, incorporate planting schemes that replicate natural sites, and use vegetative plantings and bioremediation techniques to neutralize soil contaminants.
- Minimize disturbances to natural drainage patterns—Minimize manicured lawns and annual beds as the dominant site elements.
- Minimize and disconnect impervious surfaces—Reduce impervious areas by including landscaping and using pervious pavements where practicable. Reduce the amounts of "hydraulically" connected impervious areas by using downspouts directed toward vegetated areas and installing rain barrels and cisterns below downspouts. Direct runoff from impervious areas to pervious areas. Grade surfaces toward open space with infiltration capacity, and infiltrate runoff a suitable distance from foundations.
- Minimize soil compaction—Restrict compaction and grading to areas that will support structures, as compacted soils suffer from reduced infiltration rates and limit root growth and plant survivability.

(d) Los Angeles County Code

Stormwater runoff and pollution regulations are controlled pursuant to Los Angeles County Code section 12.80 (Stormwater and Pollution Runoff Control). The purpose of section 12.80 is to protect the health and safety of the residents of the County by protecting the beneficial uses, marine habitats, and ecosystems of receiving waters within the County from pollutants carried by stormwater and non-stormwater discharges. The intent of this chapter is to enhance and protect the water quality of the receiving waters of the County and the United States. Section 12.80 applies to the discharge, deposit, and disposal of any stormwater and/or runoff to the storm drain system and/or receiving waters within any unincorporated area covered by a NPDES municipal stormwater permit.

(4) City of Santa Clarita Regulations

Projects located in the City of Santa Clarita also fall within the jurisdiction of the LARWQCB and are subject to NPDES, SWPPP, and SUSMP requirements, described above. Santa Clarita Municipal Code Chapter 10.04 details the City's requirements for stormwater and urban runoff pollution control.

3. ENVIRONMENTAL IMPACTS

a. Methodology

This analysis of water quality impacts is based on information from the Drainage Concept/SUSMP/LID Plan, which was prepared by David Evans and Associates and is provided in Appendix C of this Draft EIR. The report was prepared based on a review of documents from and methodologies specified by the Los Angeles County Department of Public Works (LACDPW), including the Low Impact Development Standards Manual (LID Manual) (January 2009) and the Manual for the Standard Urban Storm Water Mitigation Plan (SUSMP Manual) (September 2002), for use in developing BMPs for the Project.

The analysis of water quality impacts identifies the types of pollutants potentially associated with construction and operation of the Project and considers their effects on water quality. Consideration is given to the Project Design Features to be implemented, including BMPs, which would serve to minimize pollutants in stormwater runoff. Further, Project consistency with relevant regulatory permits/requirements is evaluated to demonstrate how compliance would protect water quality.

b. Significance Thresholds

The potential for the Project to result in impacts associated with water quality is based on the CEQA significance thresholds specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold D-1: Would the Project violate any water quality standards or waste discharge requirements?

Threshold D-2: Would the project generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality?

Threshold D-3: Would the project conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)?

Threshold D-4: Would the project result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance?

Threshold D-5: Would the project use on-site wastewater treatment systems in areas with known geological limitations (e.g., high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, or drainage courses)?

Threshold D-6: Would the project site be located in an area having known water quality problems and proposing the use of individual water wells?

Threshold D-7: Would the project's associated construction activities significantly impact the quality of groundwater and/or stormwater runoff to the stormwater conveyance system and/or receiving water bodies?

Threshold D-8: Would the project's post-development activities potentially degrade the quality of stormwater runoff and/or would post-development non-stormwater discharges contribute potential pollutants to the stormwater conveyance system and/or receiving bodies?

Threshold D-9: Would the project otherwise substantially degrade water quality?

The Project is not located in close proximity to an area identified by the State Water Resources Control Board as an area of special biological significance.[17] As such, no further analysis of Threshold D-4 is necessary. Moreover, the Project would connect to existing water infrastructure and would require the construction of new water lines. The Project does not propose the use of individual water wells. Therefore, further analysis of Threshold D-6 is also not necessary.

Appendix G of the CEQA Guidelines also includes three thresholds related to groundwater supplies, the alteration of existing drainage patterns, and the creation or contribution of runoff water. The potential for the Project to impact groundwater supplies is analyzed in Section V.L-1, Water Supply. The potential for the Project to impact drainage patterns and create or contribute runoff water is analyzed in Section V.B, Flood Hazards.

c. Project Design Elements

A detailed description of the drainage system to be installed within the Development Area as part of the Project is provided in Section V. B, Flood Hazards, of this Draft EIR, with an illustration provided in Figure V.B-3 therein. The system would incorporate a combination of sheet flow, concentrated drainage swales, localized catch basin inlets, detention and debris basins, and storm drain pipes, with all stormwater runoff from the site flowing to Placerita Creek. This system would be designed and sized to ensure that post-

[17] *California Environmental Protection Agency, State Water Resources Control Board, California's Areas of Special Biological Significance, www.swrcb.ca.gov/water_issues/programs/ocean/asbs_map.shtml. Accessed March 28, 2011.*

development peak flow rates would not exceed pre-development peak flow rates, and historic drainage patterns within and through the Development Area generally would be maintained, with two outlets provided along the embankments of Placerita Creek. The surface water treatment and infiltration features to be implemented as part of these improvements are discussed further below.

As the Project would involve the disturbance of more than one acre, in compliance with NPDES and County requirements, the Applicant would file an NOI with the SWRCB and prepare a SWPPP prior to the commencement of construction. The SWPPP would: (1) require the implementation of BMPs to prevent a net increase in sediment load in stormwater discharges as compared to pre-construction levels; (2) prohibit discharges of stormwater or non-stormwater at levels that would cause or contribute to an exceedance of any applicable water quality standard contained in the Basin Plan; (3) discuss in detail the BMPs to be implemented to control sediment and erosion, non-sediment pollutants, and potential pollutants in non-stormwater discharges; (4) describe post-construction BMPs for the Project; (5) describe the monitoring and maintenance program for the BMPs; (6) require reporting of violations to the LARWQCB; and (7) list the parties responsible for implementation of the SWPPP and BMP maintenance, both during and after construction. Upon acceptance of the NOI by the SWRCB, the Applicant would implement the SWPPP in compliance with the Construction General Permit.

A variety of construction BMPs would be specified within the SWPPP which would, at a minimum, address the following:

- Erosion control—Measures would be employed to prevent the movement of soil by wind or water during construction and might include watering and erecting physical barriers to the movement of soil particles.

- Tracking of soil—Measures would be employed to effectively minimize the tracking of soil by vehicles and might include the use of gravel driveways, wheel washing, and street sweeping.

- Wastes and cleanup—Measures would address washout, cleanup, and disposal related to debris, trash, concrete, asphalt, paint, coatings, solvents, and other materials applicable to site preparation and construction.

- Other reasonable BMPs—The SWPPP would implement other BMPs, as needed, to keep pollutants out of stormwater. The SWPPP would identify additional measures to be implemented during the rainy season and anticipated storms.

The Applicant would also prepare and implement a SUSMP to address water quality issues during ongoing operation of the Project. The SUSMP would: (1) describe the

routine and special post-construction BMPs to be implemented within the Development Area, including both structural and non-structural BMPs; (2) describe responsibilities for initial implementation and the long-term maintenance of the BMPs; (3) provide a narrative with graphic materials as necessary to specify the locations of the structural BMPs to be introduced; and (4) describe effective means to ensure the SUSMP is carried out by the Applicant and/or its future successors or assignees.

The SUSMP would also identify potential and expected pollutants of concern that may be generated by the Project. While Placerita Creek is not listed as an impaired waterway, the Santa Clara River (Reach 6) is listed as impaired for Chloride, Chlorpyrifos, Coliform, Diazinon, and Toxicity on the most recent State Clean Water Act Section CWA 303(d) list of impaired water bodies. Section 303(d) of the Clean Water Act identifies the TMDL for nutrients, sediments, oil and grease, and trash and debris as medium to high priority, with pesticides and organic compounds listed as very low priority. As such, the SUSMP would concentrate on pollutants with a TMDL priority of medium to high. In particular, the SUSMP would address the following pollutants through implementation of BMPs:

- Nutrients;
- Sediments;
- Oil and grease; and
- Trash and debris.

All of the following BMPs would also be implemented as part of the Project's SUSMP:

- Source Control BMPs—Routine Non-Structural BMPs:
  - Educational materials for property owners, tenants and occupants regarding stormwater protection and pollution prevention;
  - Activity restrictions;
  - Spill contingency plans;
  - Employee training programs regarding stormwater protection and pollution prevention;
  - Road sweeping; and
  - Catch basin inspections.

- Source Control BMPs—Routine Structural BMPs:
  - Landscape planning and design;
  - Roof runoff controls;
  - Efficient irrigation;
  - Protection of slopes and channels;
  - Storm drain signage;
  - Inlet trash racks;
  - Energy dissipators; and
  - Trash storage areas and litter control.
- Treatment Control BMPs—In accordance with NPDES requirements, the following treatment control BMPs would mitigate (infiltrate or treat) the first 0.75 inch of stormwater runoff from the first flush storm event:
  - Vegetated swales—Vegetated swales would be used to remove pollutants, reduce stormwater volumes and flow velocity, and convey stormwater runoff.
  - Detention basins—Detention basins would serve as the main treatment control BMP for the Project. They would be designed to manage the increase in stormwater runoff and to detain and slowly release the design volume of urban runoff, allowing particles and associated pollutants to settle and be removed. These detention basins would be composed of a vegetated aboveground portion and an underground detention and infiltration system. The vegetated portions would allow infiltration, and turf management in the basin would ensure that pesticides would not contribute to water pollution. The surface detention system overflow outlet would drain to Placerita Creek, while the underground detention systems would capture and detain stormwater flows and provide first flush mitigation before either infiltrating back into the local groundwater basin or draining via outlets to Placerita Creek. Energy dissipaters would be required to minimize erosion. Cleanup would be conducted semiannually, especially during and after major rainfall events. The Applicant and/or its successor or assignee would be responsible for cleanup and documenting maintenance.
- Operation and Maintenance (O&M) requirements for BMPs—In order to minimize the potential for pollutants to enter receiving waters in stormwater runoff following Project construction, the following BMPs would be implemented to separate stormwater from potential pollutants:

- Parking lot and roadway cleaning—Parking lots and internal roadways would be routinely maintained to effectively minimize nuisances and to keep internal roads and parking lots in safe condition. Cleaning would include vacuuming or sweeping of all parking lots, and internal roadways.

- Parking lot runoff—Parking lot drainage points would be equipped with oil/water separators which would be maintained according to manufacturers' specifications.

- Landscape planting—Landscaping, buffers, and other vegetated areas would require weekly maintenance to control optimum height and prevent drain blockage. Pesticide and fertilizer use would occur in accordance with product instructions and be applied by a certified applicator.

- Irrigation system—Maintenance of the irrigation system(s) within the Project site would comply with County requirements regarding water conservation. Systems would be periodically inspected to address overspray, broken sprinklers, or other system failures.

- Trash storage areas—Trash areas would be paved with impervious surfaces and designed to prevent runoff from percolating. Trash storage areas would be maintained routinely to effectively minimize nuisances.

- Roof runoff control—Roof drain downspouts would drain to concrete gutters or would be directly connected to the proposed on-site underground drain pipe system.

- Storm drain inspection—All storm drain facilities, including catch basins, pipes, drain inlets, and channels, would be inspected and cleaned just prior to the rainy season.

- Detention basins—Cleanup and inspection would occur before, during, and after major rainfall events. Basins would be serviced semiannually or following an extreme storm. Service would include cleaning the basins and maintaining the outlet structures.

• Other reasonable BMPs—The Applicant would implement other good housekeeping and storage measures, as needed, to keep pollutants out of stormwater, as outlined in the SUSMP.

In addition, in accordance with County's LID Manual, the following LID BMPs would promote infiltration and would complement, or be a part of, the SUSMP BMPs listed above:

• Downspout connection—Building downspouts would direct stormwater to the streets and storm drain system for discharge to the on-site detention basins,

which would have infiltration capacity (thus reducing stormwater-loads during precipitation events).

- Vegetated swale—As previously described, these engineered, densely vegetated depressions would retain and filter the first flush of runoff from impervious surfaces such as parking lots and roadways.

- Riparian buffers—Riparian buffers are undeveloped and vegetated areas adjacent to a stream or water body that help absorb stormwater runoff. They also maintain and improve water quality by protecting water resources from non-point pollutants, such as sediment, nutrients, and pesticides from urban and agricultural activities. The existing riparian buffer within and adjacent to Placerita Creek would be improved and revegetated following stabilization of the fill pad slopes, as described further in Section V.F, Biological Resources, of this Draft EIR.

Refer to Appendix 2 within the Drainage Concept for a more detailed discussion of the SUSMP. Figure 9 within the Drainage Concept shows the locations of some of the proposed SUSMP and LID BMPs for the Project. Additionally, refer to Section V.B, Flood Hazards, of this Draft EIR for a list of additional drainage design features to be implemented as part of the Project.

d. Impact Analysis

Threshold D-1: Would the project violate any water quality standards or waste discharge requirements?

Threshold D-2: Would the project generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality?

Threshold D-7: Would the project's associated construction activities significantly impact the quality of groundwater and/or stormwater runoff to the stormwater conveyance system and/or receiving water bodies?

Threshold D-8: Would the project's post-development activities potentially degrade the quality of stormwater runoff and/or would post-development non-stormwater discharges contribute potential pollutants to the stormwater conveyance system and/or receiving bodies?

Threshold D-9: Would the project otherwise substantially degrade water quality?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

Construction activities, such as grading, maintenance/operation of construction equipment, and the handling/storage/disposal of construction materials, could potentially contribute to pollutant loading in stormwater runoff. However, the Project would be required to obtain coverage under the Construction General Permit. In accordance with the permit requirements, the Applicant would prepare and implement a site-specific SWPPP, which would specify BMPs to be used during construction. Such BMPs would include, but not be limited to, measures for erosion control, sediment control, non-stormwater management, and materials management.

Implementation of the SWPPP and associated BMPs would reduce or eliminate the discharge of potential pollutants from stormwater runoff to the maximum extent practicable. Given the proposed uses for the Project, discharge of Chloride, Chlorpyrifos, Coliform, and Diazinon, the constituents for which the Santa Clara River (Reach 6) is listed as impaired (and which are generally associated with agricultural uses), is not expected.[18] More specifically, implementation of the BMPs would ensure the quality of stormwater runoff leaving the Development Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas (if developed), Trail Area, and Water Tank Area would meet all regulatory standards and maintain the beneficial uses of Placerita Creek and its downstream waters. With implementation of the construction BMPs, Project construction activities are not anticipated to create pollution, contamination, or nuisance, as defined in Section 13050 of the California Water Code. Additionally, the County would monitor compliance with these requirements as part of the project approval process. Therefore, with compliance with NPDES and County requirements, Project construction would not violate any water quality standards or waste discharge requirements, result in substantial erosion or siltation, contribute substantial additional sources of polluted runoff, or otherwise substantially degrade surface water quality. As such, impacts to surface water quality associated with Project construction would be less than significant.

[18] *As part of the Ranch's existing agricultural operations insecticides that contain organophosphates are used on rare occasions but Diazinon is not used. Further, precautions are taken to ensure limited generation of chloride contamination in the form of salt as a residual of fertilizer. Specifically, berms are in place to prevent such materials from entering nearby streams. Additionally, coliform bacteria is typically associated with feces, which is and would not permitted to enter any streams.*

(b) Operation

As is typical of most developments, stormwater runoff from the Development Area and Conditional Parking Areas (if developed) would have the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system.[19] Given the proposed uses for the Project, discharge of Chloride, Chlorpyrifos, Coliform, and Diazinon, the constituents for which the Santa Clara River (Reach 6) is listed as impaired (and which are generally associated with agricultural uses), is not expected.[20] The addition of impervious surface area and the associated increase in peak runoff volumes could also contribute to a potentially adverse impact on surface water quality. In accordance with NPDES requirements, the Applicant would be required to prepare and implement a SUSMP throughout the operational life of the Project. As described above, stormwater BMPs would be incorporated into the design of the Project to address stormwater runoff water quality. Such BMPs would include source control BMPs to prevent pollutants from entering into stormwater discharges and treatment control BMPs to remove pollutants from stormwater discharges. In accordance with NPDES requirements, the treatment control BMPs would mitigate (infiltrate or treat) the first 0.75 inch of stormwater runoff from a first flush storm event. In addition, operation and maintenance measures would be implemented to separate stormwater from potential pollutants, and LID BMPs would be implemented to promote infiltration, in accordance with the County's LID Manual.

Relative to sedimentation, as discussed in detail in Section V.B, Flood Hazards, of this Draft EIR, the Project's potential hydromodification impacts to Placerita Creek were evaluated. The study results indicate that for all six storm events evaluated, the streambed would experience downstream sedimentation increases of an estimated maximum of 0.1 to 0.2 feet during post-Project conditions. Such increases in streambed elevation would not impact the creek's capacity, which could experience a peak flow rate of 5,800 cfs during a County 50-year storm event (bulk and burned) from a tributary watershed of almost 6 square miles, as all runoff would still be contained within the natural creek channel. Therefore, no significant impact associated with hydromodification would result from buildout of the Project.

---

[19] *The other Project site areas within the Ranch (Water Tank Area, Trail Area, and Potential Mobile Home Relocation Areas) would have limited potential for the generation of stormwater pollutants and in any case would be covered by the Project's SUSMP.*

[20] *As part of the Ranch's existing agricultural operations insecticides that contain organophosphates are used on rare occasions but Diazinon is not used. Further, precautions are taken to ensure limited generation of chloride contamination in the form of salt as a residual of fertilizer. Specifically, berms are in place to prevent such materials from entering nearby streams. Additionally, coliform bacteria is typically associated with feces, which is and would not permitted to enter any streams.*

In summary, implementation of the SUSMP measures would ensure the quality of stormwater runoff leaving the Development Area, the Potential Mobile Home Relocation Areas, the Conditional Parking Areas (if developed), Trail Area, and the Water Tank Area would meet all regulatory standards and would maintain the beneficial uses of Placerita Creek and its downstream waters. The County, as part of its project approval and construction practice, would monitor compliance with these requirements. As such, the Project would not violate any water quality standards or waste discharge requirements, contribute substantial additional sources of polluted runoff, or otherwise substantially degrade surface water quality. Based on the above, no significant impact on water quality is anticipated due to long-term operation of the Project.

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction

The Off-Site Infrastructure Improvements would involve temporary trenching within roadways for utility lines, and the SCE power pole replacements would require minimal excavation to remove existing poles, install new poles, and backfill the excavated holes. The Project would also include traffic infrastructure improvements as part of the Project Design Features and Mitigation Measures at several roadway intersections. Such activities could generate stormwater pollutants, including soils and sediments released during grading activities, petroleum-related pollutants due to spills or leaks from heavy equipment and machinery, concrete and related cutting or curing residues, and wastes from cleaning agents. However, as discussed above, all construction activities would be required to obtain coverage under the Construction General Permit. In accordance with the permit requirements, the Applicant would prepare and implement a Project-specific SWPPP, which would specify BMPs to be used during construction. With implementation of the construction BMPs, Project construction activities are not anticipated to create pollution, contamination, or nuisance, as defined in Section 13050 of the California Water Code. Additionally, the County and the City, as applicable based on the location of the off-site improvements, would monitor compliance with these requirements. Therefore, with compliance with NPDES and City requirements, Project construction would not violate any water quality standards or waste discharge requirements, result in substantial erosion or siltation, contribute substantial additional sources of polluted runoff, or otherwise substantially degrade surface water quality. As such, impacts to surface water quality associated with construction in the Off-Site Infrastructure Improvement Areas would be less than significant.

(b) Operation

The Off-Site Infrastructure Improvements would not affect long-term water quality after construction of the Project as water and sewer operations would consist of the

enclosed transport of water and wastewater, with limited aboveground infrastructure (a booster pump station and a sewer crossing of the LADWP aqueduct). Operation of the new power poles and improved intersections would not represent a change in use from existing conditions. In addition, appropriate drainage infrastructure would be provided at the off-site intersections to be improved, as required. Therefore, no impacts to water quality would result.

Threshold D-3: Would the project conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84 and Title 22, Ch. 22.52)?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

As discussed above, in accordance with the County's LID Manual, as part of its Project Design Features, the Project would implement LID BMPs on-site that would promote infiltration and would complement, or be a part of, the SUSMP BMPs. These LID BMPs would include the following: downspout connection; vegetated swales; riparian buffers; and possibly infiltration trenches. In addition, the Drainage Concept includes a LID hydrologic analysis which compares the pre- and post-development peak runoff volumes and determines the volume or flow rate to be treated. As shown therein, the Project would result in a net increase in runoff of approximately 1.8 acre-feet to be treated with the LID BMPs. As such, the Project would not conflict with the County's LID ordinance and would result in no impacts.

(2) Off-Site Infrastructure Improvement Areas Impacts

The majority of the Off-Site Infrastructure Improvement Areas is located in the City of Santa Clarita. The LID ordinance, which is part of the Los Angeles County Code, would not apply to the off-site improvements located within the City, but would apply to the limited portions of off-site improvements located within the County. Accordingly, LID BMPs would be implemented, as required. Therefore, no impacts would occur.

Threshold D-5: Would the project use on-site wastewater treatment systems in areas with known geological limitations (e.g., high groundwater) or in close proximity to surface water (including, but not limited to streams, lakes, or drainage courses)?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The new structures within the Development Area would be served by proposed on- and off-site wastewater improvements that would connect to the Santa Clarita Valley

Sanitation District of Los Angeles County public sewer system. The remaining structures within the Ranch would continue to use the existing septic tanks associated with those structures.

The existing Ranch foreman's mobile home that would be relocated from the Development Area to another area within the Ranch east of the Development Area would require installation of a new septic tank. The Potential Mobile Home Relocation Areas are not located in close proximity to Placerita Creek and are outside of the creek floodway and floodplain.

In addition, prior to the issuance of any building permit and installation of the new septic tank, the Applicant would submit a feasibility report in conformance with the requirements outlined in the "Onsite Wastewater Treatment System (OWTS) Guidelines" of the County of Los Angeles Department of Public Health (LACDPH) and demonstrate to the satisfaction of the Environmental Health section of LACDPH that the Potential Mobile Home Relocation Areas are capable of supporting a new septic tank. The design and installation of the new septic tank will conform to the requirements of the County Department of Public Health and other applicable regulatory agencies, including possibly the Regional Water Quality Control Board.

Therefore, the Project would result in less than significant impacts associated with the use of septic tanks.

(2) Off-Site Infrastructure Improvement Areas Impacts

No septic tanks or other private sewage disposal system would be used as part of the Off-Site Infrastructure Improvements. As such, no impacts would result.

4. CUMULATIVE IMPACTS

The geographic context for the cumulative impact analysis on water quality is the Placerita Creek watershed on a local level and the Upper Santa Clara River watershed on a more regional level. Cumulative growth as identified in Section III, Environmental Setting, including forecasted growth through 2020 and various related projects that are anticipated to be developed within the vicinity of the Development Area, could increase the potential for pollutants to enter receiving waters. Only one known project, Related Project No. 3, is located within the immediate vicinity of the Project and falls within the Placerita Creek watershed. Related Project No. 3 is a proposed mixed-use commercial development located at the southwest corner of Placerita Canyon Road and Sierra Highway, across SR-14 from the Development Area, and would discharge its drainage runoff to Placerita Creek. However, like the Project, Related Project No. 3 and other qualifying future

developments in the area would be subject to state, regional, and County requirements, such as NPDES permits and LID requirements, as well as SWPPP and SUSMP requirements, as appropriate. Similarly, nearly all the related projects are located within the Upper Santa Clara River watershed and would ultimately discharge to the Santa Clara River. Accordingly, all future development, including the related projects, throughout both the Placerita Creek watershed and the Upper Santa Clara River watershed would be subject to relevant regulatory requirements, including NPDES, SWPPP, and SUSMP requirements to minimize water quality impacts. Future projects would be evaluated individually to determine appropriate BMPs and treatment measures to avoid impacts to water quality. In addition, the County or City (as appropriate) would review all construction projects on a case-by-case basis to ensure that local and regional drainage surface water quality is protected. Therefore, with compliance with all applicable laws, rules, and regulations, no significant cumulative impacts to surface water quality are anticipated.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF D-1: The Applicant shall prepare and implement a Stormwater Pollution Prevention Plan in compliance with the National Pollutant Discharge Elimination System Construction General Permit prior to and during construction activities.

PDF D-2: The Applicant shall prepare and implement a Standard Urban Stormwater Mitigation Plan to address water quality issues during ongoing operation of the Project, consistent with the approved Drainage Concept/LID Plan/SUSMP Plan contained in Appendix C of the Draft EIR.

PDF D-3: In accordance with the County's Low Impact Development Manual, low impact development best management practices shall be implemented to promote infiltration and to complement, or be a part of, the Standard Urban Stormwater Mitigation Plan best management practices.

PDF D-4: The following best management practices shall also be implemented as part of the Project's Standard Urban Stormwater Mitigation Plan:

- Treatment Control best management practices—In accordance with National Pollutant Discharge Elimination System requirements, the following treatment control best management practices shall be implemented to infiltrate or treat the first 0.75 inch of stormwater runoff from the first flush storm event:
  - Vegetated swales—Vegetated swales shall be used to remove pollutants, reduce stormwater volumes and flow velocity, and convey stormwater runoff.

- Detention basins—Detention basins shall serve as the main treatment control best management practice for the Project. They shall be designed to manage the increase in stormwater runoff and to detain and slowly release the design volume of urban runoff, allowing particles and associated pollutants to settle and be removed. These detention basins shall be composed of a vegetated aboveground portion and an underground detention system. The vegetated portions shall allow infiltration, and turf management in the basin shall ensure that pesticides would not contribute to water pollution. The surface detention system overflow outlet shall drain to Placerita Creek, while the underground detention systems shall capture and detain stormwater flows and provide first flush mitigation before either infiltrating back into the local groundwater basin or draining via outlets to Placerita Creek. Energy dissipaters shall be required to minimize erosion. Cleanup shall be conducted semiannually, especially during and after major rainfall events. The Applicant and/or its successor or assignee shall be responsible for cleanup and documenting maintenance.

- Operation and maintenance requirements for best management practices—In order to minimize the potential for pollutants to enter receiving waters in stormwater runoff following Project construction, the following best management practices shall be implemented to separate stormwater from potential pollutants:

  - Parking lot and roadway cleaning—Parking lots and internal roadways shall be routinely maintained to effectively minimize nuisances and to keep internal roads and parking lots in safe condition. Cleaning shall include vacuuming or sweeping of all parking lots, and internal roadways.

  - Parking lot runoff—Parking lot drainage points shall be equipped with oil/water separators which would be maintained according to manufacturers' specifications.

  - Landscape planning—Landscaping, buffers, and other vegetated areas shall require weekly maintenance to control optimum height and prevent drain blockage. Pesticide and fertilizer use shall occur in accordance with product instructions and be applied by a certified applicator.

  - Irrigation system—Maintenance of the irrigation system(s) within the Project site shall comply with County requirements regarding water conservation. Systems shall be periodically inspected to address overspray, broken sprinklers, or other system failures.

- Trash storage areas—Trash areas shall be paved with impervious surfaces and designed to prevent runoff from percolating. Trash storage areas shall be maintained routinely to effectively minimize nuisances.
- Roof runoff control—Roof drain downspouts shall drain to concrete gutters or shall be directly connected to the proposed on-site underground drain pipe system.
- Storm drain inspection—All storm drain facilities, including catch basins, pipes, drain inlets, and channels, shall be inspected and cleaned just prior to the rainy season.
- Detention basins—Cleanup and inspection shall occur before, during, and after major rainfall events. Basins shall be serviced semiannually or following an extreme storm. Service shall include cleaning the basins and maintaining the outlet structures.

- Other reasonable Best management practices—The Applicant shall implement other good housekeeping and storage measures, as needed, to keep pollutants out of stormwater, as outlined in the Standard Urban Stormwater Mitigation Plan.

Additionally, refer to Section V.B, Flood Hazards, of this Draft EIR for a list of drainage design features to be implemented as part of the Project.

b. Mitigation Measures

Based on the design features to be implemented as part of the Project, Project-level impacts on water quality would be less than significant. However, to ensure that impacts remain less than significant, the following mitigation measures would be implemented:

MM D-1: Prior to the issuance of any building permit/installation of any on-site wastewater treatment system, the Applicant shall submit a feasibility report in conformance with the requirements outlined in the County of Los Angeles Department of Public Health's guidelines "Onsite Wastewater Treatment System (OWTS) Guidelines" to the Environmental Health section of the County of Los Angeles Department of Public Health for review and approval and demonstrate that the Potential Mobile Home Relocation Areas are capable of supporting the installation of an on-site wastewater treatment system.

MM D-2: The design and installation of the on-site wastewater treatment system shall conform to the rules, regulations and requirements of the County of Los Angeles Department of Public Health and other applicable

regulatory agencies, including the Regional Water Quality Control Board, as applicable.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

As indicated above, with implementation of the above Project Design Features and Mitigation Measures, Project-level and cumulative impacts on surface water quality would be less than significant.

V. Environmental Impact Analysis

E.1 Air Resources—Air Quality

V. ENVIRONMENTAL IMPACT ANALYSIS

E.1 AIR RESOURCES—AIR QUALITY

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's potential impacts on air quality. The analysis addresses the air emissions generated by construction and operation of the Project, the consistency of the Project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the County of Los Angeles General Plan. The analysis of Project-generated air emissions focuses on whether the Project would exceed the ambient air quality standard or SCAQMD significance threshold. Calculation worksheets, analysis assumptions, and model outputs used in this evaluation are contained in Appendix E.1 of this Draft EIR. A supplemental analysis of the Project's impacts relative to existing (2010) conditions, entitled Analysis in Response to Opinion in Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council, was conducted based on the recent decision in *Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351 and is provided in Appendix M of this EIR. A discussion of global climate change and related analysis of greenhouse gases (GHGs) is provided in Section V.E.2, Global Climate Change, of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Air Quality Background

The Project site is located within the South Coast Air Basin (Basin), an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and the San Gorgonio Pass area in Riverside County. The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

Air pollutant emissions within the Basin are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point

and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect the public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. The national and state standards have been set at levels considered safe to protect public health, including the health of sensitive populations, such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The national and state criteria pollutants and the applicable standards are listed in Table V.E.1-1 on page V.E.1-3.

b. Air Pollution and Potential Health Effects

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality within the Basin. The criteria air pollutants for which national and state standards have been promulgated and which are most relevant to current air quality planning and regulation in the Basin include ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. Toxic air contaminants (TAC) and global climate change related GHGs are also of concern in the Basin. Each of these is briefly described below.

(1) Criteria Pollutants

(a) Ozone

Ozone is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (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, light wind, and warm

Table V.E.1-1
Ambient Air Quality Standards

Pollutant	Averaging Period	California Standard[a]	Federal Standard[b]	SCAQMD Attainment Status[c]	
				California Standard[d]	Federal Standard[e]
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m^3)	Revoked	Non-Attainment	—
	8 hour	0.07 ppm (137 µg/m^3)	0.075 ppm [f] (147 µg/m^3)	Non-Attainment	Non-Attainment (Extreme)
Respirable Particulate Matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3	Non-Attainment	Non-Attainment (Serious)
	Annual	20 µg/m^3	Revoked	Non-Attainment	Non-Attainment
Fine Particulate Matter ($PM_{2.5}$)	24 hour	—	35 µg/m^3	—	Non-Attainment (Serious)
	Annual	12 µg/m^3	15 µg/m^3	Non-Attainment	Non-Attainment
Carbon Monoxide (CO)	1 hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Attainment	Attainment
	8 hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm (339 µg/m^3)	0.10 ppm (188 µg/m^3)	Attainment	—
	Annual	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Attainment	Attainment
Lead (Pb)	30 day average	1.5 µg/m^3	—	Attainment	—
	Calendar quarter	—	1.5 µg/m^3	—	Attainment
Sulfur Dioxide (SO_2)	1 hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	Attainment	—
	3 hour	—	0.5 ppm (1,300 µg/m^3)	—	Attainment
	24 hour	0.04 ppm (105 µg/m^3)	Revoked	Attainment	Attainment
	Annual	—	Revoked	—	
Hydrogen Sulfide (H_2S)	1 hour	0.03 ppm (42 µg/m^3)	—	Unclassified	—
Vinyl Chloride	24 hour	0.01 ppm (26 µg/m^3)	—	Unclassified	—
Sulfates	24 hour	25 µg/m^3	—	Attainment	—
Visibility-Reducing Particles	8 hour	Extinction coefficient of 0.23 per kilometer (visibility of 10 miles or more due to particles when relative humidity is less than 70 percent)	—	Unclassified	—

[a] *California standards based on CARB website (www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm).*

[b] *Federal standards based on USEPA website (http://epa.gov/air/criteria.html).*

[c] *"Attainment" means that the regulatory agency has determined, based on established criteria, that the Basin meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the Basin does not meet the standard.*

[d] *California standard attainment status based on CARB website (www.arb.ca.gov/desig/adm/adm.htm).*

[e] *Federal standard attainment status based on USEPA websites (www.epa.gov/air/oaqps/greenbk/index.html and www.arb.ca.gov/desig/adm/adm.htm).*

[f] *Effective May 27, 2008, the value became 0.075 ppm, although the 0.08 ppm standard has remained in effect during transition.*

Source: Matrix Environmental, 2011.

temperature conditions are favorable. An elevated level of ozone irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

(b) Particulate Matter

The human body naturally prevents the entry of larger particles into the body. However, small particles, with an aerodynamic diameter equal to or less than 10 microns (PM_{10}) and even smaller particles with a aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), can enter the body and are trapped in the nose, throat, and upper respiratory tract. These small particulates could potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM_{10} and $PM_{2.5}$. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates could become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(c) Carbon Monoxide

Carbon monoxide is primarily emitted from combustion processes and motor vehicles due to incomplete combustion of fuel. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of carbon monoxide can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

(d) Nitrogen Dioxide

Nitrogen dioxide is a byproduct of fuel combustion and major sources include power plants, large industrial facilities, and motor vehicles. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of ozone.

Effective April 12, 2010, the United States Environmental Protection Agency (USEPA) set a new 1-hour NO_2 standard at 0.10 part per million (188 μg/m^3).[1] To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average must not exceed 0.1 ppm. The USEPA cited evidence that short-term NO_2 exposures could contribute to adverse respiratory effects, including increased asthma symptoms, worsened control of asthma, and an increase in respiratory illnesses and symptoms. The USEPA also indicated NO_2 concentrations on or near major roads can be approximately 30 to 100 percent higher than concentrations in the surrounding community, which could contribute to health effects for at-risk populations, including people with asthma, children, and the elderly.

(e) Sulfur Dioxide

Major sources of sulfur dioxide include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO_2 aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of SO_2, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

On June 2, 2010, the USEPA established a new 1-hour SO_2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The USEPA also revoked the existing 24-hour SO_2 standard of 0.14 ppm and the annual primary SO_2 standard of 0.030 ppm, effective August 23, 2010.

(f) Lead

Lead (Pb) is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting or processing the metal is the primary source of Pb emissions, which is primarily a regional pollutant. Lead affects the brain and other parts of the body's nervous system. Exposure to lead in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

---

[1] *USEPA, Final Revisions to the Primary National Ambient Air Quality Standard for Nitrogen Dioxide (NO_2), General Overview, Office of Air and Radiation Office of Air Quality Planning and Standards, January 2010, pp. 11–12.*

(g) Volatile Organic Compounds

Volatile organic compounds (VOCs) are typically formed from combustion of fuels and/or released through evaporation of organic liquids. Some VOCs are also classified by the state as toxic air contaminants. While there are no specific VOC ambient air quality standards, VOC is a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as O_3, NO_2, and certain fine particles are formed. They are thus regulated as "precursors" to formation of those criteria pollutants.

(2) Toxic Air Contaminants

Toxic air contaminants refer to a diverse group of "non-criteria" air pollutants that can affect human health, but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above, but because their effects tend to be local rather than regional. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TACs can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular).

The California Air Resources Board (CARB) and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. The complete list of such substances is located at www.arb.ca.gov/toxics/id/taclist.htm.

Diesel Particulate Matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the State as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 µm), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following adverse health effects: (1) Aggravated asthma; (2) Chronic bronchitis; (3) Increased respiratory and cardiovascular hospitalizations;

(4) Decreased lung function in children; (5) Lung cancer; and (6) Premature deaths for people with heart or lung disease.[2]

To provide a perspective on the contribution that DPM has on the overall Statewide average ambient air toxics potential cancer risk, CARB evaluated risks from specific compounds using data from CARB's ambient monitoring network. CARB maintains a 21-site air toxics monitoring network which measures outdoor ambient concentration levels of approximately 60 air toxics. CARB has determined that, of the top ten inhalation risk contributors, DPM contributes approximately 71 percent of the total potential cancer risk.[3]

c. Regulatory Framework

The Project site, the remainder of the Ranch, and the surrounding vicinity are subject to federal, state, and local air quality laws and regulations. A number of plans and policies have been adopted by various agencies that address air quality concerns. Those laws, regulations, plans and policies that are relevant to the Project are discussed below.

(1) Criteria Pollutants

(a) Federal Regulations

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments in 1990. At the federal level, the USEPA is responsible for implementation of some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies.

The CAA establishes federal air quality standards, known as National Ambient Air Quality Standards (NAAQS), as shown in Table V.E.1-1 on page V.E.1-3, and specifies future dates for achieving compliance. The CAA also mandates that the state submit and implement a State Implementation Plan (SIP) for areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The Development Area is located within the Basin, which is an area designated as non-attainment because the area does not meet NAAQS for certain pollutants regulated under the CAA.

---

[2] *Website www.arb.ca.gov/research/diesel/diesel-health.htm.*

[3] *SCAQMD 2000. "Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II)." Draft Report. South Coast Air Quality Management District, Diamond Bar, California. Executive Summary.*

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions are implemented for the purpose of attaining NAAQS. Table V.E.1-1 on page V.E.1-3 shows the NAAQS currently in effect for each criteria pollutant and their relative attainment status. The NAAQS were amended in September 2006 to include an established methodology for calculating $PM_{2.5}$ and to revoke the annual PM_{10} threshold. The NAAQS were also amended in July 1997 to include an 8-hour standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. The CAA provides deadlines for meeting the NAAQS within the Basin including the following: (1) 8-hour O_3 by the year 2024; (2) PM_{10} by the year 2006; and (3) $PM_{2.5}$ by the year 2015. Although the deadline for PM_{10} has passed, the Basin met the PM_{10} standard in 2006 at all stations except for western Riverside.[4]

Nonattainment designations are categorized into seven levels of severity: (1) basic, (2) marginal, (3) moderate, (4) serious, (5) severe-15, (6) severe-17, and (7) extreme.[5] On June 11, 2007, the USEPA reclassified the Basin as a federal "attainment" area for CO and approved the Basin's CO maintenance plan.[6] The Basin fails to meet national standards for O_3, PM_{10}, and $PM_{2.5}$ and, therefore, is considered a federal "non-attainment" area for these pollutants.

Title II of the CAA pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

---

4 *South Coast Air Quality Management District, 2007 AQMP.*

5 *The "-15" and "-17" designations reflect the number of years within which attainment must be achieved.*

6 *"Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes: California, Final Rule."* Federal Register *72 (11 May 2007):26718-26721.*

(b) State Regulations

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (Cal EPA), is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, the CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table V.E.1-1 on page V.E.1-3 includes the CAAQS currently in effect for each of the criteria pollutants as well as other pollutants recognized by the state. As shown in Table V.E.1-1, the CAAQS include more stringent standards than the national ambient air quality standards.

The CARB published the *Air Quality and Land Use Handbook* on April 28, 2005 (referred to herein as the CARB Handbook), to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

(c) Regional Regulations

(i) South Coast Air Quality Management District

The SCAQMD shares responsibility with CARB for ensuring all state and federal ambient air quality standards are achieved and maintained throughout all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles. This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the

non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Basin is a subregion of the SCAQMD jurisdiction.

In order to meet the CAAQS and NAAQS, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs). The 2007 AQMP employs the most up-to-date science, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. Policies and measures currently contemplated by responsible agencies to achieve federal standards for healthful air quality in the Basin are built upon the 2007 AQMP. It also incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources and area sources.

The 2007 AQMP builds upon improvements accomplished in previous plans and aims to incorporate all feasible control measures while balancing costs and socioeconomic impacts for the attainment of air quality standards. However, it highlights the significant amount of reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the Federal CAA.

The 2007 AQMP relies on a comprehensive and integrated control approach aimed at achieving the $PM_{2.5}$ standard by 2015 through implementation of short- and mid-term control measures and achieving the 8-hour ozone standard by 2024 based on implementation of additional long-term measures. These reductions are expected to be achieved through implementation of new and advanced control technologies as well as improvement of existing control technologies. Control techniques requiring substantial levels of committed funding for implementation would also fall under this category of long-term emission reductions.

There are four components of the 2007 AQMP control measures: (1) the SCAQMD's Stationary and Mobile Source Control Measures; (2) CARB's proposed State Strategy; (3) SCAQMD Staff's Proposed Policy Options to Supplement CARB's Control Strategy; and 4) Regional Transportation Strategy and Control Measures provided by the Southern California Association of Governments. Overall, the Plan includes 31 stationary and 30 mobile source measures. The SCAQMD's control strategy for stationary and mobile sources is based on the following approaches: (1) facility modernization; (2) energy efficiency and conservation; (3) good management practices; (4) market incentives/compliance flexibility; (5) area source programs; (6) emission growth management; and (7) mobile source programs.

The SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to construction or operation of the Project. For example,

SCAQMD Rule 403 requires the implementation of best available fugitive dust control measures during active construction periods capable of generating fugitive dust emissions from on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the Project. Instead, the SCAQMD published the *CEQA Air Quality Handbook* in November 1993 to assist lead agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects proposed in the Basin. The SCAQMD *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. However, the SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*. In the interim, SCAQMD recommends use of the calculation methodologies in the *CEQA Air Quality Handbook*, but to avoid use of obsolete emission factors and screening tables.[7] However, it is recommended that lead agencies follow the calculation methodologies in Chapter 9 and the Appendix to Chapter 9 in the *Handbook*.

In order to assist the CEQA practitioner in conducting an air quality analysis in the interim while the *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/information is provided on the SCAQMD website (http://www.aqmd.gov/ceqa/hdbk.html) and includes information regarding: (1) EMFAC 2007 (v2.3) on-road vehicle emission factors; (2) background CO concentrations; (3) localized significance thresholds; (4) mitigation measures and control efficiencies; (5) mobile source toxics analysis; (6) off-road mobile source emission factors; (7) $PM_{2.5}$ significance thresholds and calculation methodology; and (7) updated SCAQMD Air Quality Significance Thresholds. The SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the URBEMIS 2007 model. These recommendations were followed in the preparation of this analysis.

The SCAQMD has also adopted land use planning guidelines in the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* (May 2005), which considers impacts to sensitive receptors from facilities that emit TAC

[7] *Screening tables in the Handbook's Chapter 6 were derived using an obsolete version of CARB's mobile source emission factors (EMFAC7E) instead of the currently approved version (EMFAC2007), and the trip-generation rates were based on the fifth edition of the ITE Trip Generation Manual. The most current version is the eighth edition (www.aqmd.gov/ceqa/oldhdbk.html).*

emissions. SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity of freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

(ii) Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including the Transportation Conformity Rule and other applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. SCAG is a co-producer, with the SCAQMD, of the transportation strategy and transportation control measure sections of the AQMP for the Basin. With regard to future growth, SCAG has prepared the Regional Transportation Plan (RTP) which provides population, housing, and employment projections for cities under its jurisdiction. The growth projections in the RTP are based on projections originating under county and city General Plans. The RTP growth projections are utilized in the preparation of the air quality forecasts and consistency analysis included in the SCAQMD's AQMP.

(d) Local Regulations

In accordance with CEQA requirements and the CEQA review process, the County assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The County uses the SCAQMD's *CEQA Air Quality Handbook* as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

(i) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to air quality. As discussed in the General Plan policy consistency

analysis provided therein, the Project would be consistent with the applicable General Plan polices related to air quality.

(ii) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to air quality. As discussed in the Area Plan policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to air quality.

(2) Toxic Air Contaminants

The California Air Toxics Program (see www.arb.ca.gov/toxics/toxics.htm) was established in 1983, when the California Legislature adopted AB 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a toxic air contaminant (TAC) in California. Since inception of the program, a number of such substances have been listed (see www.arb.ca.gov/toxics/id/taclist.htm). In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs. In 1999, CARB completed the final staff report, Update to the Toxic Air Contaminant List. The list represented the priorities for identifying and regulating substances as directed by State law. The report described the process followed by CARB in reviewing and revising the Toxic Air Contaminant List, and presented changes to the list.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources (see www.arb.ca.gov/toxics/atcm/atcm.htm). In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time.

In addition to limiting exhaust from idling trucks, CARB promulgated emission standards for off-road diesel construction equipment such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by CARB on July 26, 2007, aims to reduce emissions by encouraging the installation of diesel particulate filters and the replacement of older, dirtier engines with

newer emission controlled models. Implementation is staggered based on fleet size, with the largest operators to begin compliance in 2010. By 2020, CARB estimates that diesel particulate matter will be reduced by 74 percent and smog forming oxides of nitrogen by 32 percent, compared to what emissions would be without the regulation.

The AB 1807 program is supplemented by the AB 2588 Air Toxics "Hot Spots" program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by SB 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

d. Existing Air Quality Conditions

(1) Regional Air Quality

The southern California region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, affect the accumulation and dispersion of pollutants throughout the Basin, making it an area of high pollution potential.

The greatest air pollution impacts throughout the Basin occur from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season, and time of day. Ozone concentrations, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Basin and adjacent desert. Over the past 30 years, substantial progress has been made in reducing air pollution levels in southern California. However, the Basin fails to meet national standards for O_3, PM_{10}, and $PM_{2.5}$.

The SCAQMD has released a Basin-wide air toxics study (MATES III, Multiple Air Toxics Exposure Study, September 2008). The MATES III Study represents one of the most comprehensive air toxics studies ever conducted in an urban environment. The study was aimed at estimating the cancer risk from toxic air emissions throughout the Basin by conducting a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize health risks for those living in the Basin. The study concluded that the average carcinogenic risk from air pollution in the Basin is approximately 1,200 in 1 million. Mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.) represent the greatest contributors. Approximately 85 percent of the risk is attributed to diesel particulate emissions, approximately 10 percent is attributed to other toxics associated with mobile sources, including benzene, butadiene, and formaldehyde, and approximately five percent of all carcinogenic risk is attributed to stationary sources, which include industries and other businesses, such as dry cleaners and chrome plating operations.

As part of the MATES III study, the SCAQMD prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps' estimates represent the number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years) in parts of the area. The MATES III map, is the most recently available map to represent existing conditions near the Project area. The estimated cancer risk for the vast majority of the urbanized area within the Basin ranges from 375 to 2,500 cancers per million.[8] Generally, the risk from air toxics is lower near the coastline and it increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

(2) Local Air Quality

Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as space and water heating, landscape maintenance from leaf blowers and lawn mowers, consumer products, and mobile sources, primarily automobile traffic. Motor vehicles are the primary source of pollutants in the local vicinity.

(a) Existing Pollutant Levels at Nearby Monitoring Stations

The SCAQMD maintains a network of air quality monitoring stations located throughout the Basin and has divided the Basin into 27 source receptor areas (SRAs) in

[8] *AQMD MATES III Model Estimated Risk Map, www2.aqmd.gov/webappl/matesiii, accessed December 22, 2010.*

which 31 monitoring stations operate. Figure V.E.1-1 on page V.E.1-17 shows the locations of the SRAs in Los Angeles County. The Development Area is located between SRA 13 and SRA 15. The monitoring station most representative of the Development Area is the Santa Clarita Valley Station, located at 22224 Placerita Canyon Road in the City of Santa Clarita, approximately two miles west of the Development Area. Criteria pollutants monitored at this station include PM_{10}, O_3, CO, and NO_2. The monitoring station most representative of the Development Area for $PM_{2.5}$ and SO_2 is the Burbank Station, located at 228 West Palm Avenue in the City of Burbank, approximately 17 miles southeast of the Development Area. The monitoring station most representative of the Development Area for lead and sulfate is the Los Angeles-North Main Street Station, located at 1630 North Main Street in the City of Los Angeles, approximately 25 miles southeast of the Development Area. Table V.E.1-2 on page V.E.1-18 identifies the national and state ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured at the representative monitoring stations through the period of 2007 to 2009.

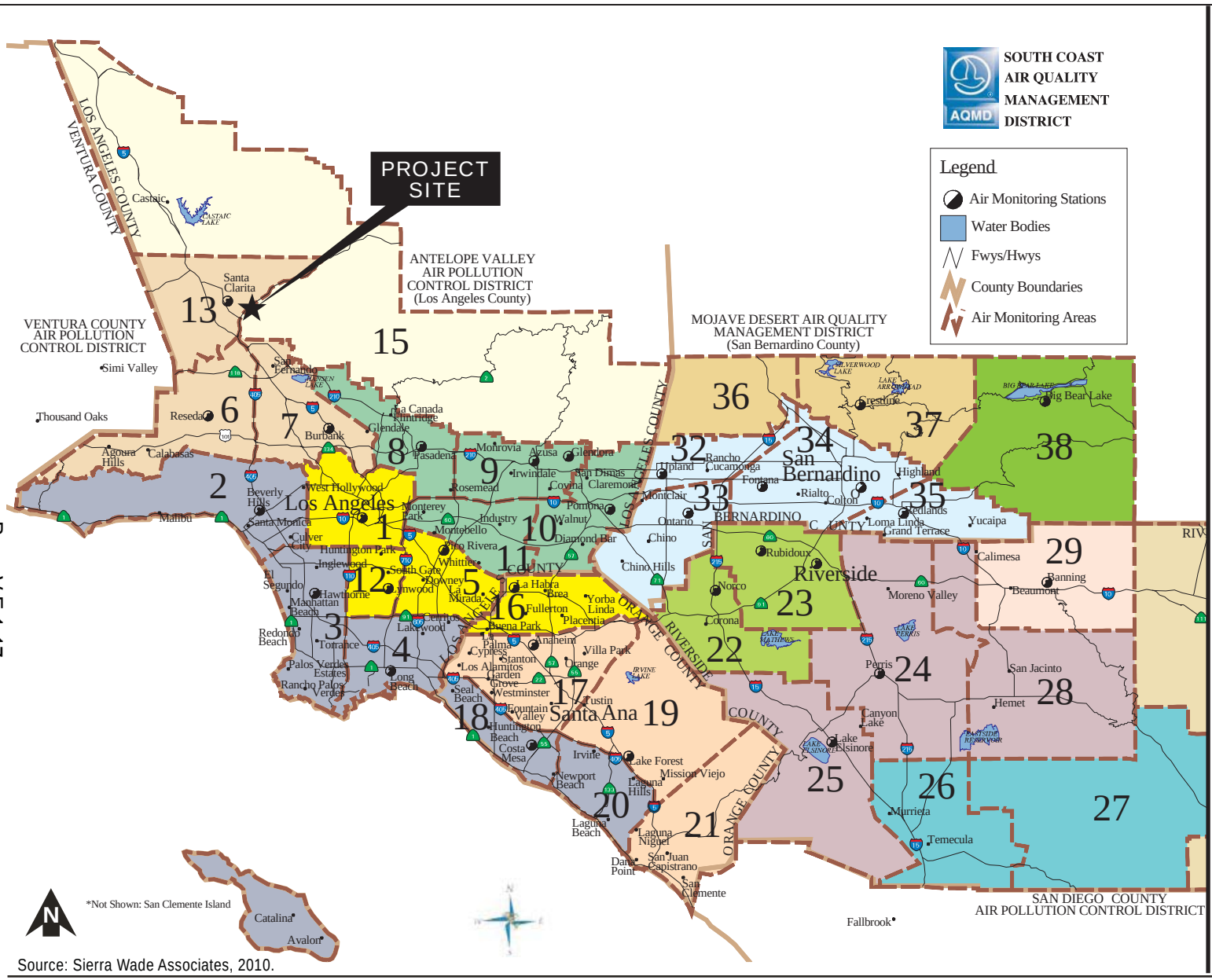
(b) Existing Health Risk in the Surrounding Area

As shown in Figure V.E.1-2 on page V.E.1-20, the Development Area and the remainder of the Ranch are located within a cancer risk zone of 515 in one million. In general, the risk experienced at the Ranch is comparable with locations outside of the central Los Angeles area.

(c) Sensitive Receptors and Locations

As shown in Figure V.E.1-3 on page V.E.1-21, the Project vicinity includes a variety of uses. New development within the recently approved Golden Valley Ranch planned community is underway to the north of the Ranch within the City of Santa Clarita. Upon completion, new uses within the 1,259-acre Golden Valley Ranch will include approximately 500 single-family residential units, approximately 610,000 square feet of community-serving commercial uses, a school, parks, and a fire station. Residential subdivisions are also located to the northwest of the Ranch on the other side of SR-14 within the City of Santa Clarita. To the south of the Ranch are the Angeles National Forest and State Park lands as well as residential subdivisions further to the southwest. To the east of the Ranch are undeveloped areas and a small residential subdivision located approximately 1.25 miles from the Development Area within the Ranch. To the west of the Ranch and the Development Area across SR-14 in the City of Santa Clarita are oil production wells and industrial uses, with The Master's College and residential subdivisions further to the west.

The SCAQMD *CEQA Air Quality Handbook* provides examples of typical sensitive receptors and includes long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and



Source: Sierra Wade Associates, 2010.

General Forecast Areas & Air Monitoring Areas

Coastal

Northwest Los Angeles County Coastal	2
Southwest Los Angeles County Coastal	3
South Los Angeles County Coastal	4
North Orange County Coastal	18
Central Orange County Coastal	20

Metropolitan

Central Los Angeles County	1
Southeast Los Angeles County	5
South Central Los Angeles County	12
North Orange County	16

San Fernando Valley

West San Fernando Valley	6
East San Fernando Valley	7
Santa Clarita Valley	13

San Gabriel Valley

West San Gabriel Valley	8
East San Gabriel Valley	9
Pomona/Walnut Valley	10
South San Gabriel Valley	11

Inland Orange County

Central Orange County	17
Saddleback Valley	19
Capistrano Valley	21

Riverside Valley

Corona/Norco Area	22
Metropolitan Riverside	23

San Bernardino Valley

Northwest San Bernardino Valley	32
Southwest San Bernardino Valley	33
Central San Bernardino Valley	34
East San Bernardino Valley	35

Hemet/Elsinore Area

Perris Valley	24
Lake Elsinore	25
Hemet/San Jacinto Valley	28

Temecula/Anza Area

Temecula Valley	26
Anza Area	27

San Gabriel Mountains 15

San Bernardino Mountains

West San Bernardino Mountains	36
Central San Bernardino Mountains	37

Big Bear Lake 38

Banning Pass Area 29

Coachella/Low Desert

Coachella Valley	30
East Riverside County	31

Disney | ABC Studios at The Ranch

matrix environmental

Figure V.E.1-1
SCAQMD Source Receptor Areas

Table V.E.1-2
Summary of Ambient Air Quality in the Project Vicinity

Pollutant	Year		
	2007	2008	2009
Ozone			
Maximum 1-hour Concentration (ppm)	0.135	0.160	0.140
Days exceeding NAAQS (0.12 ppm)	2	8	5
Days exceeding CAAQS (0.09 ppm)	31	54	57
Maximum 8-hour Concentration ppm)	0.110	0.131	0.122
Days exceeding NAAQS (0.075 ppm)	44	60	64
Days exceeding CAAQS (0.07 ppm)	64	81	77
Respirable Particulate Matter (PM_{10})			
Maximum 24-hour Concentration (µg/m^3)	131	91	56
Days exceeding NAAQS (150 µg/m^3)	0	0	0
Days exceeding CAAQS (50 µg/m^3)	5	2	1
Annual Arithmetic Mean (µg/m^3)	30	26	23
Does Measured AAM exceed NAAQS (50 µg/m^3)?	No	No	No
Does measured AAM exceed CAAQS (20 µg/m^3)?	Yes	Yes	Yes
Fine Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour Concentration (µg/m^3)	57	58	68
Days exceeding NAAQS (35 µg/m^3)	9	2	4
Annual Arithmetic Mean (µg/m^3)	17	14	14
Does measured AAM exceed NAAQS (15 µg/m^3)?	Yes	No	No
Does measured AAM exceed CAAQS (12 µg/m^3)?	Yes	Yes	Yes
Carbon Monoxide (CO)			
Maximum 1-hour Concentration (ppm)	2	2	2
Days exceeding NAAQS (35.0 ppm)	0	0	0
Days exceeding CAAQS (20.0 ppm)	0	0	0
Maximum 8-hour Concentration (ppm)	1.2	1.1	1.4
Days exceeding NAAQS and CAAQS (9 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour Concentration (ppm)	0.08	0.07	0.13
Days exceeding CAAQS (0.18 ppm)	0	0	0
Annual Arithmetic Mean (ppm)	0.020	0.017	0.015
Does measured AAM exceed NAAQS (0.0534 ppm)?	No	No	No
Does measured AAM exceed CAAQS (0.03 ppm)?	No	No	No
Sulfur Dioxide (SO_2)			
Maximum 1-hour Concentration (ppm)	0.01	0.01	0.01
Days exceeding CAAQS (0.25 ppm)	0	0	0
Maximum 24-hour concentration (ppm)	0.003	0.003	0.003
Days exceeding CAAQS (0.04 ppm)	0	0	0
Days exceeding NAAQS (0.14 ppm)	0	0	0

Table V.E.1-2 (Continued)
Summary of Ambient Air Quality in the Project Vicinity

Pollutant	Year		
	2007	2008	2009
Annual Arithmetic Mean (ppm)	0.001	0.001	0.001
Does measured AAM exceed NAAQS (0.030 ppm)?	No	No	No
Lead			
Maximum 30-day Average Concentration (μg/m^3)	0.04	0.02	—
Does measured concentration exceed NAAQS (1.5 μg/m^3)	No	No	—
Maximum Calendar Quarter Concentration (μg/m^3)	0.03	0.02	—
Does measured concentration exceed CAAQS (1.5 μg/m^3)	No	No	—
Sulfate			
Maximum 24-hour Concentration (μg/m^3)	11	14	—
Does measured concentration exceed CAAQS (25 μg/m^3)	No	No	—

ppm = parts per million by volume
μg/m^3 = micrograms per cubic mete
AAM = annual arithmetic mean
— = not available
Source: South Coast Air Quality Management District, Ambient Monitoring Data, 2011.

athletic facilities. Sensitive land uses in the Project vicinity discussed above are shown in Figure V.E.1-3. Whitney Canyon Park was conservatively included as a sensitive receptor to account for potential hikers on trails.

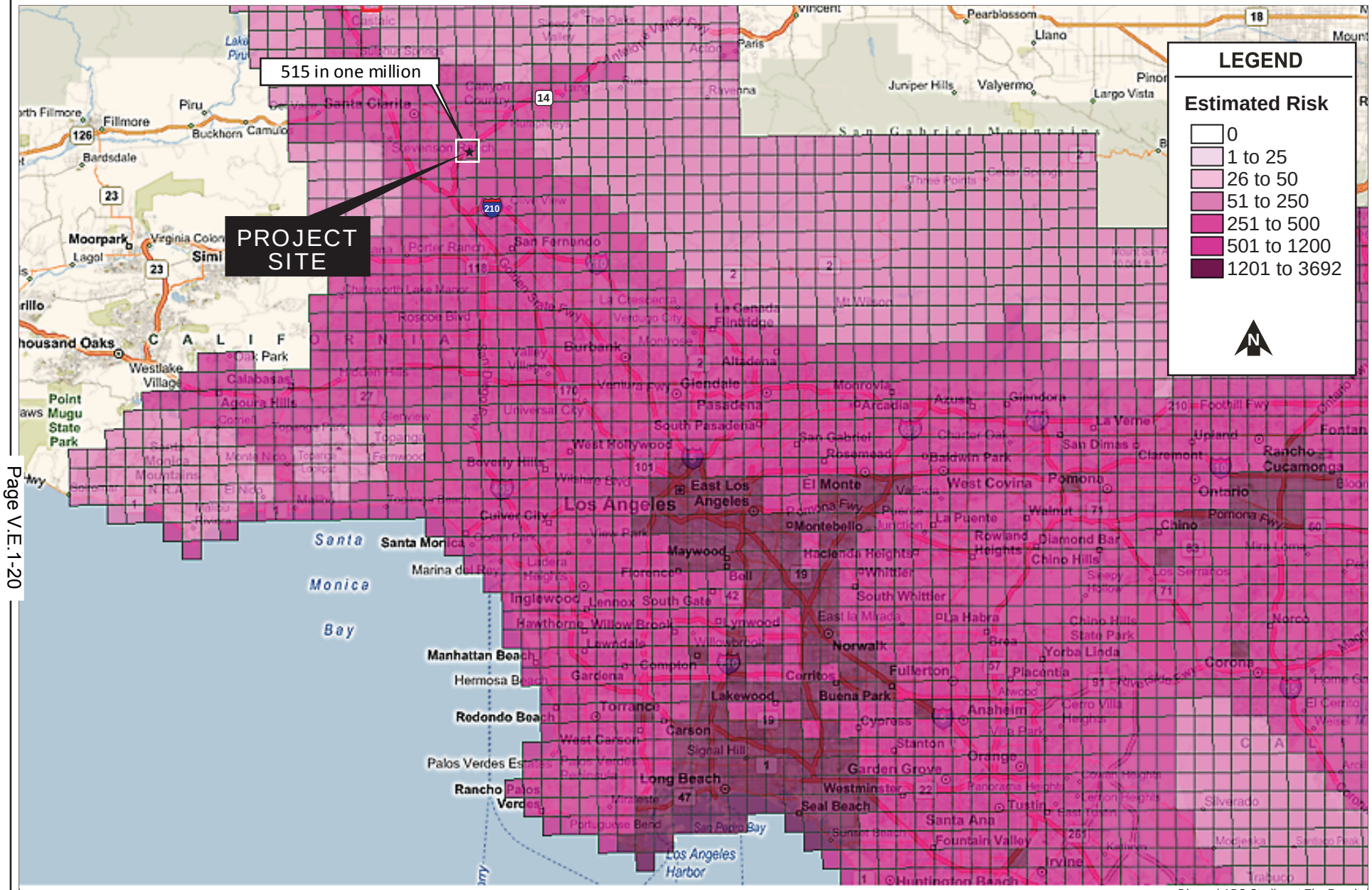
3. ENVIRONMENTAL IMPACTS

a. Methodology

This analysis focuses on the potential change in the air quality environment due to implementation of the Project. Air pollutant emissions associated with the Project would result from construction and operation of the proposed development. Specific analysis methodologies are discussed below.

(1) Construction Emissions Methodology

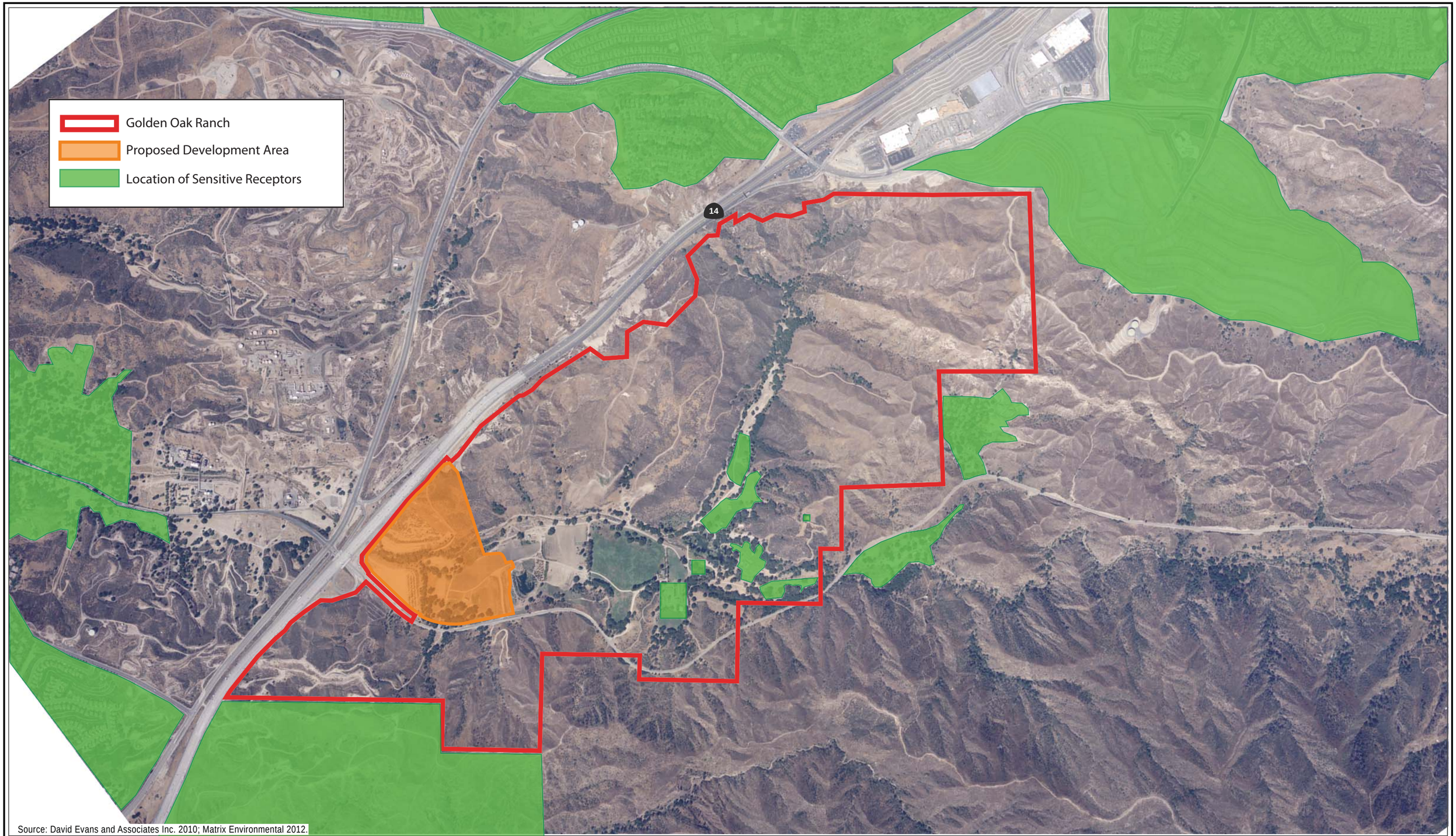
Daily regional emissions during construction were forecasted by assuming a conservative start date (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile-source and fugitive dust emissions factors derived from the SCAQMD recommended URBEMIS model. Details are presented in Appendix E.1 of this Draft EIR. The calculations reflect the types and quantities of construction equipment that



matrix environmental

Figure V.E.1-2
MATES III Total Cancer Risk for Project Area

Source: South Coast AQMD, 2010.



Source: David Evans and Associates Inc. 2010; Matrix Environmental 2012.

Disney | ABC Studios at The Ranch

matrix environmental

0' 1500' 3000'
Approximate Scale in Feet

Figure V.E.1-3
Air Quality Sensitive Receptor Locations

would be used to remove existing structures and pavement, grade and excavate the Development Area, construct the proposed buildings, structures and related improvements, and plant new landscaping within the Development Area. Construction tasks were aggregated to reflect overlapping tasks and identify the maximum construction emissions occurring over the course of Project construction.

Construction of the Project would likely be implemented in phases and may be completed as early as 2015 or as late as 2020. As a result, the analysis accounts for the increased building construction activity that would occur should Project construction within the Ranch be completed by 2015. Off-site utility and roadway improvements were also included to consider the potential overlap of these activities.

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to the SCAQMD's localized significance threshold (LST) methodology, which uses on-site mass emissions rate look up tables and project specific modeling, where appropriate. LSTs are only applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA) and distance to the nearest sensitive receptor. For PM_{10} and $PM_{2.5}$, LSTs were derived based on requirements in SCAQMD Rule 403, Fugitive Dust. The mass rate look-up tables were developed for each SRA and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. The LST mass rate look-up tables only apply to projects that are less than or equal to 5 acres. If the project exceeds 5 acres of active construction area then the SCAQMD recommends that project specific air quality modeling must be performed. As the off-site utility and roadway improvements would each be limited to less than 5 acres of disturbed area per day, the screening level tables were used to evaluate potential localized impacts from these improvements. However, construction activities related to the Development Area would exceed 5 acres of disturbed area and, therefore, localized air quality impacts on nearby receptors and concurrent construction of on-site and off-site improvements were analyzed using the Industrial Source Complex Short Term model (ISCST3) (Version 02035) to estimate ambient air concentrations. This model is approved for use by USEPA, CARB, and SCAQMD. Modeling parameters are set forth in detail in Appendix E.1 to this Draft EIR.

A complete listing of the construction equipment by phase, construction phase duration, emissions estimation model and dispersion model input assumptions used in this analysis is included within the emissions calculation worksheets that are provided in Appendix E.1 of this Draft EIR.

(2) Operational Emissions Methodology

(a) Regional

Analysis of the Project's likely impact on regional air quality during long-term project operations (i.e., after construction is complete) looks at three types of sources: (1) mobile; (2) area; and (3) stationary. Mobile source emissions are generated by the increase in motor vehicle trips to and from the Development Area associated with operation of the Project. Area source emissions are generated by, among other things, natural gas for the central plant, heat or cooking, maintenance equipment, generators, charbroilers, and consumer products that contain solvents. Landscaping that uses fuel-powered equipment outdoors is also considered an area source. The stationary sources considered in the analysis of regional impacts are those involved with generating electricity for the Project.[9]

URBEMIS2007 software was used to forecast regional emissions from mobile and area sources that would occur during Project operations, and also to estimate regional emissions associated with current uses of the site.[10] In calculating mobile source emissions, the URBEMIS2007 default trip length assumptions were applied to average daily trip estimates provided in the traffic study prepared for the Project to arrive at vehicle miles traveled (VMT). Stationary source emissions were compiled using procedures outlined in the SCAQMD's *CEQA Air Quality Handbook*.[11] To determine if a significant air quality impact would occur, the net increase in regional operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.[12]

(b) Localized

The general procedure for evaluating localized impacts from project operations is to evaluate any new or modified stationary combustion sources, and to study the likely effect on CO concentrations of induced traffic at nearby intersections.

---

[9] *A review of the Project's site plan and related project description did not identify any new or modified individually significant stationary source on-site.*

[10] *As construction activities could be completed as early as 2015, Project operational emissions were analyzed for 2015. This approach is conservative as combustion emission factors decrease in subsequent years as a result of regulatory requirements and technological advances.*

[11] *See SCAQMD, CEQA Air Quality Handbook (April 1993; portions "Changed November 1993"), Chapter 9 and Appendix 9.*

[12] *SCAQMD Air Quality Significance Thresholds (Rev. March 2009), www.aqmd.gov/ceqa/handbook/signthres.pdf. SCAQMD based these thresholds in part on the Federal Clean Air Act, and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1–6-2.)*

Effects related to operation of stationary-source combustion equipment at the Project, and associated PM_{10} emissions, were evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling) as necessary. The screening-level analysis consists first of reviewing the Project's site plan and related project description to identify any new or modified stationary-source combustion equipment. Then, if such equipment is identified, the potential significance of its impact is evaluated qualitatively in light of applicable regulations and operating parameters. If the qualitative evaluation does not rule out significant impacts, a more detailed analysis is conducted. In such a case, downwind sensitive receptor locations are identified, and site-specific dispersion modeling is conducted to estimate Project impacts. The results of the screening-level analysis, as described below, determined that detailed dispersion modeling was not required for the Project.

Localized CO concentrations were evaluated by using the CALINE4 microscale dispersion model, developed by Caltrans, in combination with EMFAC2007 emission factors. In traffic studies, the term "level of service" (LOS) describes traffic performance at intersections or along roadway segments, and is generally expressed as a letter grade (A through F, with an F grade meaning the worst-flowing traffic). Traffic researchers and planning agencies generally assign LOS ratings to intersections based on the ratio of traffic volume (or demand) to capacity (V/C). Lower V/C ratios correspond to better performance (freer-flowing traffic). SCAQMD suggests conducting a CO hotspots analysis according to a Caltrans protocol for any intersection where a proposed project would worsen the LOS by a level to any level below C, and for any intersection rated D or worse where the proposed project would increase the V/C ratio by 2 percent or more.[13] Projected CO concentrations were compared to ambient air quality standards and incremental increase in thresholds to determine whether CO impacts from operation would be significant. As the Project could be completed as early as 2015, the localized CO analysis was conservatively conducted with 2020 traffic volumes and 2015 emission factors (i.e., more traffic with higher emission factors).

(3) Toxic Air Contaminants Impacts (Construction and Operations)

As recommended by the SCAQMD, potential TAC impacts were evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion

[13] *See, for example, SCAQMD, Letter from Steve Smith, Ph.D., to Mr. Oscar Orci, City of Banning, re Mitigated Negative Declaration (MND) for Tentative Tract Map 34335 (Messenger Investment Company), September 7, 2007 (www.aqmd.gov/CEQA/igr/2007/sept/MNDBanning.pdf), Attachment p. 2, and SCAQMD, Letter from Steve Smith, Ph.D., to Mr. Richard Masyczek, City of Hemet, re Mitigated Negative Declaration (MND) for Sam's Club Conditional Use Permit 05-9: Hemet, November 22, 2005 (www.aqmd.gov/CEQA/igr/2005/nov/1101-02.pdf), Attachment p. 2.*

modeling), as necessary. The screening-level analysis consists of reviewing the Project's site plan and project description to identify any new or modified TAC emissions sources and determine whether the Project is consistent with recommended siting distances in the CARB Handbook. If the screening-level analysis does not rule out significant impacts from a new source, or modification of an existing TAC emissions source, a more detailed analysis is conducted. Downwind sensitive receptor locations are identified, and site-specific dispersion modeling is conducted to estimate Project impacts. The results of the screening-level analysis, as described below, determined that detailed dispersion modeling was not required for the Project.

(4) Odor Impacts (Construction and Operations)

As recommended by the SCAQMD, potential odor impacts were evaluated by conducting a screening-level analysis followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The screening-level analysis consisted of reviewing the Project's site plan and project description to identify new or modified odor sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing odor source, a more detailed analysis is conducted. Downwind sensitive receptor locations are identified, and site-specific dispersion modeling is conducted as necessary to estimate Project impacts. For this project, the screening-level analysis, as described below, determined that detailed dispersions was not required.

b. Significance Thresholds

The potential for the Project to result in impacts associated with air quality is based on the CEQA significance thresholds specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the State CEQA Guidelines and are as follows:

Threshold E.1-1: Would the project expose sensitive receptors to substantial pollutant concentrations?

Threshold E.1-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Threshold E.1-3: Would the project increase local emissions to a significant extent due to increased traffic congestion or use of a parking structure or exceed SCAQMD thresholds of potential significance?

Threshold E.1-4: Would the project create objectionable odors affecting a substantial number of people?

Threshold E.1-5: Would the project conflict with or obstruct implementation of the applicable air quality plan of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?

Threshold E.1-6: 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The SCAQMD CEQA significance thresholds are provided in the SCAQMD *CEQA Air Quality Handbook*, and include the following established thresholds to assess the regional and localized impacts of Project-related air pollutant emissions:

- Regional construction emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 100 pounds per day for NO_X; (2) 75 pounds per day for VOC; (3) 150 pounds per day for PM_{10} or SO_X; (4) 55 pounds per day $PM_{2.5}$; and (5) 550 pounds per day for CO.

- Regional operational emissions would exceed any of the following SCAQMD prescribed threshold levels: (1) 55 pounds a day for NO_X, VOC, or $PM_{2.5}$; (2) 150 pounds per day for PM_{10} or SO_X; and (3) 550 pounds per day for CO.

- Maximum on-site daily localized emissions would be greater than the localized significance threshold (LST), resulting in predicted ambient concentrations in the vicinity of the Project greater than the most stringent ambient air quality standards for CO (20 ppm over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 parts per million NO_2 over a 3-year average of the 98th percentile of the daily maximum 1-hour average (national standard), or 0.03 ppm averaged over an annual period).

- Maximum on-site localized PM_{10} or $PM_{2.5}$ emissions during construction would be greater than the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Development Area to exceed the incremental 24-hr threshold of 10.4 $\mu g/m^3$ for construction and 2.5 $\mu g/m^3$ for operation or 1.0 $\mu g/m^3$ PM_{10} averaged over an annual period.

- Either of the following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:

  – The Project would cause or contribute to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or

- The incremental increase due to the Project would be equal to or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.

- The Project would create an odor nuisance pursuant to SCAQMD Rule 402 (i.e., objectionable odor at the nearest sensitive receptor).

- The Project would emit carcinogenic or toxic air contaminants that would exceed the maximum incremental cancer risk of 10 in 1 million or an acute or chronic hazard index of 1.0.

- Hazardous materials associated with on-site stationary sources result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.

- The Project would be occupied primarily by sensitive land uses (e.g., residential uses, hospital, school) within a quarter mile of any existing facility that emits air toxic contaminants which could result in a health risk for pollutants identified in District Rule 1401.

c. Project Design Elements

The air quality analysis includes the following Project Design Features (PDFs) that factor into the estimates of construction and operational emissions levels presented in the following sections. These features and control measures are in addition to those to be implemented in conjunction with Project mitigation, specified later below.

(1) Construction

The Project would comply with SCAQMD Rule 403 regarding fugitive dust control. The following control measures would be implemented to control fugitive dust:

- Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind.
- Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use.
- Securing loads by trimming, watering or other appropriate means to prevent spillage and dust.
- Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation.
- Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour;

- Covering all haul trucks or maintaining at least 6 inches of freeboard;
- Minimizing track-out emissions using the methods provided for in Rule 403; and
- Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.

The following Project Design Feature would be implemented to control VOC emissions from the application of architectural coatings:

- Proposed buildings would be designed to minimize the need for application of architectural coatings.

(2) Operations

The Project would be based on principles of smart growth and environmental sustainability, as evidenced in the synergy of consolidating the existing outdoor filming uses at the Ranch with the proposed indoor film production facilities on the same site, as well as access enhancements that would make use of the Development Area's proximity to nearby freeways. Some of the key sustainability features that may be implemented include: photovoltaic technology on selected roofs; use of color and shade structures such as awnings or canopies to reduce the heat island effect; the use of highly efficient electric and heating, ventilation, and air-conditioning (HVAC) equipment (housed in the proposed central utility plant); and the use of drought-tolerant plant species, including native and non-native plants, for a minimum of 75 percent of total landscaping. Water conservation and Project Design Features would include low flow/ultra low-flow fixtures, Energy Star appliances, drought-tolerant landscaping, and use of drip irrigation systems. As part of compliance with the County's recently adopted Green Building ordinance, the soundstages, production offices, and administration building would comply with the County's Green Building Standards and achieve Leadership in Energy and Environmental Design (LEED™) Silver Certification. The commissary would comply with the County's Green Building Standards and achieve LEED™ Certification. The writers/producers bungalows would comply with the County's Green Building Standards. While the mills and the warehouse are exempt from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they would comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant would be exempt from the County's Green Building ordinance. The Project would also incorporate relevant sustainability features set forth in the County's Green Building ordinance, Low Impact Development ordinance, and Drought-Tolerant Landscaping ordinance. Implementation of these sustainability features in return would contribute to a reduction in air pollutant emissions via reductions in vehicle trips, vehicle miles traveled, energy consumption, and embodied energy associated with water usage.

As listed below, the Project would implement the following specific Project Design Features that address each of the following areas:

(a) Land Use

The Project includes existing outdoor filming uses and proposed indoor production facilities consolidated on the same site to reduce vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods. The combination of such uses at one location would reduce the need for film production-related trips to off-site locations throughout the region.

The Project also provides a direct entrance to the Development Area from the SR-14 northbound off-ramp to allow immediate access to the Development Area from SR-14. This direct freeway access avoids passing by off-site sensitive receptors and thus limits air quality impacts from Project-related cars and trucks.

(b) Transportation

The Project would include the following:

- Accessibility enhancements and linkages that make use of the Development Area's accessibility to nearby freeways. Specifically, the Project would include the following improvements, either as Project Design Features or as Mitigation Measures, as detailed in Section V.J, Traffic, Access and Parking:
  - Placerita Canyon Road (new Ranch main entrance)/SR-14 Northbound Off-Ramp: The Project would provide a direct entrance, if approved by Caltrans, to the Development Area from the SR-14 northbound off-ramp to allow immediate access to the Project. This intersection would be signalized and the off-ramp widened to provide three lanes (one left-turn lane, one optional through and left-turn lane, and one right-turn lane). Eastbound to northbound left-turns would be prohibited, and southbound movement out of the Development Area would be limited to right-turns only. These improvements would be the sole responsibility of the Project
  - Sierra Highway/SR-14 Southbound Ramps: The Project Applicant would install a traffic signal at this intersection with protected left-turn phasing for southbound Sierra Highway. Northbound Sierra Highway would be widened to provide a separate right-turn only lane onto the SR-14 southbound on-ramp. These improvements would be the sole responsibility of the Project. Detailed striping/signing and traffic signal plans would be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation.

- Sierra Highway/Placerita Canyon Road: The Project Applicant would widen the Placerita Canyon Road westbound approach to provide a free-flow right-turn lane onto northbound Sierra Highway, facilitating traffic flow to the SR-14 southbound on-ramp. These improvements would be the sole responsibility of the Project. A detailed striping/signing plan would be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation.

- Current Ranch main entrance/Placerita Canyon Road (Easterly Driveway): The Project Applicant would install a traffic signal at this intersection. The eastbound approach of Placerita Canyon Road at the intersection would be striped to provide for a left-turn only lane to improve access to the Ranch. This intersection's southbound approach exiting the Development Area would be striped to provide one left-turn lane and one right-turn lane. These improvements would be the sole responsibility of the Project. Detailed striping/signing and traffic signal plans would be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation.

- The Project would also pay its fair share toward the cost of the cumulative traffic improvements listed below:

  - Sierra Highway/SR-14 Southbound Ramps: The Project Applicant would pay its pro rata share (20.9 percent) of the cost for the widening of southbound Sierra Highway to provide a second left-turn only lane onto the SR-14 southbound on-ramp.

  - Sierra Highway/Placerita Canyon Road: Prior to issuance of the first certificate of occupancy, the Project Applicant would pay its pro rata share (16.2 percent) of the cost for the widening of Sierra Highway northbound approach to provide a separate right-turn only lane onto eastbound Placerita Canyon Road.

- To encourage the use of alternative modes of transportation, the Project would incorporate the following features:

  - The provision of information on transportation alternatives (transit schedules, maps, etc.);

  - A carpool matching program;

  - Preferred parking for low-emitting (Zero Emission) and fuel-efficient vehicles;

  - Preferred parking for carpool/vanpool vehicles;

  - Video conferencing facilities within the Project;

- On-site secure, bicycle storage areas; and
- Non-dedicated walkways, bicycle access, and paved surfaces throughout the Development Area to minimize use of automobiles and trucks traveling throughout the Development Area.

- The Project would be designed to reduce vehicle idling and queuing through proper design of the on-site circulation system.
- Deliveries would be scheduled during off-peak traffic periods to encourage the reduction of trips during the most congested periods.

(c) Water

The Project would reduce its water demand by at least 20 percent through the use of Project Design Features that would include, at a minimum, the following measures, or equivalent measures capable of achieving the same results:[14]

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

The Project would reduce its landscaping water demand by at least 50 percent through the use of Project Design Features that would include, at a minimum, the following measures, or equivalent measures capable of achieving the same results:[15]

- Weather-based irrigation controller with rain shutoff.
- Matched precipitation (flow) rates for sprinkler heads.
- Drip/microspray/subsurface irrigation where appropriate.

---

[14] *Such reductions were not accounted for in the water demand calculations provided in Section V.L.1, Utilities and Service Systems—Water Supply, of this Draft EIR, in order to present a conservative analysis.*

[15] *Ibid.*

- Minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grass pavers, or porous asphalt) where appropriate, primarily for pedestrian walkways and along the bungalows, the administration building, and the commissary, as well as within the Conditional Parking Areas, if developed. In addition, permeable surfaces could potentially be used for parking areas that would not be used by trucks (e.g., single rows of parking with a limited number of spaces, such as those that would surround some of the proposed detention basins, or the parking row adjacent to the Administration building).
- Proper hydro-zoning and turf minimization.
- Use of landscape contouring to minimize precipitation runoff.

(d) Energy

The Project would reduce its energy usage by at least 15 percent below Title 24 (2008) standards by implementing Project Design Features that would include, at a minimum, the following measures, or equivalent measures capable of achieving the same results: [16]

- Installation of energy efficient heating and cooling systems, equipment, and control systems (e.g., via the proposed central plant).
- Installation of efficient lighting and lighting control systems.
- Installation of light-emitting diodes for traffic and street lighting, as permitted.
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures such as awnings or canopies around soundstages and mills to reduce the heat island effect.
- Incorporation of energy saving features into building design, as appropriate (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.).
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons.

[16] *Such reductions were not accounted for in the energy demand calculations provided in Section V.L.4, Utilities and Service Systems—Energy, of this Draft EIR, in order to present a conservative analysis.*

- Use of Energy Star appliances.
- Use of photovoltaic technology on selected roofs.

In addition, the Applicant would obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources would be subject to SCAQMD Regulation XIII (New Source Review) and would meet Best Available Control Technology (BACT) requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.

(e) Solid Waste

The Project would incorporate the following Project Design Features pertaining to solid waste reduction:

- Establish a Solid Waste Diversion Program of 50 percent for Project operations.
- Establish a Solid Waste Diversion Program of 75 percent for Project construction.
- The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related solid wastes, as required per the Los Angeles County Code and demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Recycling Centers: Provide readily accessible areas to serve the Development Area for depositing, storage, and collection of non-hazardous materials for recycling.

(f) Building Design

Many of the new buildings for the Project would be designed and constructed to meet the County's Green Building Standards and achieve the equivalent of LEED™ Certification or LEED™ Silver Certification. Specifically, the soundstages, production offices, and administration building would comply with the County's Green Building Standards and achieve LEED™ Silver Certification. The commissary would comply with the County's Green Building Standards and achieve LEED™ Certification. The writers/producers bungalows would comply with the County's Green Building Standards. While the mills and the warehouse are exempt from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they would comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant

would be exempt from the County's Green Building ordinance. The Project would reduce its domestic water demand by at least 20 percent through the use of the Project Design Features described above. The Project would also reduce its energy usage by at least 15 percent below Title 24 (2008) standards with implementation of the Project Design Features listed above.

d. Impact Analysis

Threshold E.1-1: Would the project expose sensitive receptors to substantial pollutant concentrations?

Threshold E.1-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Threshold E.1-3: Would the project increase local emissions to a significant extent due to increased traffic congestion or use of a parking structure or exceed SCAQMD thresholds of potential significance?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The Project would provide up to twelve soundstages, production offices, six mills, a warehouse, writers/producers bungalows, a commissary, an administration building, a central utility plant, and an electrical substation within the 58-acre Development Area. The number of employees associated with the Project would vary based on filming schedules and demand, with up to 1,240 persons associated with Development Area activities potentially present each day, for a total of up to 1,840 persons potentially present on the Ranch on a daily basis. Potential air quality impacts from the Project are discussed below.

With regard to receptors that are sensitive to pollutant concentrations, the closest off-site sensitive residential receptor to on-site construction and operational activities is a single-family home at 20821 Placerita Canyon Road, approximately 2,400 feet west of the Development Area. Other off-site receptors in the Project vicinity include the following: various sensitive uses (residential, school, and park uses) to the north within the recently approved Golden Valley Ranch; Placerita Canyon Nature Center to the east, south of Placerita Canyon Road, and a residential subdivision to the east at Running Horse Road; Whitney Canyon Park to the south in the City of Santa Clarita; residential subdivisions located to the west and southwest of the Ranch on the other side of SR-14 (e.g., west of Sierra Highway and south of Dockweiler Road); and residential subdivisions located to the north and northwest, also on the other side of SR-14 (e.g., near and north of Golden Valley Road).

(a) Construction

Construction of the Project may occur in phases, with completion as early as 2015 or as late as 2020. Construction would start with clearing the Development Area, including removal of existing on-site structures, followed by mass grading of the Development Area. As discussed in detail in Section V.A, Geotechnical Hazards, and illustrated in Figures V.A-3 through V.A-7 therein, Project grading within the Ranch is anticipated to involve approximately 700,000 cubic yards of cut and 350,000 cubic yards of fill, with approximately 350,000 cubic yards of soil export.[17] Based on rough grading estimates, the northern portion of the Development Area would require approximately 443,000 cubic yards of cut and 5,000 cubic yards of fill, and the southern portion would require approximately 252,000 cubic yards of cut and approximately 336,000 cubic yards of fill, including fill to be placed east of the southern fill pad. An estimated 4,050 cubic yards of cut and 7,560 cubic yards of fill would be needed to create the development pad for the water tank and to smooth and pave the existing unpaved maintenance road to the tank so as to provide all-weather access for Newhall County Water District (NCWD). Construction of the proposed trail would involve approximately 700 cubic yards of cut which would be used elsewhere within the Ranch and would not require export. Earthwork necessary for the Conditional Parking Areas, if constructed, would involve limited surface grading, with less than 1,000 cubic yards of cut and less than 1,000 cubic yards of fill. The use of excess soil from the Development Area could be used as fill for the Conditional Parking Areas if these Project areas were developed during a similar timeframe. Limited fine grading would also be necessary at the selected of the two Potential Mobile Home Relocation Areas for the Ranch foreman's mobile home and the associated new septic system. Site grading is assumed to occur during approximately 6 months of the overall 27-month construction schedule (not taking into account possible nighttime hauling, which could reduce the total duration of earthwork activities), and clearing/demolition is expected to occur during 1 month of the overall construction schedule. For purposes of this analysis, grading would occur on a maximum of 10 acres per day and would include approximately 685 total round trips in order to haul approximately 11,000 cubic yards of export per day from the Development Area, which could potentially occur over two shifts daily. As shown in the air quality worksheets provided in Appendix E.1, these haul trips would result in approximately 13,700 vehicle miles traveled on a peak day. If a second shift is required for export, it would only involve loading of export and hauling of material off-site and would not include active grading activities.

[17] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated herein.*

(i) Regional Construction Impacts

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Development Area. In addition, fugitive dust emissions would result from demolition and construction activities. Mobile source emissions, primarily NO_X, would result from haul trucks and the use of heavy-duty construction equipment. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

In order to provide a conservative analysis, it was assumed all construction activities would be completed within the minimum timeframe anticipated for construction (i.e., over a 27-month timeframe ending in 2015). This timeframe provides for the maximum overlap of construction components within the Project's overall development period and includes all on-site infrastructure improvements with the exception of the trail improvements. The trail improvements would not be developed concurrently with other Project grading activities within the Ranch (refer to Mitigation Measure (MM) E.1-9). The off-site infrastructure improvements, evaluated below, would also occur during this timeframe. Construction emissions are directly related to the duration and intensity of construction activities (i.e., emissions increase as the amount of construction and intensity increases). Emission rates representative of certain stages of construction (i.e., construction worker trips and delivery vehicle trips) can also decrease over time in response to the use of vehicles or equipment that emit lower levels of pollutant emissions. Additional details of construction activities (i.e., demolition, site preparation/excavation, and building construction/finishing) and the equipment that would be used during Project construction are provided in Appendix E.1 of this Draft EIR.

The emissions levels in Table V.E.1-3 on page V.E.1-37 represent the highest daily emissions projected to occur on any one day of project construction. Maximum daily emissions associated with on-site development would primarily occur during grading operations within the Development Area. These grading activities would occur across the entire Development Area at the beginning of construction regardless of whether the Project is finished in two or more phases.

As mentioned previously, the Project would allow for some flexibility in terms of permitted types of land uses allowed. The Studio Office Option would result in a total of nearly 46,000 less gross square feet of building area. As the Studio Office Option results in less square footage and the peak construction activities would generally be the same for

Table V.E.1-3
Unmitigated Project—Estimate of Construction Emissions[a]
(pounds per day)

Type of Construction Emissions	VOC	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]
REGIONAL EMISSIONS						
On-Site Improvements	120	492	220	<1	132	43
Trail Improvements	2	12	9	<1	10	3
Off-Site Roadway Improvements	7	48	49	<1	12	4
Off-Site Utility Improvements	7	34	23	<1	5	2
Maximum Construction Emissions	120	492	220	<1	132	43
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**45**	**392**	**(330)**	**(150)**	**(18)**	**(12)**
Exceed Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
Maximum Combined Emissions[c]	134	574	292	1	149	49
SCAQMD Daily Significance Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Over/(Under)	**56**	**474**	**(258)**	**(149)**	**(1)**	**(6)**
Exceed Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**
LOCALIZED EMISSIONS						
On-Site Improvements	116	221	117	<1	115	29
SCAQMD Daily Significance Thresholds (Exceeds 5 Acres—Dispersion Modeling Required)						
Trail Improvements	2	12	9	<1	10	3
SCAQMD Daily Significance Thresholds[d,g]		**54**	**1,294**		**25**	**7**
Over/(Under)		**(42)**	**(1,285)**		**(15)**	**(4)**
Exceed Threshold?		**No**	**No**		**No**	**No**
Off-Site Roadway Improvements	7	29	18	<1	11	3
SCAQMD Daily Significance Thresholds[e,g]		**70**	**2,500**		**51**	**18**
Over/(Under)		**(41)**	**(2,499)**		**(40)**	**(15)**
Exceed Threshold?		**No**	**No**		**No**	**No**
Off-Site Utility Improvements		26	17	<1	3.4	1.9
SCAQMD Daily Significance Thresholds[f,g]		**46**	**590**		**4**	**3**
Over/(Under)		**(20)**	**(573)**		**(0.6)**	**(1.1)**
Exceed Threshold?		**No**	**No**		**No**	**No**

[a] *Emission quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the URBEMIS model printout sheets and/or calculation worksheets that are presented in Appendix E.1.*

[b] *PM_{10} and $PM_{2.5}$ emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.*

[c] *Maximum overlapping regional daily emissions occur during site grading activities and off-site roadway/ utility improvements. Please note that trail improvements are not anticipated to occur concurrently with on-site grading activities.*

Table V.E.1-3 (Continued)
Unmitigated Project—Estimate of Construction Emissions[a]
(pounds per day)

Type of Construction Emissions	VOC	NO_X	CO	SO_X	PM_{10}[b]	$PM_{2.5}$[b]

[d] *The SCAQMD LSTs are based on Source Receptor Area No. 13 for a 1-acre site with no sensitive uses within 100 meters.*

[e] *The SCAQMD Localized Significance Thresholds (LSTs) are based on Source Receptor Area No. 13 (Santa Clarita Valley) for a 1-acre site with sensitive uses within 200 meters.*

[f] *The SCAQMD LSTs are based on Source Receptor Area No. 13 for a 1-acre site with no sensitive uses within 25 meters.*

[g] *The SCAQMD localized threshold for NO_2 was revised to account for the recently adopted 1-hour NO_2 NAAQS of 188 µg/m^3 or an incremental threshold of 73 µg/m^3 for SRA 13. This incremental threshold is equivalent to 46 pounds per day for a 1-acre site at a distance of 25 meters within SRA 13 and is substantially less than 114 pounds per day for the state standard. For a 1-acre site at a distance of 200 meters, the NAAQS increment is equivalent to 70 pounds per day and is substantially less than 173 pounds per day for the state standard.*

Source: Matrix Environmental, 2011.

both scenarios, the analysis below represents peak impacts for the Soundstage Option and the Studio Office Option.

As presented in Table V.E.1-3, construction-related daily maximum regional construction emissions associated with on-site development would exceed the SCAQMD daily significance thresholds for VOC and NO_X. Therefore, regional construction emissions resulting from Project development within the Ranch would result in a significant short-term impact.

It should be noted that the emissions estimates presented in Table V.E.1-3 do not take into account recently promulgated emission standards for off-road diesel construction equipment such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. Thus, actual emissions from the Project would be less than those presented above.

(ii) Localized Construction Impacts

Conservative estimates of maximum on-site daily construction emissions for CO, NO_X, PM_{10} and $PM_{2.5}$ were also compiled for construction activities associated with on- and off-site development and infrastructure improvements and are presented in Table V.E.1-4 on page V.E.1-39. However, since the Development Area and combined areas of on-site and off-site improvements would exceed 5 acres, the localized effects were analyzed using the ISCST3 dispersion model, as recommended by LST methodology.

Table V.E.1-4
Unmitigated Project—Maximum Ambient Construction Pollutant Impacts at the Closest Sensitive Receptors[a]

Pollutant	On-Site Residential (East of the Development Area and Ranch)	Whitney Canyon Park (South of the Ranch)[b]	Residential (West of the Ranch)[c]	Residential (North of the Ranch)[d]
PM_{10} (24-hr Concentration) (µg/m^3)				
Project Increment	8.5	7.8	3.2	1.6
LST Threshold	10.4	10.4	10.4	10.4
Over/(Under)	(2.0)	(2.6)	(7.2)	(8.8)
Exceed Threshold?	No	No	No	No
PM_{10} (Annual Concentration) (µg/m^3)				
Project Increment	0.9	0.8	0.2	0.1
LST Threshold	1.0	1.0	1.0	1.0
Over/(Under)	(0.1)	(0.2)	(0.8)	(0.9)
Exceed Threshold?	No	No	No	No
$PM_{2.5}$ (24-hr Concentration) (µg/m^3)				
Project Increment	2.2	2.0	0.9	0.4
LST Threshold	10.4	10.4	10.4	10.4
Over/(Under)	(8.2)	(8.4)	(9.5)	(10.0)
Exceed Threshold?	No	No	No	No
CO (1-hr Concentration) (µg/m^3)				
Project Increment	111	100	61	40
Background	2,290	2,290	2,290	2,290
Background + Increment	2,401	2,390	2,352	2,330
LST Threshold	23,000	23,000	23,000	23,000
Over/(Under)	(20,599)	(20,610)	(20,648)	(20,670)
Exceed Threshold?	No	No	No	No
CO (8-hr Concentration) (µg/m^3)				
Project Increment	25	22	10	6
Background	1,603	1,603	1,603	1,603
Background + Increment	1,628	1,626	1,613	1,609
LST Threshold	10,000	10,000	10,000	10,000
Over/(Under)	(8,372)	(8,374)	(8,387)	(8,391)
Exceed Threshold?	No	No	No	No
NO_2 (1-hr Concentration) (µg/m^3)				
Project Increment	23	31	39	43
CAAQS Background	115	115	115	115
CAAQS Background + Increment	138	145	154	158
LST Threshold (CAAQS)	188	188	188	188
Over/(Under)	(50)	(43)	(34)	(30)

Table V.E.1-4 (Continued)
Unmitigated Project—Maximum Ambient Construction Pollutant Impacts at the Closest Sensitive Receptors[a]

Pollutant	On-Site Residential (East of the Development Area and Ranch)	Whitney Canyon Park (South of the Ranch)[b]	Residential (West of the Ranch)[c]	Residential (North of the Ranch)[d]
Exceed Threshold?	No	No	No	No
NAAQS Background	244	244	244	244
NAAQS Background + Increment	268	275	284	288
LST Threshold (NAAQS)	339	339	339	339
Over/(Under)	(71)	(64)	(55)	(51)
Exceed Threshold?	No	No	No	No
NO_2 (Annual Concentration) (µg/m^3)				
Project Increment	<1	<1	<1	<1
Background	38	38	38	38
Background + Increment	38	38	38	38
LST Threshold	57	57	57	57
Over/(Under)	(19)	(19)	(19)	(19)
Exceed Threshold?	No	No	No	No

[a] *The on- and off-site residential areas referenced herein are the sensitive receptors located closest to the Development Area, where the majority of Project construction would occur, and therefore represent the potential for the greatest impacts.*

[b] *Whitney Canyon Park located on the south side of Placerita Canyon Road approximately 1,000 feet south of the Project site.*

[c] *Single-family home located at 20821 Placerita Canyon Road approximately 2,400 west of the Project site.*

[d] *Single-family subdivision located on the south side of Golden Valley Road west of SR-14 5,500 feet north of the Project site.*

Source: Matrix Environmental, 2011.

The Project-related localized emissions that were used to perform the dispersion modeling are presented in Table V.E.1-3 on page V.E.1-37. The values in Table V.E.1-4 represent the maximum construction pollutant concentrations from the Project (both on-site and off-site improvements). It should be noted that the resultant pollutant concentrations are predominately from on-site improvements within the Development Area.

As shown in Table V.E.1-4, maximum construction pollutant concentrations would not exceed SCAQMD recommended localized significance thresholds for PM_{10}, $PM_{2.5}$, CO, and NO_2 concentrations. As such, localized air quality impacts during construction would be less than significant.

(iii) Toxic Air Contaminants

The greatest potential for TAC emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology.

OEHHA has developed methodology for estimating health risk from TAC pollutants such as diesel exhaust from construction equipment. OEHHA has developed a DPM inhalation non-cancer (long-term) reference exposure level (REL) of 5 micrograms per cubic meter ($\mu g/m^3$). No non-cancer acute (short-term) REL has been established for DPM.

Although a cancer risk factor has been established for DPM, the OEHHA HRA (Health Risk Assessment) cancer risk factors assume a continuous exposure over a 70-year time frame. Because the construction schedule estimates that the phases which require the most heavy-duty diesel vehicle usage, such as site grading and excavation, would last for a much shorter duration (i.e., approximately 6 months), construction of the Project would not result in a long-term (i.e., 70 years) substantial source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions. It is therefore not meaningful to evaluate long-term cancer impacts from construction activities which occur over a relatively short duration. In addition, there would be no residual emissions after construction and no corresponding individual cancer risk. As such, toxic emission impacts related to construction activities within the Ranch would be less than significant.

(b) Operational Impacts

(i) Regional Operational Impacts

Regional operational air pollutant emissions associated with Project operations would be generated by the consumption of electricity and natural gas, and by the operation of on-road vehicles. Pollutant emissions associated with energy demand (i.e., electricity generation and natural gas consumption) are classified by the SCAQMD as regional stationary source emissions. Electricity is considered an area source since it is produced at various locations within and outside the South Coast Basin. Since it is not possible to isolate where electricity is produced, these emissions are conservatively considered to occur within the Basin and are regional in nature. Criteria pollutant emissions associated with the production and consumption of energy were calculated using emission factors from the SCAQMD *CEQA Air Quality Handbook* (Appendix to Chapter 9).

Mobile-source emissions were calculated using the URBEMIS emissions inventory model, which multiplies an estimate of the increase in daily VMT by applicable EMFAC2007 emissions factors. The URBEMIS model output and worksheets for calculating regional operational daily emissions are provided in Appendix E.1 of this Draft EIR. As shown in Table V.E.1-5 on page V.E.1-43, regional emissions resulting from operation of the Project are not expected to exceed the SCAQMD daily thresholds for either the Soundstage or Studio Office options. As discussed above, Project operational emissions were calculated for 2015 and would be considered a conservative estimate of 2020 emissions (i.e., lower emission rates in future years). Air quality impact from Project operational emissions would be less than significant and no mitigation measures would be required.

(ii) Localized Operational Impacts

Operation of the Project would not introduce any major new sources of air pollution within the Ranch. Emissions estimates for criteria air pollutants from on-site sources, such as natural gas consumption, emergency generators, consumer product use, landscaping activities, and a charbroiler are presented in Table V.E.1-6 on page V.E.1-44. The SCAQMD LST mass rate look-up tables were used to evaluate potential localized impacts. The LST mass rate look-up tables apply to projects that have active areas that are less than or equal to 5 acres in size. Although the Development Area and other areas of the Ranch to be developed exceed 5 acres, it was conservatively assumed that all on-site emissions would occur within a 5-acre area. This approach is recommended by SCAQMD for a screening-level analysis and would over predict potential localized impacts (i.e., more pollutant emissions occurring within a smaller area and within closer proximity to potential sensitive receptors). As shown in Table V.E.1-6, on-site operational emissions would be well below the significance thresholds.

For the operation of projects that do not include major on-site sources or large parking structures, CO generated by project-related traffic is generally the localized pollutant of concern. As such, the potential for CO hot spots was analyzed.

The SCAQMD recommends an evaluation of potential localized CO impacts when a project causes the level of service (LOS) at a study street intersection to worsen from C to D, or if a project increases the volume-to-capacity (V/C) ratio at any street intersection rated D or worse by two percent or more. As detailed in Section V.J, Traffic, Access and Parking, Project traffic volumes would meet these criteria at two intersection locations for the Project.

Table V.E.1-5
Unmitigated Project—Regional Operational Emissions
(pounds per day)[a]

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Use Emissions (Soundstage Option)						
On-Site Improvements						
Mobile	20	29	226	<1	55	11
Area	5	4	9	<1	<1	<1
Stationary	<1	14	2	1	<1	<1
Miscellaneous	<1	3	<1	<1	<1	<1
Off-Site Infrastructure Improvements	0	0	0	0	0	0
Total	26	50	241	2	57	12
SCAQMD Significance Threshold	55	55	550	150	150	55
Over/(Under)	**(29)**	**(5)**	**(309)**	**(148)**	**(93)**	**(44)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Project Use Emissions (Studio Office Option)						
On-Site Improvements						
Mobile	22	32	246	<1	60	12
Area	5	4	9	<1	<1	<1
Stationary	<1	15	3	2	<1	<1
Miscellaneous	<1	3	<1	<1	<1	<1
Off-Site Infrastructure Improvements	0	0	0	0	0	0
Total	27	53	260	2	62	13
SCAQMD Significance Threshold	55	55	550	150	150	55
Over/(Under)	**(28)**	**(2)**	**(290)**	**(148)**	**(88)**	**(42)**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *Mobile and area emissions are calculated using the URBEMIS emissions model. Area sources include natural gas consumption (e.g., central utility plant), landscape fuel consumption, residential consumer products, commercial solvent usage, and architectural coatings. Stationary source emissions due to project-related electricity generation are calculated based on guidance provided in the SCAQMD CEQA Air Quality Handbook. Miscellaneous sources include a charbroiler and emergency generators. Worksheets and modeling output files are provided in Appendix E.1.*

Source: Matrix Environmental, 2011.

CO concentration levels were forecasted at the above-mentioned intersections using the CALINE4 dispersion model developed by the California Department of Transportation, using peak-hour traffic volumes and conservative meteorological assumptions.

Conservative meteorological conditions include low wind speed, stable atmospheric conditions, and the wind angle producing the highest CO concentrations for each case.

Table V.E.1-6
Unmitigated Project—Localized Operational Emissions
(pounds per day)[a]

Emission Source	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Use Emissions (Soundstage Option)						
On-Site Improvements	<1	17	5	2	1	1
Off-Site Improvements	0	0	0	0	0	0
Total	**<1**	**17**	**5**	**2**	**1**	**1**
SCAQMD Daily Significance Thresholds[a,b]		**140**	**11,049**		**39**	**23**
Over/(Under)		**(123)**	**(11,044)**		**(38)**	**(22)**
Exceed Threshold?		**No**	**No**		**No**	**No**
Project Use Emissions (Studio Office Option)						
On-Site Improvements	<1	18	5	2	2	1
Off-Site Improvements	0	0	0	0	0	0
Total	**<1**	**18**	**5**	**2**	**2**	**1**
SCAQMD Daily Significance Thresholds[a,b]		**140**	**11,049**		**39**	**23**
Over/(Under)		**(122)**	**(11,044)**		**(37)**	**(22)**
Exceed Threshold?		**No**	**No**		**No**	**No**

Numbers may not add up exactly due to rounding.

[a] *The SCAQMD Localized Significance Thresholds (LSTs) are based on Source Receptor Area No. 13 for a 5-acre site with no sensitive uses within 500 meters.*

[b] *The SCAQMD localized threshold for NO_2 was revised to account for the recently adopted 1-hour NO_2 NAAQS of 188 µg/m^3 or an incremental threshold of 73 µg/m^3 for SRA 13. This incremental threshold is equivalent to 140 pounds per day for a 5-acre site at a distance of 500 meters within SRA 13 and is substantially less than 345 pounds per day for the state standard.*

Source: Matrix Environmental, 2011.

CO concentrations were modeled under the future No Project and With Project conditions.[18] The analysis conservatively considered 2020 traffic volumes with 2015 emissions factors (i.e., increased traffic with higher emission factors). As shown in Table V.E.1-7 on page V.E.1-45, project-generated traffic volumes are forecasted to result in less than a 0.1 ppm increase in the projected 1-hour and 8-hour CO concentrations at each of the two intersection locations analyzed for the Soundstage Option and Studio Office Option. In addition, the resultant CO concentrations at the two analyzed intersections would be well below the NAAQS and CAAQS. Since no significant impacts would occur at the intersections operating at the highest LOS and V/C ratio, no significant impacts would

[18] *Gibson Transportation Consulting, Inc., Transportation Study for the Disney | ABC Studios at The Ranch, January 2011.*

Table V.E.1-7
Local Area Carbon Monoxide Dispersion Analysis

Intersection	Peak Period[a]	Maximum 1-Hour 2015 Base Concentration (ppm)[b]	Maximum 1-Hour 2015 w/ Project Concentration (ppm)[c]	Significant 1-Hour Impact? (>20 ppm)[d]	Maximum 8-Hour 2015 Base Concentration (ppm)[e]	Maximum 8-Hour 2015 w/ Project Concentration (ppm)[f]	Significant 8-Hour Impact? (>9.0 ppm)[d]
Soundstage Scenario							
Sierra Highway and Placertia Canyon Road	A.M.	6.0	6.0	No	3.0	3.0	No
	P.M.	6.2	6.2	No	3.2	3.2	No
Sierra Highway and SR-14 Southbound Ramp	A.M.	6.2	6.2	No	3.2	3.2	No
	P.M.	6.2	6.3	No	3.1	3.2	No
Office Scenario							
Sierra Highway and Placertia Canyon Road	A.M.	6.0	6.0	No	3.0	3.0	No
	P.M.	6.2	6.3	No	3.2	3.2	No
Sierra Highway and SR-14 Southbound Ramp	A.M.	6.2	6.2	No	3.2	3.2	No
	P.M.	6.2	6.3	No	3.1	3.2	No

ppm = parts per million

[a] *Peak-hour traffic volumes are based on the Traffic Impact Study prepared for the Project by Gibson Transportation Consulting, Inc., January 2010.*

[b] *SCAQMD 2015 1-hour ambient background concentration (5.1 ppm) + 2015 Base (related projects traffic CO 1-hour contribution).*

[c] *SCAQMD 2015 1-hour ambient background concentration (5.1 ppm) + 2015 with Project traffic CO 1-hour contribution.*

[d] *The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.*

[e] *SCAQMD 2015 8-hour ambient background concentration (2.6 ppm) + 2015 Base (related projects traffic CO 8-hour contribution).*

[f] *SCAQMD 2015 8-hour ambient background concentration (2.6 ppm) + 2015 with Project traffic CO 8-hour contribution.*

Source: Matrix Environmental, 2010; emission factor and dispersion modeling output sheets are provided in Appendix E.1.

occur at any other analyzed roadway intersection as a result of Project-generated traffic volumes. Thus, the Project would not cause any new or exacerbate any existing CO hotspots, and, as a result, impacts related to localized mobile-source CO emissions would be less than significant.

The Project would include the installation and operation of diesel-fired generators for emergency power generation within the Development Area. Unless a blackout occurs, these generators would be operated for only a few hours per month for routine testing and maintenance purposes. The Applicant would be required to obtain a permit to construct and a permit to operate any standby generators under SCAQMD Rules 201, 202, and 203. The Project would also include installation of a central utility plant, which would include cooling towers, chillers, pumps, boilers, and other associated equipment. Potential emissions from these sources would be subject to SCAQMD Regulation XIII and must meet Best Available Control Technology (BACT) requirements to minimize emissions of PM_{10} (as well as CO, VOC, and NO_X emissions). Compliance with SCAQMD Rules and Regulations regarding stationary-source combustion equipment would ensure contributions to localized PM_{10} and $PM_{2.5}$ concentrations remain below the 2.5 $\mu g/m^3$ operational significance threshold. As such, potential impacts would be less than significant.

(iii) Toxic Air Contaminants

This section evaluates potential impacts to neighbopring properties that may result from TAC emissions associated with long-term operation of the Project, based on the SCAQMD's recommended methodology. The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and on-site truck idling) and emergency backup generators, and to a lesser extent, natural gas-fired boilers and a potential charbroiler. The SCAQMD recommends that health risk assessments be conducted for substantial sources of DPM (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[19] The CARB siting guidelines define a warehouse as having more than 100 truck trips or 40 refrigerated truck trips per day. Based on this guidance, the Project is not considered to be a substantial source of DPM warranting a refined HRA. As such, quantification of mobile source diesel emissions was not required. In addition, as described above, per the SCAQMD *CEQA Air Quality Handbook* the Project uses are not considered sensitive uses. Thus, an analysis of the exposure of on-site workers to the TAC emissions from the freeway is not warranted.

---

[19] *SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.*

As mentioned previously, CARB-mandated ATCM limits diesel fueled commercial vehicles (delivery trucks) to idle for no more than 5 minutes at any given time. The increase in potential localized air toxic impacts from on-site sources of diesel particulate emissions would be minimal since only a limited number of heavy-duty trucks would access areas of the Development Area at a given time and the trucks that would visit the Development Area would not idle for extended periods of time. This ATCM would significantly limit the potential incremental increase in emissions from delivery truck activity.

The Project would require the installation of back-up diesel-powered emergency generators. New generators would be required to comply with applicable rules and regulations, including BACT. If the installation of new generators results in multiple-generator groups, the installation would be required to comply with recently promulgated Rule 1472 to ensure localized risk remains below thresholds. Compliance with Rule 1472, if applicable, along with the low operational hours would result in substantially reduced potential impacts.

If the proposed commissary would require the use of a charbroiler, the unit would be required to comply with all applicable SCAQMD rules and regulations. Specifically, the charbroiler would be required to comply with SCAQMD Rule 1138 (Restaurant Operations), which would result in substantially reduced potential impacts.

Based on the low incremental increase in the number and long-term (annual average) activity of the on-site toxic air contaminant sources, the On-Site Improvements would not warrant the need for a refined health risk assessment, and potential air toxic impacts to on- and off-site receptors from on-site sources would be less than significant.

Typical sources of acutely and chronically hazardous toxic air contaminants include industrial manufacturing processes. The On-Site Improvements would not include any of these potential sources. It is expected that quantities of any hazardous toxic air contaminants located on-site would be below thresholds warranting further study under the California Accidental Release Program. As such, the On-Site Improvements would not release substantial amounts of toxic contaminants, and no significant impact on human health would occur.

(2) Off-Site Infrastructure Improvement Areas Impacts

The Off-Site Infrastructure Improvements would not involve population-generating and/or new employment-generating uses and would not exceed the state's criteria for regional significance.

(a) Construction

The Project includes off-site improvements that include construction of new utility infrastructure (e.g., sanitary sewer and water lines and a new water tank), roadway infrastructure (e.g., reconfiguration of SR-14 ramps at Placerita Canyon Road), and replacement of SCE power poles. Construction of the off-site utilities improvements is expected to start in 2013 and would last approximately 9 to 12 months. It is anticipated that the roadway improvements would be completed at the same time as the on-site improvements. With respect to the off-site utilities, these improvements would involve an estimated 15,000 to 20,000 cubic yards of cut, approximately 10,000 to 12,000 cubic yards of fill, and as much as 5,000 to 8,000 cubic yards of export. The traffic infrastructure improvements within the Caltrans right-of-way would involve cutting into an existing engineered slope adjacent to the SR-14 northbound off-ramp, requiring an estimated 11,500 to 14,000 cubic yards of cut, approximately 1,500 to 2,000 cubic yards of fill, and as much as 10,000 to 12,000 cubic yards of export. The replacement of nine power poles by SCE would require minimal excavation to remove existing poles, install new poles, and backfill the excavated holes. There would be limited grading of soil, estimated at approximately 7 cubic yards per pole for steel poles and 2 cubic yards for wood poles, some of which could be used to backfill the excavated holes, for a total of up to 63 cubic yards of export. The area to be disturbed is estimated at less than 1,000 square feet per pole, including space for the staging of vehicles and equipment, for a total of approximately 9,000 square feet. These activities are expected to occur in late 2013, concurrent with construction of the substation, and would be scheduled so as to minimize disruption of service to other users in the area.

Detailed descriptions of the utility improvements proposed within the Off-site Infrastructure Improvement Areas are provided in Section V.L.1, Utilities and Service Systems—Water Supply, and Section V.L.2, Utilities and Service Systems—Wastewater/ Sewage Disposal, of this Draft EIR. The construction of the proposed improvements would use open-cut trenching techniques. Water line trenches would be approximately 4 feet wide and 6 feet deep; sewer trenches would be approximately 4 feet wide with varying depths of up to 12 to 14 feet. Most soil excavated for the trenches would be used as backfill. Construction using open-cut trenching techniques typically would result in less than one acre of disturbed area per day and proceed in the following general order: demolition and cutting, excavation and installation of piping, backfill and paving. The proposed alignments would travel almost entirely through existing paved, public rights-of-way along which residential uses are located as close as 25 feet from the construction zone.

As discussed more thoroughly in Section V.J, Traffic, Access and Parking, of this Draft EIR, the Project Design Features and Mitigation Measures include roadway infrastructure improvements at the following intersections: Placerita Canyon Road/State

Route 14 Northbound Ramps; Sierra Highway/SR-14 Southbound Ramps; Sierra Highway/Placerita Canyon Road; and current Ranch main entrance/Placerita Canyon Road. The Project would also pay its fair share toward the cost of additional improvements at the following intersections: Sierra Highway/SR-14 Southbound Ramps; and Sierra Highway/Placerita Canyon Road. Construction of these improvements would involve less than one acre of disturbed area per day at any of the intersections and proceed in the following general order: demolition and cutting, grading, and paving. The nearest sensitive receptor to the proposed infrastructure improvements is a single-family residential use located at 20821 Placerita Canyon Road, which is approximately 2,200 feet to the west.

(i) Regional Construction Impacts

The emissions levels in Table V.E.1-3 on page V.E.1-37 represent the highest daily emissions projected to occur on any one day of construction. As presented in Table V.E.1-3, construction-related daily maximum regional construction emissions associated with the Off-Site Infrastructure Improvements would not exceed the SCAQMD daily significance thresholds. Therefore, regional construction emissions resulting from the Off-Site Infrastructure Improvements would not result in a significant short-term impact.

(ii) Localized Construction Impacts

The SCAQMD LST mass rate look-up tables apply to projects that have active construction areas that are less than or equal to 5 acres in size. Each of the Off-Site Infrastructure Improvements Areas would be limited to an active construction area of less than 1 acre. Thus, the LST mass rate look-up tables were used to evaluate localized impacts from these improvements. Conservative estimates of maximum daily construction emissions for CO, NO_X, PM_{10}, and $PM_{2.5}$ were compiled for these improvements and are presented in Table V.E.1-3 on page V.E.1-37. As shown in Table V.E.1-3, construction-related daily maximum localized construction emissions from Off-Site Infrastructure Improvements would not exceed the SCAQMD localized significance thresholds. Therefore, localized construction emissions resulting from the Off-Site Infrastructure Improvements, without considering on-site development, would result in a less than significant impact. Refer to the earlier discussion of localized construction impacts for the on-site elements of the Project, which incorporated localized impacts associated with concurrent construction activities for both on-site development and the off-site infrastructure improvements.

(iii) Toxic Air Contaminants

As with the on-site development, the construction schedule for Off-Site Infrastructure Improvements estimates that the phases which require the most heavy-duty diesel vehicle usage, such as site grading and excavation, would last for a short duration and would not

result in a long-term (i.e., 70 years) substantial source of TAC emissions. As such, potential TAC impacts during construction of the Off-Site Infrastructure Improvements would be less than significant.

(b) Operational Impacts

(i) Regional Operational Impacts

The Off-Site Infrastructure Improvements would only result in short-term construction emissions and would not result in a long-term source of emissions (i.e., there would be no trip generation associated with the improvements). As such, regional operational emissions resulting from the Off-Site Infrastructure Improvements would be less than significant.

(ii) Localized Operational Impacts

The Off-Site Infrastructure Improvements would not result in any vehicular trip generation. Proposed improvements to intersections were considered in the local CO hotspot analysis presented in Table V.E.1-7 on page V.E.1-45. As shown in Table V.E.1-7, project-generated traffic volumes are forecasted to result in less than a 0.1 ppm increase in the projected 1-hour and 8-hour CO concentrations at each of the two intersection locations analyzed for the Soundstage Option and Studio Office Option. In addition, the resultant CO concentrations at the two analyzed intersection would be well below the NAAQS and CAAQS. Since no significant impacts would occur at the intersections operating at the highest LOS and V/C ratio, no significant impacts would occur at any other analyzed roadway intersection as a result of Project-generated traffic volumes. Thus, the Off-Site Infrastructure Improvements would not cause any new or exacerbate any existing CO hotspots, and, as a result, impacts related to localized mobile-source CO emissions would be less than significant.

(iii) Toxic Air Contaminants

The Off-Site Infrastructure Improvements would only result in short-term construction emissions and would not result in a long-term source of emissions. As such, potential TAC impacts during operation of the Off-Site Infrastructure Improvements would be less than significant.

(3) Combined On-Site and Off-Site Impacts

(a) Construction

The Project includes both on- and off-site improvements that may occur concurrently. In order to provide a conservative analysis, it was assumed all construction

activities would be completed within the minimum timeframe anticipated for construction which provides for the maximum overlap of construction components within the Project's overall development period. Specifically, the maximum level of construction within the Ranch was assumed to occur concurrently with the Off-Site Infrastructure Improvements.

(i) Regional Construction Impacts

The emissions levels in Table V.E.1-3 on page V.E.1-37 represent the highest daily emissions projected to occur on any one day of Project construction for combined on- and off-site improvements. As presented in Table V.E.1-3, construction-related daily maximum regional construction emissions associated with combined on- and off-site construction activities would exceed the SCAQMD daily significance thresholds for VOC and NO_X. Even with the Mitigation Measures provided below, regional construction emissions resulting from the Project would result in a significant and unavoidable short-term impact.

(ii) Localized Construction Impacts

Conservative estimates of maximum combined localized on-site and off-site daily construction emissions for CO, NO_X, PM_{10} and $PM_{2.5}$ are presented in Table V.E.1-3 on page V.E.1-37. Since the combined area of on-site and off-site improvements would exceed 5 acres, the combined localized effects from the on-site and off-site construction emissions were analyzed using the ISCST3 dispersion model, as recommended by LST methodology. The Project-related localized emissions that were used to perform the dispersion modeling are presented in Table V.E.1-3. The values in Table V.E.1-4 on page V.E.1-39 represent the maximum construction pollutant concentrations from the Project (both on-site and off-site improvements). It should be noted that the resultant pollutant concentrations are predominately from on-site improvements within the Development Area. As shown in Table V.E.1-4, maximum construction pollutant concentrations would not exceed SCAQMD recommended localized significance thresholds for PM_{10}, $PM_{2.5}$, CO, and NO_2 concentrations. As such, localized air quality impacts during construction of on-site development concurrent with the Off-Site Infrastructure Improvements would be less than significant.

(iii) Toxic Air Contaminants

The construction schedule for combined on- and off-site development estimates that the phases which require the most heavy-duty diesel vehicle usage, such as site grading and excavation, would last for a short duration and would not result in a long-term (i.e., 70 years) substantial source of TAC emissions. As such, potential TAC impacts during construction of on-site development concurrent with the Off-Site Infrastructure Improvements would be less than significant.

(b) Operational Impacts

(i) Regional Operational Impacts

As shown in Table V.E.1-5 on page V.E.1-43, regional emissions resulting from operation of the combined on- and off-site development are not expected to exceed the SCAQMD daily thresholds for either the Soundstage or Studio Office options. The air quality impact from Project operational emissions would be less than significant.

(ii) Localized Operational Impacts

Operation of the Project would not introduce any major new on-site or off-site sources of air pollution. Emissions estimates for criteria air pollutants from combined on- and off-site development, such as natural gas consumption, emergency generators, consumer product use, landscaping activities, and a charbroiler, are presented in Table V.E.1-6 on page V.E.1-44. Combined emissions and on-site emissions are the same since the Project would not generate any off-site operational emissions. As shown in Table V.E.1-6, localized operational emissions would be well below the significance thresholds.

As discussed above, pollutant concentrations provided in Table V.E.1-7 on page V.E.1-45 for localized CO hotspot impacts accounted for both on- and off-site improvements (i.e., traffic volumes associated with development within the Ranch and intersection changes related to the Off-Site Infrastructure Improvements). Project-generated traffic volumes are forecasted to result in less than a 0.1 ppm increase in the projected 1-hour and 8-hour CO concentrations at each of the two intersection locations analyzed for the Soundstage Option and Studio Office Option. In addition, the resultant CO concentrations at the two analyzed intersection would be well below the NAAQS and CAAQS. Since no significant impacts would occur at the intersections operating at the highest LOS and V/C ratio, no significant impacts would occur at any other analyzed roadway intersection as a result of Project-generated traffic volumes. Thus, the Project would not cause any new or exacerbate any existing CO hotspots, and, as a result, impacts related to localized mobile-source CO emissions would be less than significant.

(iii) Toxic Air Contaminants

As discussed above, the off-site utility and roadway improvements would not result in a new long-term source of TACs. Therefore, the potential TAC impacts associated with on-site development, discussed above, would be indicative of potential impacts associated with combined on- and off-site activities. The Project would be consistent with CARB siting guidelines, and the Project is not considered to be a substantial source of DPM warranting a refined HRA. Potential air toxic impacts to on- and off-site receptors from Project TAC emissions would therefore be less than significant.

Threshold E.1-4: Would the project create obnoxious odors affecting a substantial number of people?

(1) On-Site and Off-Site Impacts

(a) Construction

During the Project's construction phase, activities associated with the operation of construction equipment, the application of asphalt, the application of architectural coatings and other interior and exterior finishes, and roofing may produce discernible odors typical of most construction sites. SCAQMD Rule 1113 limits the amount of VOCs in architectural coatings and solvents to further reduce the potential for odiferous emissions. Although these odors could be a source of nuisance to adjacent uses, they would be temporary and intermittent in nature. As construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. This is particularly true since large portions of the Development Area are located more than 500 feet away from off-site sensitive uses. Specifically, the closest sensitive receptor is a residential use located approximately 2,400 feet to the west of the Development Area. Therefore, impacts associated with objectionable odors during Project construction would be less than significant.

(b) Operational Impacts

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project does not include any uses identified by the SCAQMD as being associated with odors. Garbage collection areas within the Development Area would be covered and situated away from the Ranch property line and sensitive uses. Good housekeeping practices would be sufficient to prevent nuisance odors. Therefore, potential odor impacts would be less than significant.

Threshold E.1-5: Would the project conflict with or obstruct implementation of the applicable air quality plan of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?

(1) On-Site and Off-Site Impacts

In accordance with the procedures established in the SCAQMD *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the Project's consistency with SCAQMD and SCAG policies:

1. Will the project result in any of the following:

   - An increase in the frequency or severity of existing air quality violations; or
   - Cause or contribute to new air quality violations; or
   - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. Will the project exceed the assumptions utilized in preparing the AQMP?

As discussed in the preceding Threshold E.1-2 for on-site and off-site impacts, localized concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_2 have been analyzed for the project. SO_2 emissions would be negligible during construction and long-term operations, and therefore would not have potential to cause or affect a violation of the SO_2 ambient air quality standard. Because VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

Particulate matter is the primary pollutant of concern during construction activities, and therefore, the Project's PM_{10} and $PM_{2.5}$ emissions during construction were analyzed to determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standards for PM_{10} and $PM_{2.5}$. Results of the analyses indicate that the increases in PM_{10} and $PM_{2.5}$ emissions during construction of on-site and off-site improvements would not exceed the SCAQMD-recommended significance threshold.

The Project's maximum potential NO_X and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As shown in Table V.E.1-5 on page V.E.1-43, the maximum estimate of localized concentrations for on-site and off-site improvements would remain below their respective SCAQMD Localized Significance Thresholds.[20] As such, localized impacts (i.e. potential to violate either the NAAQS or the CAAQS at sensitive receptor locations) that may result from construction-period air pollutant emissions would be less than significant. The analysis concluded that CO and NO_2 concentrations would not

[20] *Construction-related daily emissions within the Development Area would exceed the SCAQMD's regional significance threshold for NO_X and VOC. Both of these pollutants are precursors to the formation of O_3. However, the Project does not directly emit O_3. This impact is further discussed under cumulative impacts.*

exceed CAAQS or NAAQS, and potential impacts from on-site and off-site improvements would therefore be less than significant.[21]

Because this Project does not introduce any substantial stationary sources of emissions, CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. As indicated earlier, no violations of the state and federal carbon monoxide standards are projected to occur as shown in Table V.E.1-7 on page V.E.1-45.

Overall, the Project would result in less than significant impacts with regard to localized concentrations of PM_{10}, $PM_{2.5}$, CO, NO_2 and SO_2 during Project construction and operations. As such, the Project would meet the first AQMP consistency criterion.

The SCAQMD's second criterion for determining project consistency focuses on whether or not the Project exceeds the assumptions used in preparing the forecasts presented in the AQMP. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with the population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis of each of these three criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A project is consistent with the AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2007 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the County of Los Angeles General Plan and SCAG's *Regional Transportation Plan (RTP)*. On May 8, 2008, SCAG adopted the 2008 Regional Transportation Plan which is not yet incorporated into the 2007 AQMP. It is expected that the next update to the AQMP will be based on the 2008 RTP. The RTP also provides socioeconomic forecast projections of regional population growth. The Project is consistent with the types, intensity and patterns of land use envisioned for the vicinity of the Development Area in the RTP. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation

[21] *Note that NO_X is used when describing emissions of nitrogen oxides, but that the AAQS is in terms of NO_2 (pollutant concentration). The same applies for SO_x (emissions) versus SO_2 (AAQS concentration).*

and review. For purposes of using the most current available data, the 2008 RTP data will be used in this analysis. Refer to Section V.N, Land Use, of this Draft EIR for additional information regarding land use consistency.

The RTP projects that employment within North Los Angeles County will grow by about 25,251 jobs between 2010 through 2015 or 41,375 jobs between 2010 through 2020. The Project is projected to result in a net increase of approximately 1,240 full-time equivalent jobs within the Development Area or less than 4.9 percent of the total job growth projected for the subregion through 2015 and 3.0 percent through 2020.[22] Such levels of employment growth are consistent with the employment forecasts for the subregion as adopted by SCAG. Because the SCAQMD is expected to incorporate these same projections into the AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP.

- Does the project implement all feasible air quality mitigation measures?

Implementation of all feasible mitigation measures is required to reduce air quality impacts to the extent feasible. The Project would incorporate a number of key control measures identified by the SCAQMD, as summarized below. As such, the Project meets this AQMP consistency criterion since all feasible mitigation measures would be implemented.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

The Project would serve to implement a number of land use policies of the County of Los Angeles and SCAG. With regard to land use developments, such as the Project, air quality policies focus on the reduction of vehicle trips and vehicles miles traveled. The Project, by virtue of its location and design, exhibits many attributes that have a positive direct and indirect benefit with regard to the reduction of vehicle trips and vehicles miles traveled. The Project would implement an extensive program to promote sustainability within the Development Area, which in return would contribute to a reduction in air quality emissions via a reduction in vehicle trips, vehicle miles traveled, energy usage, and embodied energy associated with water usage. As described above, sustainability practices would be implemented and promoted within all facets of the Project. Some of the key features to be implemented include energy conservation through the use of highly

[22] *The Off-Site Infrastructure Improvements would not generate any changes in population, housing, or employment growth.*

efficient electric and HVAC equipment (housed in the proposed central plant), water conservation through the use of irrigation/sprinkler controls and low consumption fixtures, and building design and construction that would achieve the equivalent of LEED™ Silver certification for most of the buildings in the Development Area. In addition, the Project would reduce the number of passenger vehicle and truck trips from film shoots on the Ranch to outside production facilities, which occur under current conditions. A single day of outside production results in approximately 240 truck trips, with an approximately 40-mile round trip distance. Thus, the Project would be consistent with the SCAQMD's objective of reducing vehicle miles traveled and the related vehicular air emissions.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of the project on air quality in the Basin. While development of the Project would result in short-term regional impacts, project development would not have a long-term impact on the region's ability to meet state and federal air quality standards. As discussed above, the Project's long-term influence would also be consistent with the goals and policies of the AQMP and is, therefore, considered consistent with the SCAQMD's AQMP.

Threshold E.1-6: 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

(1) Construction

According to the SCAQMD, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in non-attainment. Construction-related daily emissions within the Development Area would exceed the SCAQMD's significance threshold for NO_X and VOC. Even with the implementation of the Mitigation Measures provided below, the Project would result in a significant and unavoidable cumulative impact associated withconstruction-related regional NO_X and VOC emissions.

(2) Operation

According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As discussed above, peak daily emissions of operation-related pollutants would not exceed SCAQMD significance thresholds. By applying SCAQMD's

cumulative air quality impact methodology, implementation of the Project would not result in an increase of criteria pollutants such that cumulative impacts would occur. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

4. CUMULATIVE IMPACTS

a. Construction

As indicated above, according to the SCAQMD, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in non-attainment. Construction-related daily emissions within the Development Area would exceed the SCAQMD's significance threshold for NO_X and VOC. Consequently, the Project would have a cumulative impact due to construction-related regional NO_X and VOC emissions. However, in terms of localized air quality impacts, construction of the Project would not have a cumulative impact on sensitive receptors due to localized pollutant emissions.

Similar to the Project, the greatest potential for TAC emissions at each Related Project would involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions. It is therefore not meaningful to evaluate long-term cancer impacts from construction activities which occur over a relatively short duration. As such, cumulative toxic emission impacts during construction would be less than significant.

Also similar to the Project, potential sources that may emit odors during construction activities at each Related Project would include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. With mandatory compliance with SCAQMD Rules, it is anticipated that construction activities or materials used in the construction of the Related Projects would not create objectionable odors. Thus, odor impacts from the Related Projects are anticipated to be less than significant individually and cumulatively with the Project.

b. Operation

According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As discussed above, peak daily emissions of operation-related pollutants would not exceed SCAQMD regional and localized significance thresholds. By applying SCAQMD's cumulative air quality impact methodology, implementation of the Project would not result in an increase of criteria pollutants such that cumulative impacts would occur. Therefore, the emissions of non-attainment pollutants and precursors generated by Project operations in excess of the SCAQMD project-level thresholds would be less than significant.

With respect to TAC emissions, the Project would not represent a substantial source of TAC emissions. Based on recommended screening level siting distances for TAC sources, as set forth in CARB's Land Use Guidelines, the Project and Related Projects would likely generate minimal TAC emissions related to diesel truck idling, the use of consumer products and landscape maintenance activities, among other things. Pursuant to AB 1807, which directs CARB to identify substances as TAC and adopt airborne toxic control measures (ATCMs) to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emission reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. In addition, the Project would not result in any new sources of TACs that have been identified under CARB's Land Use Guidelines, and thus would not contribute to a cumulative impact.

c. Odors

With respect to potential odor impacts, neither the Project nor any of the Related Projects (which are primarily residential, retail, and restaurant uses) have a high potential to generate odor impacts.[23] Furthermore, any Related Project that may have a potential to generate objectionable odors would be required by SCAQMD Rule 402 (Nuisance) to implement BACT to limit potential objectionable odor impacts to a less than significant level. Thus, potential odor impacts from Related Projects are anticipated to be less than significant individually and cumulatively.

---

[23] *According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding.*

d. Consistency with Applicable Air Quality Plan

As discussed above, while development of the Project would result in short-term regional impacts, Project development would not have a long-term impact on the region's ability to meet State and federal air quality standards. The Project's long-term influence would also be consistent with the goals and policies of the AQMP and is, therefore, considered consistent with the SCAQMD's AQMP. Thus, the Project would not contribute to cumulative impacts associated with consistency with the AQMP.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF E.1-1: During construction, the Project shall comply with the South Coast Air Quality Management District's Rule 403 regarding fugitive dust control. The following control measures shall be implemented to control fugitive dust:

- Watering active construction areas twice daily unless visibly moist to control dust caused by construction and hauling, and at all times provide reasonable control of dust caused by wind.
- Covering stockpiled soil with secured tarps or plastic sheeting or spraying with a soil stabilizer when not in active use.
- Securing loads by trimming, watering or other appropriate means to prevent spillage and dust.
- Maintaining soil stabilization of inactive construction areas with exposed soil via water, non-toxic soil stabilizers, or replaced vegetation.
- Suspending earthmoving operations or applying additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour;
- Covering all haul trucks or maintaining at least 6 inches of freeboard;
- Minimizing track-out emissions using the methods provided for in Rule 403; and
- Limiting vehicle speeds to 15 miles per hour or less in staging areas and on haul roads.

In addition to these measures, some of the Project Design Features set forth in Sections IV, Project Description; V.J, Traffic, Access and Parking; V.L.1, Utilities and Service Systems—Water Supply; V.L.4, Utilities and Service Systems—Energy; V.L.3, Utilities and Service Systems—Solid Waste; and V.N, Land Use; of this Draft EIR, would also serve to reduce the Project's air pollutant emissions.

b. Mitigation Measures

The following mitigation measures would be implemented to reduce construction equipment and vehicle combustion exhaust (VOC and NO_X) emissions:

MM E.1-1: All equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. Verification documentation shall be provided to the County of Los Angeles Department of Regional Planning upon request within five business days.

MM E.1-2: During construction, trucks and vehicles in loading and unloading queues shall have their engines turned off after 5 minutes when not in use, to reduce vehicle emissions.

MM E.1-3: Outdoor construction activities shall be discontinued during second-stage smog alerts.

MM E.1-4: After mass grading of the Project site is completed, construction activity shall utilize electricity from power poles on or adjacent to the Ranch rather than temporary diesel power generators and/or gasoline power generators when electricity with adequate circuit capacity is available from power poles in proximity to construction areas.

MM E.1-5: The selected contractor shall use a mix of equipment that includes Tier 3 or Tier 4 equipment for off-road construction equipment, as defined by the United States Environmental Protection Agency, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. Verification documentation shall be provided to the County of Los Angeles Department of Regional Planning upon request within five business days.

MM E.1-6: Project buildings shall be designed to minimize the need for the application of architectural coatings. Where the application of architectural coatings is necessary on-site, the Applicant shall comply with the South Coast Air Quality Management District's Rule 1113 regarding the use of low and zero volatile organic compound coatings.

MM E.1-7: Mass grading shall be limited to 10 acres per day.

MM E.1-8: Construction of the proposed Placerita Canyon Connector Trail shall be scheduled so as not to occur concurrently with Project-related grading activities within the Ranch.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Construction

Implementation of the mitigation measures and Project Design Features described above would reduce construction emissions by as much as 59 percent for NO_X and nine percent for VOC.[24] However, the Project would continue to exceed the SCAQMD regional significance thresholds for NO_X and VOC during the most intense construction period. As such, Project construction would continue to result in a significant and unavoidable regional impact even with incorporation of feasible mitigation measures. Localized construction impacts would remain less than significant.

Actual construction activities would on average occur at a somewhat reduced level compared to the maximum predicted day and would have a corresponding reduction in pollutant emissions. Therefore, the modeled set of conservative assumptions overstates the potential impacts. However, the Project's impacts during construction would be significant and unavoidable even with incorporation of feasible mitigation measures. Cumulative regional air quality impacts associated with construction of the Project described above would also remain significant.

No notable impacts related to TAC emissions during construction are anticipated to occur for the Project. As such, potential impacts would be less than significant.

The Project is not anticipated to generate a substantial amount of objectionable odor emissions during construction. With mandatory compliance with SCAQMD Rules, no construction activities or materials are proposed that would create objectionable odors. As such, potential impacts would be less than significant.

b. Operation

The Project would incorporate numerous Project design features to reduce operational emissions (e.g., synergy between existing outside productions and the Project, energy conservation through the use of highly efficient electric and HVAC equipment housed in the central plant, preferential parking for alternative-fueled vehicles and carpools, and proposed design and construction of many of the buildings to achieve the equivalent of the LEED™ Silver Certification for most buildings within the Development Area), and

---

[24] *SCAQMD, Off-Road Engine Emission Rates and Comparison of Uncontrolled to Tiered Rates and Tiered to Tiered Rates (Table II-D), www.aqmd.gov/ceqa/handbook/mitigation/offroad/MM_offroad.html, accessed December 22, 2010.*

regional operational emissions would not exceed the SCAQMD daily emission thresholds. Therefore, operation of the Project would have a less than significant impact on regional air quality. Cumulative operational air quality impacts would also remain less than significant. No significant impacts related to local CO concentrations would occur for the Project.

The Project is not anticipated to include any notable TAC emission sources. As such, potential impacts from Project TAC emissions would be less than significant. Via compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD BACT Guidelines, potential impacts that could result from any potential odor source would be less than significant.

V. Environmental Impact Analysis

E.2 Air Resources—Global Climate Change

V. ENVIRONMENTAL IMPACT ANALYSIS

E.2 AIR RESOURCES—GLOBAL CLIMATE CHANGE

1. INTRODUCTION

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, which is a part of climate change, is the observed increase in average temperature of the Earth's surface and atmosphere. One identified cause of global warming is an increase of greenhouse gases (GHGs) in the atmosphere. GHGs are those compounds in the Earth's atmosphere that play a critical role in determining the Earth's surface temperature. Specifically, GHGs allow the sun's rays to enter the Earth's atmosphere, but trap the energy which is radiated back from the Earth to space, resulting in a warming of the atmosphere. The earthward movement of this radiation is known as the "greenhouse effect."

Studies indicate that the effects of global climate change may include rising surface temperatures, loss of snow pack, sea level rise, more extreme heat days per year, and more drought years.[1] Understanding of the fundamental processes responsible for global climate change has improved over the past decade and predictive capabilities are advancing. However, scientific uncertainties remain surrounding the response of the Earth's climate system to combinations of changes, particularly at regional and local scales. In addition, there continues to be significant debate over the extent to which global climate change may also be partly due to natural fluctuations in global weather patterns, and not necessarily tied to only human actions. Consequently, the scientific community has systematically developed a range of scenarios that are based on computer programs, model parameters, climatic processes, and social and economic responses. The result is a range of potential future conditions for key variables such as peak summer temperature, the occurrence of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inherent uncertainty in the future actions

---

[1] *Existing climate change models also show that climate warming portends a variety of impacts on agriculture, including loss of microclimates that support specific crops, increased pressure from invasive weeds and diseases, and loss of productivity due to changes in water reliability and availability.*

of human beings, predictions of future climatic conditions will always include a range of possible outcomes.

California Health & Safety Code § 38505(g) recognizes the six listed gases as GHGs. The six most globally important GHGs are carbon dioxide (CO_2), methane, nitrous oxide, sulfur hexafluoride, haloalkanes, and perfluorocarbons. CO_2 is the most abundant GHG in the atmosphere and does not pose a direct threat to human health. These gases have different potential for trapping heat in the atmosphere, called global warming potential. When dealing with an array of emissions, the gases are converted to their carbon dioxide equivalents (CO_2e) for comparison purposes and typically are measured in metric tons of CO_2e units. For example, one pound of methane has 21 times more global warming potential than one pound of CO_2, and one pound of sulfur hexafluoride has 23,900 times more global warming potential than one pound of CO_2. The global warming potential for common GHGs are shown in Table V.E.2-1 on page V.E.2-3.

Recently, some groups have advocated for the inclusion of “black carbon” in analyses of global climate change under CEQA. Black carbon is a form of particulate air pollution most often produced from the burning of biomass, cooking with solid fuels, and diesel exhaust. Some studies have implicated black carbon as a source of global climate change. However, the potential impact of black carbon on global climate change is currently under substantial dispute. Some studies indicate that less than 15 percent of the man-made portion of global warming is due to black carbon. Black carbon is not assessed in this report for three primary reasons. First, no regulatory authority has classified black carbon as a GHG, and black carbon is not regulated under Assembly Bill 32, the primary legislation designed to reduce California’s impact on global climate change, or any other law implemented to address global climate change. Second, no tools are available to quantify black carbon emissions at this time. Emissions factors for black carbon have not been published by the California Air Resources Board, the United States Environmental Protection Agency (USEPA), or other reputable bodies. Although some calculation methodologies have been postulated, the methodologies have not been confirmed by actual measurements of sources. Third, no guidance on the importance, evaluation, or mitigation of black carbon has been provided by the agencies leading the global climate change issue. The South Coast Air Quality Management District (SCAQMD) has not included black carbon in their discussion of GHG significance thresholds. No guidance appears to have been provided in recent guidelines released by the California Office of Planning and Research or the California Air Pollution Control Officers Association.

Additionally, black carbon does not appear to be addressed in current efforts to implement Assembly Bill 32. Thus, although the Project would generate some black carbon, the quantities are indeterminable at this time, and therefore the potential impact of black carbon emissions on global climate change is also unknown at this time. As such, black carbon is not analyzed herein.

Table V.E.2-1
Global Warming Potentials

Gas	Atmospheric Lifetime (years)	Global Warming Potential (Carbon Dioxide Equivalent)
Carbon Dioxide	50–200	1
Methane	12	21
Nitrous Oxide	120	310
Haloalkanes -23	264	11,700
Haloalkanes -134a	14.6	1,300
Haloalkanes -152a	1.5	140
Perfluorocarbons: Tetrafluoromethane	50,000	6,500
Perfluorocarbons: Hexafluoroethane	10,000	9,200
Sulfur Hexafluoride	3,200	23,900

Source: EPA 2006, Non Carbon Dioxide Gases Economic Analysis and Inventory, December 2006.

GHGs are the result of both natural and human-influenced activities. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooling are the primary sources of GHG emissions. Without human intervention, the Earth maintains an approximate balance between the emission of GHGs into the atmosphere and the storage of GHGs in oceans and terrestrial ecosystems. Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have contributed to the rapid increase in atmospheric levels of GHGs over the last 150 years. As reported by the California Energy Commission (CEC), California contributes 1.4 percent of global and 6.2 percent of national GHG emissions.[2] Approximately 80 percent of GHGs in California are carbon dioxide produced from fossil fuel combustion. The current California GHG inventory compiles statewide anthropogenic GHG emissions and sinks (carbon storage) from years 2002 to 2008. It includes estimates for CO_2, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. The GHG inventory for California is presented in Table V.E.2-2 on page V.E.2-4.

[2] *California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, CEC-600-2006-013, October 2006.*

Table V.E.2-2
California GHG Inventory
(Million Metric Tons CO_2e)

	2002	2003	2004	2005	2006	2007	2008
Transportation	**180.35**	**178.02**	**181.71**	**184.31**	**184.11**	**183.84**	**175.00**
On Road	*168.40*	*166.17*	*169.22*	*170.82*	*170.48*	*170.79*	*163.30*
Passenger Vehicles	135.43	132.83	134.24	134.51	133.80	133.34	128.51
Heavy Duty Trucks	32.97	33.34	34.98	36.31	36.68	37.45	34.79
Ships & Commercial Boats	*3.87*	*4.04*	*4.06*	*4.36*	*4.45*	*4.38*	*4.32*
Aviation (Intrastate)	*2.66*	*2.59*	*2.64*	*2.70*	*2.68*	*2.96*	*2.42*
Rail	*2.48*	*2.41*	*2.89*	*3.32*	*3.50*	*3.15*	*2.52*
Unspecified	*2.94*	*2.81*	*2.90*	*3.11*	*3.00*	*2.56*	*2.44*
Electric Power	**106.49**	**109.89**	**119.96**	**110.97**	**107.67**	**111.10**	**116.36**
In-State Generation	*50.87*	*49.08*	*57.40*	*51.75*	*56.29*	*55.16*	*55.12*
Natural Gas	42.42	41.01	48.66	43.21	47.62	47.20	48.07
Other Fuels	8.45	8.07	8.74	8.54	8.67	7.96	7.05
Imported Electricity	*55.62*	*60.81*	*62.56*	*59.22*	*51.38*	*55.94*	*61.24*
Unspecified Imports	*25.42*	*30.21*	*31.32*	*28.44*	*26.40*	*30.57*	*35.19*
Specified Imports	*30.19*	*30.60*	*31.24*	*30.78*	*24.98*	*25.37*	*26.05*
Commercial and Residential	**43.79**	**41.37**	**42.55**	**40.79**	**41.46**	**41.83**	**43.13**
Residential Fuel Use	*29.35*	*28.31*	*29.34*	*28.08*	*28.45*	*28.61*	*28.45*
Natural Gas	28.03	26.59	27.30	25.89	26.52	26.65	26.10
Other Fuels	1.32	1.72	2.04	2.19	1.93	1.96	2.35
Commercial Fuel Use	*13.37*	*12.80*	*12.72*	*12.56*	*12.84*	*12.73*	*14.31*
Natural Gas	12.11	11.34	11.13	10.90	11.58	11.35	12.51
Other Fuels	1.26	1.46	1.59	1.66	1.26	1.38	1.80
Commercial Cogeneration Heat Output	*1.07*	*0.26*	*0.49*	*0.15*	*0.17*	*0.49*	*0.37*
Industrial	**96.72**	**96.15**	**90.89**	**90.72**	**90.48**	**93.83**	**92.67**
Refineries	*33.87*	*34.80*	*34.06*	*35.31*	*36.09*	*36.07*	*35.65*
General Fuel Use	*19.53*	*16.39*	*16.29*	*14.79*	*15.17*	*14.78*	*14.83*
Natural Gas	12.80	10.26	10.53	9.86	9.90	9.76	9.14
Other Fuels	6.73	6.13	5.76	4.93	5.27	5.02	5.69
Oil & Gas Extraction[a]	*17.37*	*19.52*	*19.31*	*18.01*	*16.49*	*16.52*	*17.05*
Fuel Use	16.64	18.78	18.94	17.66	15.72	15.75	16.27
Fugitive Emissions	0.73	0.74	0.37	0.35	0.77	0.77	0.78
Cement Plants	*9.61*	*9.71*	*9.82*	*9.92*	*9.75*	*9.17*	*8.61*
Clinker Production	5.60	5.68	5.77	5.85	5.80	5.55	5.31
Fuel Use	4.01	4.03	4.05	4.07	3.95	3.62	3.30
Cogeneration Heat Output	*10.84*	*10.79*	*6.19*	*6.91*	*6.90*	*11.22*	*10.47*
Other Process Emissions	*5.50*	*4.94*	*5.22*	*5.78*	*6.08*	*6.07*	*6.06*

Table V.E.2-2 (Continued)
California GHG Inventory
(Million Metric Tons CO_2e)

	2002	2003	2004	2005	2006	2007	2008
Recycling and Waste	**6.21**	**6.29**	**6.23**	**6.52**	**6.59**	**6.53**	**6.71**
Landfills[b]	*6.21*	*6.29*	*6.23*	*6.52*	*6.59*	*6.53*	*6.71*
High Global Warming Potential	**11.97**	**12.75**	**13.57**	**14.23**	**14.92**	**15.28**	**15.65**
Ozone Depleting Substance Substitutes	*10.12*	*10.92*	*11.74*	*12.41*	*13.05*	*13.47*	*13.89*
Electricity Grid SF6 Losses[c]	*1.07*	*1.05*	*1.05*	*1.04*	*1.00*	*0.97*	*0.96*
Semiconductor Manufacturing[b]	*0.78*	*0.78*	*0.78*	*0.78*	*0.87*	*0.84*	*0.80*
Agriculture[d]	**28.40**	**28.49**	**28.81**	**28.98**	**29.91**	**28.26**	**28.06**
Livestock	*14.56*	*14.88*	*14.81*	*15.36*	*15.63*	*15.96*	*16.28*
Enteric Fermentation (Digestive Process)	7.86	7.97	7.97	8.26	8.33	8.52	8.70
Manure Management	6.70	6.91	6.84	7.10	7.30	7.44	7.58
Crop Growing & Harvesting	*9.47*	*9.41*	*9.51*	*9.03*	*9.08*	*8.53*	*7.96*
Fertilizers	8.06	8.02	8.03	7.58	7.44	7.08	6.72
Soil Preparation and Disturbances	1.34	1.31	1.41	1.37	1.56	1.36	1.15
Crop Residue Burning	0.07	0.08	0.07	0.08	0.08	0.09	0.09
General Fuel Use	*4.37*	*4.20*	*4.49*	*4.59*	*5.20*	*3.77*	*3.82*
Diesel	3.02	2.94	3.15	3.38	3.85	2.66	2.93
Natural Gas	0.95	0.85	0.82	0.69	0.77	0.79	0.72
Gasoline	0.40	0.41	0.52	0.52	0.57	0.32	0.17
Other Fuels	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Forestry	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**
Wildfire (methane & nitrous oxide)	*0.19*	*0.19*	*0.19*	*0.19*	*0.19*	*0.19*	*0.19*
Total Gross Emissions	***474.12***	***473.15***	***483.91***	***476.71***	***475.33***	***480.86***	***477.77***
Forestry Net Emissions	*-4.40*	*-4.33*	*-4.32*	*-4.17*	*-4.04*	*-4.07*	*-3.98*
Total Net Emissions	***469.72***	***468.82***	***479.59***	***472.54***	***471.29***	***476.79***	***473.79***

[a] *Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions.*

[b] *These categories are listed in the Industrial sector of ARB's GHG Emission Inventory sectors.*

[c] *This category is listed in the Electric Power sector of ARB's GHG Emission Inventory sectors.*

[d] *Reflects use of updated USEPA models for determining emissions from livestock and fertilizers.*

Source: California GHG Inventory for 2002–2008, by Category as Defined in the Climate Change Scoping Plan million tonnes of CO_2e (based upon IPCC Second Assessment Report's Global Warming Potentials), www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf.

2. ENVIRONMENTAL SETTING

a. Regulatory Setting

(1) Federal

(a) Federal Clean Air Act

The U.S. Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that carbon dioxide and other GHGs are pollutants under the federal Clean Air Act, which the federal Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare. On April 17, 2009, the USEPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009-0171. The 60-day public comment period on the proposed rule ended June 23, 2009.

(b) Federal Corporate Average Fuel Economy Standards

The 2007 Energy Bill creates new federal requirements for increases in fleet-wide fuel economy for passenger vehicles and light trucks. The federal legislation requires a fleet-wide average of 35 miles per gallon to be achieved by 2020. The National Highway Traffic Safety Administration is directed to phase-in requirements to achieve this goal. Analysis by the California Air Resources Board (CARB) suggests that this will require an annual improvement of approximately 3.4 percent between now and 2020.[3] California had petitioned the USEPA in December 2005 to allow more stringent standards and California executive agencies have repeated their commitment to higher mileage standards. On July 1, 2009, the USEPA granted California a waiver which will enable the State to enforce stricter tailpipe emissions on new motor vehicles. In addition, on May 19, 2009, President Barack Obama announced a new National Fuel Efficiency Policy aimed at increasing fuel economy and reducing GHG pollution.[4] The new National Fuel Efficiency Policy is expected to increase fuel economy by more than 5 percent by requiring a fleet-wide average of 35.5 miles per gallon by 2016 starting with model years 2012. However, federal fuel economy standards have not yet been promulgated establishing specific benchmarks.

---

[3] *CARB comparison between Pavley Assembly Bill 1493 and the Federal 2007 CAFE standards, www.arb.ca.gov/cc/ccms/ab1493_v_cafe_study.pdf).*

[4] *The White House, Office of the Press Secretary, May 19, 2009, www.whitehouse.gov/the_press_office/ President-Obama-Announces-National-Fuel-Efficiency-Policy/).*

(2) State

In response to growing scientific and political concern regarding global climate change, California recently adopted a series of laws to reduce both the level of GHGs in the atmosphere and to reduce emissions of GHGs from commercial and private activities within the State.

(a) State Assembly Bill 1493

Assembly Bill (AB) 1493, adopted September 2002, requires the development and adoption of regulations to achieve "the maximum feasible reduction of GHGs" emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. Although setting emission standards on automobiles is solely the responsibility of the USEPA, the federal Clean Air Act allows California to set State-specific emission standards on automobiles if the State first obtains a waiver from the USEPA. As stated above, the USEPA granted California that waiver on July 1, 2009. A comparison between the AB 1493 standards and the Federal Corporate Average Fuel Economy was completed by CARB and is available at www.arb.ca.gov/cc/ccms/ab1493_v_cafe_study.pdf. The emission standards become increasingly more stringent through the 2016 model year. California is also committed to further strengthening these standards beginning in 2017 to obtain a 45 percent GHG reduction from 2020 model year vehicles.

(b) Executive Order S-1-07 (California Low Carbon Fuel Standard)

Executive Order S-1-07, the Low Carbon Fuel Standard (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. Regulatory proceedings and implementation of the Low Carbon Fuel Standard have been directed to CARB. The Low Carbon Fuel Standard has been identified by CARB as a discrete early action item in the Adopted *Climate Change Scoping Plan*. CARB expects the Low Carbon Fuel Standard to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the *Climate Change Scoping Plan* work in tandem with one another. To avoid the potential for double-counting emission reductions associated with AB 1493 (see previous discussion), the *Climate Change Scoping Plan* has modified the aggregate reduction expected from the Low Carbon Fuel Standard to 9.1 percent.

(c) Executive Order S-3-05

Executive Order S-3-05, issued in June 2005, established GHG emissions targets for the State, as well as a process to ensure the targets are met. The order directed the Secretary for California EPA to report every two years on the State's progress toward

meeting the Governor's GHG emission reduction targets. As a result of this executive order, the California Climate Action Team, led by the Secretary of the California EPA, was formed. The California Climate Action Team is made up of representatives from a number of State agencies and was formed to implement global warming emission reduction programs and reporting on the progress made toward meeting statewide targets established under the Executive Order. The California Climate Action Team reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.[5] The GHG targets are as follows:

- By 2010, reduce to 2000 emission levels;
- By 2020, reduce to 1990 emission levels; and
- By 2050, reduce to 80 percent below 1990 levels.

(d) California Global Warming Solutions Act of 2006 (AB 32)

The California Global Warming Solutions Act of 2006 (also known as AB 32) commits the State to achieving the following:

- 2000 GHG emission levels by 2010; and
- 1990 levels by 2020.

To achieve these goals, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. Many of the regulations required to meet the goals under AB 32 have been adopted and will be implemented no later than January 1, 2012.[6]

---

[5] *California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

[6] *CARB's list of discrete early action measures that can be adopted and implemented before January 1, 2010, was approved on June 21, 2007. The three adopted discrete early action measures are: (1) a low-carbon fuel standard, which reduces carbon intensity in fuels State-wide; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance; and (3) increased methane capture from landfills, which includes requiring the use of state-of-the-art capture technologies.*

(e) Climate Change Scoping Plan

CARB approved a *Climate Change Scoping Plan* required by AB 32.[7] The *Climate Change Scoping Plan* proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."[8] The *Climate Change Scoping Plan* has a range of GHG reduction actions which include direct regulations; alternative compliance mechanisms; monetary and non-monetary incentives; voluntary actions; market-based mechanisms, such as a cap-and-trade system; and an AB 32 implementation regulation to fund the program.

The *Climate Change Scoping Plan* calls for a "coordinated set of solutions" to address all major categories of GHG emissions. Transportation emissions will be addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard (see below), and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations will be encouraged and, sometimes, required to use energy more efficiently. Utility energy supplies will change to include more renewable energy sources through implementation of the Renewables Portfolio Standard.[9] This will be complemented with emphasis on local generation, including rooftop photovoltaics and solar hot water installations. Additionally, the *Climate Change Scoping Plan* emphasizes opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicates that substantial savings of electricity and natural gas will be accomplished through "improving energy efficiency by 25 percent."

The *Climate Change Scoping Plan* identifies a number of specific issues relevant to the Project including:

- The potential of using the green building framework as a mechanism which could enable GHG emissions reductions in other sectors (i.e., electricity, natural gas), noting that "green buildings exceed minimum energy efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable and low-emitting materials that

---

[7] *Climate Change Proposed Scoping Plan was approved by CARB on December 11, 2008.*

[8] *Climate Change Scoping Plan, CARB, December 2008, www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm.*

[9] *For a discussion of Renewables Portfolio Standard, refer to subsection 2(d), California Renewables Portfolio Standard.*

contribute to healthy indoor air quality, which protects human health and minimizes impacts to the environment."

- The importance of increasing the supply and utilization of green power and lower carbon intensity energy sources. Broadly defined, this includes implementation of the utility-based RPS, use of Solar Hot Water Heating (pursuant to the SB 1470 goal), support for the Million Solar Roofs Program (including the California Solar Initiative and the New Solar Homes Partnership), and increased use of combined heat and power.

- The importance of supporting the Department of Water Resources' work to implement the Governor's objective to reduce per capita water use by 20 percent by 2020. Specific measures to achieve this goal include water use efficiency, water recycling, and reuse of urban runoff. The *Climate Change Scoping Plan* notes that water use requires significant amount of energy, including approximately one-fifth of State-wide electricity.

- Encouraging local governments to set quantifiable emissions reduction targets for their jurisdictions and use their influence and authority to encourage reductions in emissions caused by energy use, solid waste and recycling, water and wastewater systems, transportation, and community design.

Subsequent to adoption of the *Climate Change Scoping Plan*, a lawsuit was filed challenging CARB's approval of the *Climate Change Scoping Plan Functional Equivalent Document (Supplemental FED to the Climate Change Scoping Plan)*. On May 20, 2011 (Case No. CPF-09-509562), the court found that the environmental analysis of the alternatives in the *Supplemental FED to the Climate Change Scoping Plan* was not sufficient under CEQA. CARB staff prepared a revised and expanded environmental analysis of the alternatives, and the *Supplemental FED to the Climate Change Scoping Plan* was approved on August 24, 2011. The *Supplemental FED to the Climate Change Scoping Plan* indicated there is the potential for adverse environmental impacts associated with implementation of the various GHG emission reduction measures recommended in the *Climate Change Scoping Plan*.

As part of the *Supplemental FED to the Climate Change Scoping Plan*, CARB updated the projected 2020 "business-as usual" emissions inventory based on current economic forecasts (i.e., as influenced by the economic downturn) and reduction measures already in place.[10] CARB staff derived the updated emissions estimates by projecting

[10] *CARB defines "business-as-usual" as emissions in the absence of any GHG reduction measures discussed in the Climate Change Scoping Plan.*

emissions from a past baseline estimate using three-year average emissions, by sector, for 2006-2008 and considering the influence of the recent recession and reduction measures that are already in place (e.g., Pavley I and Title 24). Considering the updated "business-as-usual" estimate of 507 million metric tons CO_2e by 2020, a reduction of 80 million metric tons CO_2e, or 16 percent reduction, below the estimated "business-as-usual" levels would be necessary to return to 1990 levels (i.e., 427 million metric tons CO_2e) by 2020.[11,12]

(f) California Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) program (2002, Senate Bill [SB] 1078) requires that 20 percent of the available energy supplies are from renewable energy sources by 2017. In 2006, SB 107 accelerated the 20 percent mandate to 2010, a goal that was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II. These mandates apply directly to investor-owned utilities. However, on April 12, 2011, California Governor Jerry Brown signed into law a bill entitled Senate Bill 2X, which modifies California's RPS program to require that public and private utilities in California receive at least 33 percent of their electricity from renewable sources by the year 2020. In 2008, SCE's renewable portfolio comprised approximately 16 percent of the power supply.[13]

(g) California Senate Bill 1368

SB 1368, a companion bill to AB 32, requires the California Public Utilities Commission and CEC to establish GHG emission performance standards for the generation of electricity. These standards will also generally apply to power that is generated outside of California and imported into the State. SB 1368 provides a mechanism for reducing the emissions of electricity providers, thereby assisting CARB to meet its mandate under AB 32. On January 25, 2007, the California Public Utilities Commission adopted an interim GHG Emissions Performance Standard, which is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have GHG emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour. Further, on May 23, 2007, the CEC adopted

---

[11] *CARB, Supplement to the AB 32 Scoping Plan FED, Table 1.2-2, Updated 2020 Business-as-Usual Emissions Forecast (www.arb.ca.gov/cc/scopingplan/document/final_supplement_to_sp_fed.pdf).*

[12] *The emissions and reductions estimates found in the Supplemental FED to the Climate Change Scoping Plan replace the estimates published in the 2008 Climate Change Scoping Plan. The estimates in the 2008 document are: 596 million metric tons CO_2e under 2020 "business-as-usual" and a required reduction of 169 million metric tons CO_2e (28.4 percent).*

[13] *Southern California Edison Renewable Energy, www.sce.com/PowerandEnvironment/renewables, accessed June 22, 2011.*

regulations that establish and implement an identical Emissions Performance Standard of 1,100 pounds of CO_2 per megawatt-hour (see CEC Order No. 07-523-7).

(h) California Senate Bill 97

California SB 97, passed in August 2007, is designed to work in conjunction with CEQA and AB 32. SB 97 required the Office of Planning and Research (OPR) to prepare and develop guidelines for the mitigation of GHG emissions or the effects thereof, including but not limited to, effects associated with transportation and energy consumption. The Resources Agency adopted the guidelines on December 30, 2009, and is also required to periodically update the guidelines to incorporate new information or criteria established by CARB pursuant to AB 32. SB 97 will apply retroactively to any environmental impact report, negative declaration, mitigated negative declaration, or other document required by the CEQA, which has not been finalized. Under SB 97, transportation projects funded under the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, and projects funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006 are exempted from analyzing the effects of GHGs in an environmental impact report, negative declaration, mitigated negative declaration, or other CEQA document.

OPR released a technical advisory on addressing global climate change through CEQA Review on June 19, 2008. This guidance document outlines suggested components to CEQA disclosure: quantification of GHG emissions from a project's construction and operation; determination of significance of the project's impact to global climate change; and if the project is found to be significant, the identification of suitable alternatives and mitigation measures.

(i) California Senate Bill 375

There has also been California legislative activity acknowledging the relationship between land use planning and transportation sector GHG emissions. California SB 375 was passed by the State Assembly on August 25, 2008, and signed by the Governor on September 30, 2008. This legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. Reductions in GHG emissions would be achieved by, for example, locating housing closer to jobs, retail, and transit. Under the bill, each Metropolitan Planning Organization would be required to adopt a sustainable community strategy to encourage compact development so that the region will meet a target, created by CARB, for reducing GHG emissions.

(j) Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings, located at Title 24, Part 6 of the California Code of Regulations and commonly

referred to as "Title 24," were established 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 efficiency technologies and methods.[14]

The most recent update to Title 24 Energy Efficiency Standards was adopted by the CEC on April 23, 2008. The requirement for when the 2008 standards must be followed is dependent on when the application for the building permit is submitted. If the application for the building permit is submitted on or after January 1, 2010, the 2008 standards must be met. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards to respond to the mandates of AB 32 and to pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.

(k) Title 24 California Green Building Standards

The California Green Building Standards Code, which is Part 11 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The 2008 edition, the first edition of the CALGreen Code, contained only voluntary standards. The 2010 CALGreen Code is a code with mandatory requirements for State-regulated buildings and structures throughout California beginning on January 1, 2011. The 2010 CALGreen Code contains requirements for construction site selection, storm water control during construction, construction solid waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems are functioning at their maximum efficiency.

(l) Amendments to the CEQA Guidelines

OPR's recommended Amendments to the CEQA Guidelines for GHGs were adopted by the Resources Agency on December 30, 2009. The Amendments include relatively modest changes to various portions of the existing CEQA Guidelines. The Amendments add no additional substantive requirements; rather, the Guidelines merely assist lead agencies in complying with CEQA's existing requirements. Modifications address those issues where analysis of GHG emissions may differ in some respects from

[14] *See www.energy.ca.gov/title24/ for additional information.*

more traditional CEQA analysis. Other modifications clarify existing law that may apply both to an analysis of GHG emissions, as well as more traditional CEQA analyses.

CEQA Guidelines Section 15064.4 was included to assist lead agencies in determining the significance of the impacts of GHGs. Consistent with developing practice, this section urges lead agencies to quantify GHG emissions of projects where possible and includes language necessary to avoid an implication that a "life-cycle" analysis is required. In addition to quantification, this section recommends consideration of several other qualitative factors that may be used in the determination of significance (i.e., the extent to which the project may increase or reduce GHG emissions, compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). The adopted Amendments do not establish a threshold of significance; instead, lead agencies are called on to establish significance thresholds for their respective jurisdictions in which a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). In addition, two questions relating to the effects of GHGs were added to Appendix G of the CEQA Guidelines and have been used by the County in drafting its significance thresholds, listed below.

(3) Local

(a) South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and

- Support the adoption of a California GHG emission reduction goal.

SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. Within its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 metric tons per year. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where the SCAQMD is lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects) and has formed a GHG Significance Threshold Working Group to further evaluate potential GHG significance thresholds.[15]

(b) County of Los Angeles Green Building Ordinances

On January 16, 2007, the County of Los Angeles Board of Supervisors ordered the establishment of a Green Building Program to incorporate green building standards into all appropriate industrial, commercial, and residential development projects in an effort to improve the County's energy efficiency, reduce its contribution of GHGs within California, and achieve compliance with AB 32. On November 18, 2008, the Los Angeles County Board of Supervisors adopted three ordinances that together make up the County's Green Building Program: the Green Building ordinance (County Code, Chapter 22.52, Part 20), the Drought-Tolerant Landscaping ordinance (County Code, Chapter 22.52, Part 21), and the Low Impact Development Standards ordinance (County Code, Chapter 22.52, Part 22). The Green Building ordinance is intended to minimize the impact of development by requiring building practices that reduce the use of energy, water, and other natural resources, minimize solid waste, and promote a healthy environment. Non-residential development with a gross floor area of 25,000 square feet or more is required to comply with the County's Green Building Standards and meet Leadership in Energy and Environmental Design (LEED™) Silver requirements, with compliance demonstrated via site plan review. The Drought-Tolerant Landscaping ordinance requires the use of drought-tolerant and native plants that require minimal use of water. Applicable to all projects regardless of size, this ordinance specifically requires that 75 percent of a project's total landscaped area contain drought-tolerant plants and limits the amount of turf to 25 percent of total landscaping or 5,000 square feet. The LID ordinance focuses on water resources and specifies storm water handling and treatment requirements that protect streams, groundwater, surface water quality, and natural drainage characteristics.

---

[15] *GHGs Significance Thresholds, www.aqmd.gov/ceqa/handbook/GHG/GHG.html, accessed December 21, 2010.*

3. ENVIRONMENTAL IMPACTS

a. Methodology

The California Climate Action Registry General Reporting (CCAR) Protocol, which is widely viewed as the most accurate and verifiable method for calculating GHG emissions, provides basic procedures and guidelines for calculating and reporting GHG emissions from a number of general and industry-specific activities.[16] The CCAR California Climate Action Registry General Reporting Protocol is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development and the World Resources Institute through "a multi-stakeholder effort to develop a standardized approach to the voluntary reporting of GHG emissions."[17] Although no numerical thresholds of significance have been developed, and no specific protocols are available for land use projects, the CCAR Protocol provides a basic framework for calculating and reporting GHG emissions from the Project. The information provided in this section is consistent with the CCAR Protocol's reporting requirements.

The CCAR Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.[18]

The CCAR Protocol provides a range of basic calculations methods. However, CCAR Reporting Protocol calculations are typically designed for existing buildings or

---

[16] *California Climate Action Registry, General Reporting Protocol, Version 3.1, (January 2009), www.climateregistry.org/resources/docs/protocols/grp/GRP_3.1_January2009_FINAL.pdf.*

[17] *Ibid.*

[18] *Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use a product, material, or service.*

facilities. These retrospective calculation methods are not directly applicable to planning and development situations where buildings do not yet exist.

CARB believes that consideration of so-called indirect emissions provides a more complete picture of the GHG footprint of a facility. Annually reported indirect energy usage aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.[19] CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research has noted that lead agencies "should make a good-faith effort, based on available information, to calculate, model, or estimate… GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[20] Therefore, direct and indirect emissions have been calculated for the Project using the CCAR Protocol.

A fundamental difficulty in the analysis of GHG emissions is the global nature of the existing and cumulative future conditions. Changes in GHG emissions can be difficult to attribute to a particular planning program or project because the planning effort or project may cause a shift in the locale for some type of GHG emissions, rather than causing "new" GHG emissions. Whether this represents a net global increase, reduction, or no change depends on the GHGs that would exist if the project were not implemented.

(1) Construction

Construction emissions were calculated using the URBEMIS2007 model which is based on OFFROAD2007 model outputs. OFFROAD2007 is an emissions estimation model developed by CARB to calculate emissions from construction activities. The output values used in this analysis were adjusted to be project-specific, based on usage rates, type of fuel, and construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate GHG emissions values for each construction year (refer to Appendix E.2). Mobile source emission methodology for on-road construction emissions, associated with worker commute and delivery of materials, uses a vehicle miles traveled rate calculated by URBEMIS2007 in order to generate values for annual emissions. Emission factors are derived from the EMFAC2007 model using light duty automobile factors for worker

---

[19] *CARB, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), Planning and Technical Support Division Emission Inventory Branch, October 19, 2007.*

[20] *OPR Technical Advisory, p. 5.*

commute and heavy duty truck factors for deliveries. URBEMIS2007 only reports CO_2 emissions. Therefore, the CO_2 emissions were converted into metric tons of CO_2e by applying the proper global warming potential (GWP) value.[21] These GWP ratios are available from the USEPA and published in the CCAR Protocol. In accordance with SCAQMD guidance, GHG emissions from construction were amortized over the lifetime of the project. The SCAQMD defines the lifetime of a project as 30 years. Therefore, total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions.

(2) Operation

(a) Emission Factors

Quantitative emission factors were used to calculate the energy use and potential emissions generated by existing and future land uses on the Project site. These factors include mobile sources, electricity, natural gas, water usage/wastewater generation, solid waste generation and disposal, and tree removal/replacement.

Mobile source emission calculations associated with operation of the Project use a projection of annual vehicle miles travelled (VMT), which is derived from the traffic study prepared for the Project. These values account for the daily and seasonal variations in trip frequency and length associated with employees and visitors traveling to and from the Project site and other activities that require a commute. Methane and nitrous oxide are also emitted from mobile sources. The USEPA recommends assuming that methane and nitrous oxide account for 5 percent of mobile source GHG emissions, taking into account their global warming potential.[22] These emission factors were then applied to the annual VMT calculated using URBEMIS.

The consumption of fossil fuels to generate electricity and to provide heating and hot water creates GHG emissions. Future fuel consumption rates were estimated based on specific square footages of the proposed land uses, as well as predicted water supply needs of the Project. Natural gas and electricity usage factors derived from the SCAQMD CEQA Air Quality Handbook were used to project fuel consumption rates. Embodied energy rates associated with the Project's future water supply needs (e.g., water supply and conveyance, water treatment, water distribution, and wastewater treatment) were

---

[21] *CO_2e was developed by the Intergovernmental Panel on Climate Change (IPCC), and published in its Second Assessment Report (SAR) 1996.*

[22] *USEPA, Emission Facts: Greenhouse Gas Emissions from a Typical Passenger Vehicle, Office of Transportation and Air Quality, 2005.*

calculated using factors derived from the CEC. GHG emission factors from the CCAR protocol were then applied to the respective usage rates, to calculate annual GHG emissions in metric tons.

It is difficult to identify the specific generating source of electricity particularly since SCE produces power at locally operated plants and also imports power during peak demand periods. Thus, the emission factors used in this analysis represent a State-wide average of known power-producing facilities, using various technologies and emission control strategies, and do not take into account SCE's unique emissions profile.

The CEC's estimate for energy intensity of the water use cycle in Southern California was used to calculate the energy usage related to water conveyance. Emission factors from the CCAR Protocol, Version 3.1 were implemented in calculating the associated GHGs.

Solid waste generation and disposal is associated with embodied energy. The annual operational solid generation rates are provided in Section V.L.3, Utilities and Service Systems—Solid Waste, and were converted to GHG emissions on the generic emissions factor of 0.23 metric ton CO_2e/metric tons of solid waste. This is a typical value based on the USEPA's Waste Reduction Model (WARM). Los Angeles County meets the 50 percent diversion rate required under AB 939.

In addition, trees capture and temporarily sequester atmospheric GHG emissions in the form of woody materials. As the Project would remove and plant new trees, the balance of sequestration associated with the removal and long-term replacement of these trees is part of the Project's GHG inventory. Estimates of tree carbon storage were based on a numerical benefits model developed by the Sacramento Municipal Utility District in collaboration with the U.S. Department of Agriculture Forest Service, Center for Urban Forest Research. The model is designed to provide results consistent with the CCAR's Urban Forest Project Reporting Protocols.[23] Calculations from the Sacramento Municipal Utility District model were supplemented with estimates from the U.S. Forest Service Center for Urban Forest Research Tree Carbon Calculator. Tree carbon content is typically measured as a function of diameter at breast height. However, local ordinances are also expressed, under some circumstances, in terms of canopy replacement. The emissions calculations used in this study reflect a simplifying assumption that a tree's canopy area is linearly related to tree volume.

---

[23] *Energy Savings Benefits, https://usage.smud.org/treebenefit/SavingEnergy.aspx, accessed December 21, 2010.*

(3) Consistency with Assembly Bill 32

As discussed previously, CARB, SCAQMD, and the County of Los Angeles currently have not adopted significance thresholds for GHG emissions. Based on the currently available guidance, this section assesses whether the Project's GHG impacts are significant based on the Project's consistency with California's goals to reduce GHG emissions under AB 32. A particularly illustrative method to determine consistency with AB 32, and one that has the co-benefit of being based on quantification of emissions, is to compare a project's emissions as proposed to that project's emissions if it were to be built using "business-as-usual" design, methodology, and technology. If a project constitutes an equivalent or larger break from "business-as-usual" than has been determined by CARB to be necessary to meet AB 32's goals for 2020 (approximately 16 percent), then that project can be considered consistent with AB 32 and, therefore, will not have a significant impact on the environment due to its GHG emissions. This is the average level of emissions reduction performance that would need to be achieved across all sectors of the economy to meet AB 32 goals (i.e., applied to both new and existing GHG emissions sources), and CARB and other State agencies have indicated that specific sectors of the economy may be required to contribute greater levels of reduction. This section uses this "break from 'business-as-usual'" method to determine consistency with AB 32. This approach mirrors concepts used in the CARB's *Climate Change Scoping Plan* for the implementation of AB 32.

CARB's *Climate Change Scoping Plan* and guidance from a wide-variety of State agencies has emphasized that achieving the State's GHG emissions reduction goals requires a substantial change from "business-as-usual."[24] Comparing a project's emissions to "business-as-usual" emissions is fundamental to the CARB's calculation that achieving AB 32 mandates requires a 16 percent reduction in emissions from "business-as-usual." However, the notion of statewide "business-as-usual" used in the CARB's *Climate Change Scoping Plan* is not directly applicable at local or regional scales. Nevertheless, SCAQMD recommends use of this definition of "business-as-usual" until such time as a statewide or SCAQMD definition of "business-as-usual" is developed.[25] The statewide "business-as-usual" is based on historic trends across entire economic sectors—not the activity of local governments or individual projects (i.e., it is a top-down estimate of anticipated future

[24] *The Scoping Plan defines "business-as-usual" as emissions in the absence of GHG reduction measures (i.e., the 2020 "business-as-usual" emissions inventory is forecasted based on the 2002 to 2004 statewide average annual emissions and does not take credit for, inter alia, reduction from 2005 Title 24, Assembly Bill 1493 GHG emissions reduction standards for vehicles, the California Low Carbon Fuel Standard, or full implementation of the Renewables Portfolio Standard, discussed below).*

[25] *SCAQMD, Draft Guidance Document-Interim CEQA GHG Significance Threshold, Attachment E, October 2008.*

emissions). Consequently, evaluating the proposition that a project constitutes a break from "business-as-usual" requires providing a quantitative estimate of "business-as-usual" based on the specific circumstances of the Project in the context of relevant State activities and mandates. This essentially requires two GHG emissions inventories (as follows):

- "Business-as-Usual" project GHG emissions without State mandates; and
- "As proposed" project GHG emissions with Project Design Features and with State mandates.

The analysis in this section includes potential emissions under "business-as-usual" scenarios and from the Project at build-out based on actions and mandates expected to be in force in 2020. Early-action measures provided in the *Climate Change Scoping Plan* that have not been regulatory approved were not considered in this analysis. By not speculating on potential regulatory conditions, the analysis takes a conservative approach that likely overestimates the Project's GHG emissions at buildout.

Local governments as well as others use 2020 as a target date for GHG reductions. It is also an important target date for supporting legislation and regulation, including mandates for implementation of the Low Carbon Fuel Standard and the Federal Corporate Average Fuel Economy fuel economy standards. This 2020 target date reflects California's AB 32 mandate for GHG emissions reductions based on the following CARB timeline:[26]

- January 1, 2009: CARB adopts a "scoping plan" indicating how emissions reductions will be achieved.
- January 1, 2010: Early-action measures take effect.
- January 1, 2012: GHG rules and market mechanisms adopted by CARB are legally enforceable.
- December 31, 2020: Deadline for achieving 2020 GHG emission cap.

A "business-as-usual" scenario is used to establish a baseline for comparison with project-generated GHG emissions. Similar to the unmitigated GHG scenario provided in the BAAQMD's CEQA Guidelines, discussed above, the "business-as-usual" scenario does not consider site-specific conditions, Project Design Features, or prescribed mitigation measures. As an example, a "business-as-usual" scenario would apply a base ITE

[26] *California Air Resources Board, www.arb.ca.gov/cc/cc.htm.*

trip-generation rate for the project and would not consider site-specific benefits resulting from the proposed mix of uses or recognize the synergy of having the existing outdoor filming and proposed indoor production consolidated on the same site. The analysis below establishes "business-as-usual" as complying with the minimum performance level required under Title 24 (2008). Consistent with the *Supplemental FED to the Climate Change Scoping Plan*, this scenario would also include State mandates that are already in place (e.g., Pavley I Standards, full implementation of California's State Renewables Portfolio Standard beyond current levels of renewable energy, and the California Low Carbon Fuel Standard).

b. Significance Thresholds

The potential for the Project to result in impacts related to global climate change is based on the CEQA significance criteria specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the CEQA Guidelines and are as follows:

Threshold E.2-1: Would the project generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?[27]

Threshold E.2-2: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

c. Project Design Elements

The Project would be based on principles of smart growth and environmental sustainability, as evidenced in the synergy of consolidating the existing outdoor filming uses at the Ranch with the proposed indoor production facilities on the same site, as well as access enhancements that would make use of the Development Area's proximity to nearby freeways. Some of the key sustainability features that would be implemented include the following measures or any equivalent measures designed to achieve the same results at minimum: photovoltaic technology on selected roofs; use of color and shade structures, such as awnings or canopies, to reduce the heat island effect; the use of highly efficient electric and heating, ventilation, and air-conditioning (HVAC) equipment (housed in the proposed central utility plant); and the use of drought-tolerant plant species, including native and non-native plants, for a minimum of 75 percent of total landscaping. Water

[27] *Normally, the significance of the impacts of a project's GHG emissions should be evaluated as a cumulative impact rather than a project-specific impact.*

conservation and Project Design Features (PDFs) would include the following measures or any equivalent measures capable of achieving at least the same results: low flow/ultra low-flow fixtures, Energy Star appliances, drought-tolerant landscaping, and use of drip irrigation systems. As part of compliance with the County's recently adopted Green Building ordinance, many of the proposed buildings would achieve LEED™ Certification or LEED™ Silver Certification. Specifically, the soundstages, production offices, and the administration building would comply with the County's Green Building Standards and achieve LEED™ Silver Certification. The commissary would comply with the County's Green Building Standards and achieve LEED™ Certification. The writers/producers bungalows would comply with the County's Green Building Standards. While the mills and the warehouse are exempt from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they would comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant would be exempt from the County's Green Building ordinance. The Project would also incorporate relevant sustainability features set forth in the County's Green Building ordinance, Low Impact Development ordinance, and Drought-Tolerant Landscaping ordinance. In addition, the Project would comply with the 2010 CALGreen Code, which contains requirements for construction site selection, stormwater control during construction, construction solid waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation and more. Implementation of these sustainability features in return would contribute to a reduction in GHG emissions via reductions in vehicle trips, vehicle miles traveled, energy consumption, and embodied energy associated with water usage.

As listed below, the Project would implement the following specific Project Design Features that address each of the following areas:

(1) Land Use/Location

The Project includes existing outdoor filming uses and proposed indoor production facilities consolidated on the same site to reduce vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods. The combination of such uses at one location would reduce the need for film production-related trips to off-site locations throughout the region.

Project development would be clustered within the westernmost portion of the Ranch near SR-14. This location would allow for a direct entrance to the Project from the SR-14 northbound off-ramp, providing immediate access to the Development Area and avoiding off-site sensitive receptors, and therefore limiting impacts from cars and trucks travelling to and from the freeway.

(2) Transportation

The Project would include the following:

- Accessibility enhancements and linkages that make use of the Development Area's accessibility to nearby freeways. Specifically, the Project would include the following improvements, either as Project Design Features or as Mitigation Measures, as detailed in Section V.J, Traffic, Access and Parking:

  - Placerita Canyon Road (new Ranch main entrance)/SR-14 Northbound Off-Ramp: The Project would provide a direct entrance, if approved by Caltrans, to the Development Area from the SR-14 northbound off-ramp to allow immediate access to the Project. This intersection would be signalized and the off-ramp widened to provide three lanes (one left-turn lane, one optional through and left-turn lane, and one right-turn lane). Eastbound to northbound left-turns would be prohibited, and southbound movement out of the Development Area would be limited to right-turns only. These improvements would be the sole responsibility of the Project

  - Sierra Highway/SR-14 Southbound Ramps: The Project Applicant would install a traffic signal at this intersection with protected left-turn phasing for southbound Sierra Highway. Northbound Sierra Highway would be widened to provide a separate right-turn only lane onto the SR-14 southbound on-ramp. These improvements would be the sole responsibility of the Project. Detailed striping/signing and traffic signal plans would be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation.

  - Sierra Highway/Placerita Canyon Road: The Project Applicant would widen the Placerita Canyon Road westbound approach to provide a free-flow right-turn lane onto northbound Sierra Highway, facilitating traffic flow to the SR-14 southbound on-ramp. These improvements would be the sole responsibility of the Project. A detailed striping/signing plan would be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation.

  - Current Ranch main entrance/Placerita Canyon Road (Easterly Driveway): The Project Applicant would install a traffic signal at this intersection. The eastbound approach of Placerita Canyon Road at the intersection would be striped to provide for a left-turn only lane to improve access to the Ranch. This intersection's southbound approach exiting the Development Area would be striped to provide one left-turn lane and one right-turn lane. These improvements would be the sole responsibility of the Project. Detailed striping/signing and traffic signal plans would be submitted to the County of Los Angeles Department of Public Works for review and approval prior to implementation.

- The Project would also pay its fair share toward the cost of the cumulative traffic improvements listed below:
  - Sierra Highway/SR-14 Southbound Ramps: The Project Applicant would pay its pro rata share (20.9 percent) of the cost for the widening of southbound Sierra Highway to provide a second left-turn only lane onto the SR-14 southbound on-ramp.
  - Sierra Highway/Placerita Canyon Road: Prior to issuance of the first certificate of occupancy, the Project Applicant would pay its pro rata share (16.2 percent) of the cost for the widening of Sierra Highway northbound approach to provide a separate right-turn only lane onto eastbound Placerita Canyon Road.
- To encourage the use of alternative modes of transportation, the Project would incorporate the following features:
  - The provision of information on transportation alternatives (transit schedules, maps, etc.);
  - A carpool matching program;
  - Preferred parking for low-emitting (Zero Emission) and fuel-efficient vehicles;
  - Preferred parking for carpool/vanpool vehicles;
  - Video conferencing facilities within the Project;
  - On-site secure, bicycle storage areas; and
  - Non-dedicated walkways, bicycle access, and paved surfaces throughout the Development Area to minimize use of automobiles and trucks traveling throughout the Development Area.
- The Project would be designed to reduce vehicle idling and queuing through proper design of the on-site circulation system.
- Deliveries would be scheduled during off-peak traffic periods to encourage the reduction of trips during the most congested periods.

(3) Water

The Project would reduce its water demand by at least 20 percent through the use of Project Design Features that would include, at a minimum, the following measures or equivalent measures capable of achieving the same results:[28]

- High-efficiency toilets (maximum 1.28 gallons per flush), including dual-flush water closets.
- High-efficiency urinals (maximum 0.125 gallon per flush) or waterless urinals.
- Low-flow restroom faucets with a maximum flow rate of 0.5 gallon per minute (gpm).
- Restroom faucets of a self-closing design (i.e., that automatically turn off when not in use).

The Project would reduce its landscaping water demand by at least 50 percent through the use of Project Design Features that would include, at a minimum, the following measures or any equivalent measures capable of achieving the same results: [29]

- Weather-based irrigation controller with rain shutoff.
- Matched precipitation (flow) rates for sprinkler heads.
- Drip/microspray/subsurface irrigation where appropriate.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of permeable surfaces (e.g., gravel, decomposed granite, pervious concrete, interlocking pavers, geogrid/grasspavers, or porous asphalt) where appropriate, primarily for pedestrian walkways and along the bungalows, the administration building, and the commissary, as well as within the Conditional Parking Areas, if developed. In addition, permeable surfaces could potentially be used for parking that would not be used by trucks (e.g., single rows of parking with a limited number of spaces, such as those that would surround some of the proposed detention basins, or the parking row adjacent to the Administration building).

---

[28] *Such reductions were not accounted for in the water demand calculations provided in Section V.L.1, Utilities and Service Systems—Water Supply, of this Draft EIR, in order to present a conservative analysis.*

[29] *Ibid.*

- Proper hydro-zoning and turf minimization.
- Use of landscape contouring to minimize precipitation runoff.

(4) Energy

The Project would reduce its energy usage by at least 15 percent below Title 24 (2008) standards by implementing Project Design Features that would include, at a minimum, the following measures or equivalent measures capable of achieving the same results:[30]

- Installation of energy efficient heating and cooling systems, equipment, and control systems (e.g., via the proposed central plant).
- Installation of efficient lighting and lighting control systems.
- Installation of light-emitting diodes for traffic and street lighting, as permitted.
- Installation of light colored "cool" roofs to more effectively reflect the sun's energy from the roof's surface to reduce the roof surface temperature, and use of shade structures such as awnings or canopies around soundstages and mills to reduce the heat island effect.
- Incorporation of energy saving features into building design (e.g., use of passive controls, shading, solar energy, ventilation, appropriate building materials, etc.), as appropriate.
- Prohibition of HVAC, refrigeration, and fire suppression equipment that contains banned chlorofluorocarbons.
- Use of Energy Star appliances.
- Use of photovoltaic technology on selected roofs.

In addition, the Applicant would obtain a permit to construct and a permit to operate any standby generators or boilers under SCAQMD Rules 201, 202, and 203. Potential emissions from these sources would be subject to SCAQMD Regulation XIII (New Source Review) and would meet Best Available Control Technology (BACT) requirements to minimize emissions of PM_{10}, VOC, and NO_X emissions.

---

[30] *Such reductions were not accounted for in the energy demand calculations provided in Section V.L.4, Utilities and Service Systems—Energy, of this Draft EIR, in order to present a conservative analysis.*

(5) Solid Waste

The Project would incorporate the following Project Design Features pertaining to solid waste reduction:

- Establish a Solid Waste Diversion Program of 75 percent for Project construction.
- The construction contractor would only contract for solid waste disposal services with a company that recycles demolition and construction-related solid wastes, as required per the Los Angeles County Code and demonstrated to the County of Los Angeles Department of Public Works prior to issuance of demolition or construction permits.
- Establish a Solid Waste Diversion Program of 50 percent for Project operations.
- Recycling Centers: Provide readily accessible areas to serve the Development Area for the deposit, storage, and collection of non-hazardous materials for recycling.

(6) Building Design

Many of the new buildings for the Project would be designed and constructed to meet the County's Green Building Standards and achieve the equivalent of LEED™ Certification or LEED™ Silver Certification. Specifically, the soundstages, production offices, and administration building would comply with the County's Green Building Standards and achieve LEED™ Silver Certification. The commissary would comply with the County's Green Building Standards and achieve LEED™ Certification. The writers/producers bungalows would comply with the County's Green Building Standards. While the mills and the warehouse are exempt from County Code Sections 22.52.2130.C.1 and 22.52.2130.D regarding energy conservation and third party rating systems, they would comply with the other applicable sections of the County's Green Building ordinance and achieve equivalency of LEED™ Certification. The substation and central utility plant would be exempt from the County's Green Building ordinance. The Project would reduce its domestic water demand by at least 20 percent through the use of the Project Design Features described above. The Project would also reduce its energy usage by at least 15 percent below Title 24 (2008) standards with implementation of the Project Design Features listed above.

d. Impact Analysis

Threshold E.2-1: Would the project generate greenhouse gas (GHGs) emissions, either directly or indirectly, that may have a significant impact on the environment?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The Project is associated with direct and indirect GHG emissions generated by different types of buildings, land uses, and emissions sources, including:

- Construction: Emissions associated with dust control (water), site preparation, excavation, grading, and construction-related equipment and vehicular activity;
- Transportation: Emissions associated with project-generated vehicular operations;
- Building Operations: Emissions associated with space heating and cooling, water heating, and lighting;
- Water: Emissions associated with energy used to pump (i.e., the new booster pump station), convey, treat, deliver, and re-treat water;
- Solid Waste: Emissions associated with solid waste streams (embodied energy of materials); and
- Sequestration/Emission (trees).

The Project would generate an incremental contribution to and cumulative increase in sources of GHGs. However, it should be noted that even a very large individual project would not generate enough GHG emissions to influence global climate change. Specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Project is provided below.

(a) Construction Impacts

Construction of the Project may occur in phases, with completion as early as 2015 or as late as 2020. Construction would start with clearing the Development Area, including removal of existing on-site structures, followed by mass grading of the Development Area. As discussed in detail in Section V.A, Geotechnical Hazards, and illustrated in Figures V.A-3 through V.A-6 therein, Project grading within the Ranch is anticipated to involve approximately 700,000 cubic yards of cut and 350,000 cubic yards of fill, with approximately 350,000 cubic yards of soil export.[31] Based on rough grading estimates, the northern portion of the Development Area would require approximately

[31] *However, to be conservative, soil export of up to 500,000 cubic yards has been evaluated herein.*

443,000 cubic yards of cut and 5,000 cubic yards of fill, and the southern portion would require approximately 252,000 cubic yards of cut and approximately 336,000 cubic yards of fill, including fill to be placed east of the southern fill pad. An estimated 4,050 cubic yards of cut and 7,560 cubic yards of fill would be needed to create the development pad for the water tank and to smooth and pave the existing unpaved maintenance road to the tank so as to provide all-weather access for Newhall County Water District (NCWD). Construction of the proposed trail would involve approximately 700 cubic yards of cut which would be used elsewhere within the Ranch and would not require export. Earthwork necessary for the Conditional Parking Areas, if constructed, would involve limited surface grading, with less than 1,000 cubic yards of cut and less than 1,000 cubic yards of fill. The use of excess soil from the Development Area could be used as fill for the Conditional Parking Areas if these Project areas were developed during a similar timeframe. Limited fine grading would also be necessary at the selected of the two Potential Mobile Home Relocation Areas for the Ranch foreman's mobile home and the associated new septic system. Site grading is assumed to occur during approximately 6 months of the overall 27-month construction schedule (not taking into account possible nighttime hauling, which could reduce the total duration of earthwork activities), and clearing/demolition is expected to occur during 1 month of the overall construction schedule. The Project would allow for some flexibility in terms of permitted types of land uses allowed. Specifically, an option could be implemented to develop studio office uses in lieu of four soundstages, two mills, and production offices within the northern portion of the Development Area (Studio Office Option). The Studio Office Option would result in a total of nearly 46,000 less gross square feet of building area. As the Studio Office Option would result in less square footage, the analysis below represents a conservative estimate of potential emissions for both of the Project scenarios contemplated within the Development Area.

Construction emissions represent an episodic, Scope 3 source of GHG emissions. Emissions are associated with the operation of construction equipment and the disposal of construction solid waste.

To be consistent with guidance from the SCAQMD for calculating criteria pollutants from construction activities, only GHG emissions from on-site demolition and construction activities, off-site hauling (construction-related solid waste), delivery trucks, and construction worker commuting are considered as project-generated. The information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level. Therefore, the construction analysis does not assess such GHG emissions. Furthermore, it is reasonable and consistent with criteria pollutant calculations to consider only the GHG emissions resulting from the incremental increase in usage of on-road mobile vehicles, electricity, and natural gas upon implementation of the Project as project-related.

As presented in Table V.E.2-3 on page V.E.2-32, construction emissions associated with on-site development would generate a total of 6,446 metric tons of CO_2e. As recommended by the SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project (i.e., total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions) and incorporated into the operational analysis, provided below. A complete listing of the construction equipment by on-site and off-site activities, duration, and emissions estimation model input assumptions used in this analysis is included within the emissions calculation worksheets that are provided in Appendix E.2. As described above, this GHG analysis was performed in accordance with existing non-GHG specific CARB guidance.

(b) Operational Impacts

Table V.E.2-4 on page V.E.2-33 presents the Project's GHG emissions (from both on-site and off-site improvements) taking into consideration implementation of all Project Design Features and the full implementation of current State mandates. It should be noted that the resultant GHG emissions are predominately from on-site improvements within the Development Area as the off-site improvements would primarily generate GHG emissions during construction and to a lesser extent water conveyance during operation. Also included in Table V.E.2-4 is CARB's estimated 2008 State-wide inventory, the latest year for which data are available. As shown, the net increase in GHG emissions associated with the Project is approximately 0.0015 and 0.0016 percent of the 2006 emission level for the Soundstage Option and the Studio Office Option, respectively. As stated in Table V.E.2-4, the Project, with incorporation of Project Design Features and State mandates, would achieve a 17 percent reduction from "business-as-usual" for each option. With the achievement of a 17 percent total reduction from "business-as-usual," the Project's global climate change impacts with regard to GHG emissions would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction Impacts

The Project includes off-site improvements that include the construction of new utility infrastructure (i.e., sanitary sewer and water lines and a new water tank), traffic infrastructure (i.e., reconfiguration of SR-14 ramps at Placerita Canyon Road), and replacement of SCE power poles. Construction of the off-site utilities is expected to start in 2013 and would last approximately 9 to 12 months. It is anticipated that the roadway improvements may be completed at the same time as the on-site improvements. With respect to the off-site utilities, these improvements would involve an estimated 15,000 to 20,000 cubic yards of cut, approximately 10,000 to 12,000 cubic yards of fill, and as much as 5,000 to 8,000 cubic yards of export. The traffic infrastructure improvements within the

Table V.E.2-3
Construction Related Emissions with 2020 Mandates
(Metric Tons of CO_2e)

Scope 3	Total	Annualized
On-Site Improvements	6,446	215
Off-Site Roadway Improvements	335	11
Off-Site Utility Improvements	177	6
Total	**6,958**	**232**

Source: Matrix Environmental, 2011.

Caltrans right-of-way would involve cutting into an existing engineered slope adjacent to the SR-14 northbound off-ramp, requiring an estimated 11,500 to 14,000 cubic yards of cut, approximately 1,500 to 2,000 cubic yards of fill, and as much as 10,000 to 12,000 cubic yards of export. In addition, the replacement of nine power poles by SCE would require minimal excavation to remove existing poles, install new poles, and backfill the excavated holes. There would be limited grading of soil, estimated at approximately 7 cubic yards per pole for steel poles and 2 cubic yards for wood poles, some of which could be used to backfill the excavated holes, for a total of up to 63 cubic yards of export. The area to be disturbed is estimated at less than 1,000 square feet per pole, including space for the staging of vehicles and equipment, for a total of approximately 9,000 square feet. These activities are expected to occur in late 2013, concurrent with construction of the substation, and would be scheduled so as to minimize disruption of service to other users in the area.

As presented in Table V.E.2-3, construction emissions associated with off-site development would generate a total of 512 metric tons of CO_2e. As recommended by the SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project (i.e., total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions) and incorporated into the operational analysis, provided above.

(b) Operational Impacts

As shown in Table V.E.2-4 on page V.E.2-33, off-site improvements would primarily generate GHG emissions during construction. In addition, the GHG emissions associated with the operation of the booster pump station are accounted for in the emissions provided in Table V.E.2-4. The Project, with incorporation of Project Design Features and State mandates, would achieve a 17 percent reduction from “business-as-usual” for each option. With the achievement of a 17 percent total reduction from “business-as-usual,” the Project’s global climate change impacts with regard to GHG emissions would be less than significant.

Table V.E.2-4
Annual GHG Emissions Summary
(Metric Tons of CO_2e)

Scope	"Business-as-Usual" Project with State Mandates	Project with State Mandates and Project Features	Project's Break from "Business-as-Usual"
Soundstage Option			
On-Site Improvements			
Transportation	6,352	5,147	-19%
Electricity	1,011	870	-14%
Natural Gas	728	626	-14%
Water Usage/Wastewater Generation	113	90	-20%
Solid Waste	69	69	0%
Sequestration/Emissions (trees)	13	13	0%
Construction	215	215	0%
Off-Site Roadway and Utility Improvements			
Construction	17	17	0%
Total Emission	**8,518**	**7,047**	**-17.3%**
Percent of 2008 Statewide Total 473,790,000 metric tons)	*0.0018*	*0.0015*	
Studio Office Option			
On-Site Improvements			
Transportation	6,643	5,421	-18%
Electricity	1,127	969	-14%
Natural Gas	752	647	-14%
Water Usage/Wastewater Generation	134	107	-20%
Solid Waste	69	69	0%
Sequestration/Emissions (trees)	13	13	0%
Construction	215	215	0%
Off-Site Roadway and Utility Improvements			
Construction	17	17	0%
Total Emission	**8,970**	**7,458**	**-16.9%**
Percent of 2008 Statewide Total (473,790,000 metric tons)	*0.0019*	*0.0016*	

Source: Matrix Environmental, 2011.

(3) Combined On-Site and Off-Site Impacts

(a) Construction Impacts

As presented in Table V.E.2-3 on page V.E.2-32, construction emissions associated with off-site development would generate a total of 6,958 metric tons of CO_2e. As recommended by the SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project (i.e., total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate comparable to operational emissions) and incorporated into the operational analysis, provided above.

(b) Operational Impacts

Table V.E.2-4 on page V.E.2-33 presents the Project's GHG emissions (both on-site and off-site improvements) taking into consideration implementation of all Project Design Features and the full implementation of current State mandates. As stated in Table V.E.2-4, with incorporation of Project Design Features and State mandates, operational GHG emissions associated with the Project would be 7,047 metric tons of CO_2e under the Soundstage Option and 7,458 metric tons of CO_2e under the Studio Office Option. Thus, the Project would achieve a 17 percent reduction in GHG emissions from "business-as-usual" under each option. With the achievement of a 17 percent total reduction from "business-as-usual," the Project's global climate change impacts with regard to GHG emissions would be less than significant.

Threshold E.2-2: Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas—and Off-Site Infrastructure Improvement Areas Impacts

The County of Los Angeles Green Building Program incorporates green building standards into all appropriate industrial, commercial, and residential development projects in an effort to improve the County's energy efficiency, reduce its contribution of GHGs within California, and achieve compliance with AB 32. As discussed above, the Project has been designed to incorporate a number of features that are consistent with the Los Angeles County Green Building Program goals by decreasing vehicle miles traveled, conserving water, increasing energy efficiency, using appropriate building materials, reducing solid waste, and improving public health.

As discussed above, development of the Project would implement Project Design Features that would reduce vehicular trips, reduce vehicle miles traveled, and encourage

use of alternative modes of transportation. The Project would substantially reduce the number of truck trips from outside productions which currently require travel between film shoots on the Ranch and off-site production facilities, thus advancing regional air quality goals. In addition, the Project would minimize GHG emissions from new development by energy conservation through the use of highly efficient electric and HVAC equipment (housed in the proposed central plant), water conservation through the use of irrigation/sprinkler controls and low consumption fixtures, and building design and construction that achieves the equivalent of the LEED™ Silver Certification for many of the buildings within the Development Area.

The Project contains numerous Project Design Features that would reduce the Project's emissions profile and would represent improvements above what can be considered "business-as-usual." The Project would be consistent with the goals set forth in AB 32, as well as in CARB's *Climate Change Scoping Plan*. The Project's GHG emissions reduction of 34 percent compared to the "business-as-usual" scenario constitutes an equivalent or larger break from "business-as-usual" than has been determined by CARB to be necessary to meet AB 32's goals (approximately 16 percent for 2020). Therefore, the Project will have a less than significant impact on the environment due to its GHG emissions.

4. CUMULATIVE IMPACTS

Although the Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that global climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to State or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on global climate change. The Project's GHG emissions would not be considered to be substantial when compared to statewide GHG emissions. The State has mandated a goal of reducing statewide emissions to 1990 levels by 2020, even though statewide population and commerce is predicted to continue to expand. In order to achieve this goal, the California Air Resources Board is in the process of establishing and implementing regulations to reduce statewide GHG emissions. However, currently there are no significance thresholds, specific reduction targets, and no approved policy or guidance to assist in determining significance at the project or cumulative level. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions.

Table V.E.2-4 on page V.E.2-33 illustrates that the Project's design features and State mandates would contribute to GHG reductions. These reductions represent a break from "business-as-usual" and support State goals for emissions reduction. The methods used to establish this relative reduction are consistent with the approach used in the CARB's *Climate Change Scoping Plan* for the implementation of AB 32 through 2020. The Project also identifies appropriate circumstances for the consideration of specific Early Action measures described by the California Climate Action Team. Moreover, a sizeable percentage of the operational GHG emissions conservatively associated with the Project likely should not be considered new emissions attributable to the Project because the future employees of the Project already generate emissions through their current activities.

The Project is consistent with the approach outlined in the CARB's *Climate Change Scoping Plan*, particularly its emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. The location and design of the Project reflect and support these core objectives. For example, the Project demonstrates this through the synergy between existing outside production and proposed production facilities. In addition, as recommended by CARB's *Climate Change Scoping Plan*, the Project would use green building as a framework for achieving cross-cutting emissions reductions.

The Project also would comply with the County's Green Building Program. The Program emphasizes improving energy conservation, energy efficiency, increasing renewable energy generation, and changing transportation and land use patterns to reduce auto dependence. The Project's design features would advance these objectives. In addition, the Project would comply with the 2010 CALGreen Code, which contains requirements for construction site selection, storm water control during construction, construction solid waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation and more.

Additionally, as described above, the Project has incorporated sustainability design features and mitigation measures to reduce VMT and to reduce the Project's potential impact with respect to GHG emissions. The Project, by implementing the Project Design Features and GHG reducing measures, results in a net decrease in GHG emissions that represents a substantial break from "business-as-usual." The Project's features and GHG reduction measures make the Project consistent with the goals of AB 32.

Given the Project's consistency with State and County GHG emission reduction goals and objectives, the contribution to the cumulative impact of global climate change would be less than significant and would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Similarly, Related Projects would also be anticipated to comply with these same emissions reduction goals and objectives (e.g., the County's Green Building Program).

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF E.2-1: The Project shall comply with the County's Green Building ordinance, Low Impact Development ordinance, and Drought-Tolerant Landscaping ordinance.

PDF E.2-2: The Project shall comply with the 2010 California Green Building Standards Code, which contains requirements for construction site selection, stormwater control during construction, construction solid waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation conservation.

In addition to the Project Design Features described above, Sections IV, Project Description; V.J, Traffic, Access, and Parking; V.L.1, Utilities and Service Systems—Water Supply; V.L.4, Utilities and Service Systems—Energy; V.L.3, Utilities and Service Systems—Solid Waste; and V.N, Land Use, of this Draft EIR, set forth additional Project Design Features which would serve to reduce GHG emissions via reductions in vehicle trips, vehicle miles traveled, energy consumption, and embodied energy associated with water usage.

b. Mitigation Measures

As noted previously, impacts related to global climate change would be less than significant, and no mitigation measures are recommended or required.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the Project's design features and State mandates, impacts with regards to global climate change would be less than significant.

V. Environmental Impact Analysis

F. Biological Resources

V. ENVIRONMENTAL IMPACT ANALYSIS

F. BIOLOGICAL RESOURCES

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's impacts on biological resources. The analysis is based on a number of technical reports and site evaluations prepared for the Project, as summarized below. One of the sources of information for this section is the Biological Resources Assessment: Disney | ABC Studios at The Ranch (Biological Resources Assessment) prepared by PCR Services Corporation (PCR) in December 2010, which is included as Appendix F.1 to this Draft EIR. In addition, the Biological Resources Assessment is supplemented with a letter (BRA Supplement), prepared by Dudek in July 2011 and provided as Appendix F.2, that presents the findings of a biological survey of the two Conditional Parking Areas and the two Potential Mobile Home Relocation Areas, as well as an Addendum to the Biological Resources Assessment (BRA Addendum), also prepared by Dudek in April 2012 and provided as Appendix F.3, which includes additional information regarding sensitive species potentially occurring in the Project vicinity, provides additional discussion of biological resources including jurisdictional waters for clarification purposes, and presents an evaluation of impacts associated with the Trail Area.

Information regarding protected oak tree species and oak woodland, which was incorporated into the BRA Addendum, is from the Oak Tree Report: Disney | ABC Studios at The Ranch (County Oak Tree Report) dated April 2012, which was approved by the County Forester, the Oak Tree Report: Oak Orchard Alignment Sewer Line (City Oak Tree Report) dated December 2011, and the Oak Tree and Woodland Mitigation and Monitoring Plan: Disney | ABC Studios at The Ranch (OTWMMP) dated April 2012, which was approved by the County of Los Angeles Department of Regional Planning, all of which were prepared by Dudek. These reports are included as Appendices F.4, F.5, and F.6, respectively, to this Draft EIR.

Information regarding protected waters and wetlands, which was incorporated into the Biological Resources Assessment, is from the Investigation of Jurisdictional Waters of the U.S., Waters of the State, and Wetlands: Disney | ABC Studios at The Ranch (Jurisdictional Waters Report), prepared by PCR in November 2010. This report is included as Appendix F.7 to this Draft EIR. Additional discussion and analysis of jurisdictional waters are provided in the BRA Addendum (Appendix F.3).

Information regarding fuel modification, which was incorporated into the Biological Resources Assessment, is from the Preliminary Fuel Modification Plan for Disney | ABC Studios at The Ranch, prepared by Dudek in February 2011 and approved by the Los Angeles County Fire Department's Forestry Division on August 30, 2011. This plan is included as Appendix F.8 to this Draft EIR and is discussed in detail in Section V.K.2, Public Services—Fire Protection, of this Draft EIR.

To determine the level of wildlife movement occurring within the Development Area, a local wildlife movement analysis was conducted for eight consecutive weeks from May to June 2008 and is incorporated into the Biological Resources Assessment (see Appendix B within Appendix F.1 to this Draft EIR). Additional information/clarification regarding wildlife movement is provided in the BRA Addendum (Appendix F.3).

The Analysis of Potential Impacts to Wildlife due to Noise and Lighting Associated with Disney | ABC Studios at The Ranch, Newhall, California (Wildlife Impacts Analysis), prepared by Dudek in July 2011, analyzes the potential for indirect impacts on wildlife resources within or near the Development Area, the findings of which are also summarized in the Biological Resources Assessment. This report is included as Appendix F.9 to this Draft EIR and has been updated in the BRA Addendum (Appendix F.3).

Biological surveys for nesting birds and special status species potentially located within the Development Area, including the least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Polioptila californica californica*), arroyo toad (*Anaxyrus californicus*), and the western spadefoot toad (*Spea hammondii*), were conducted between January 2010 and August 2010 and the reports for these surveys are included as Appendix F.10 to this Draft EIR. Focused surveys for the slender-horned spineflower (*Dodecahema leptoceras*) and San Fernando valley spineflower *Chorizanthe parryi* spp. *fernandina*) were also conducted in 2010, the findings of which are incorporated into the Biological Resources Assessment provided as Appendix F.1.

In addition, as part of Project mitigation, a Habitat Mitigation and Monitoring Program (HMMP) would be implemented to restore and revegetate portions of Placerita Creek and the reconstructed slopes within the Development Area. A preliminary HMMP, prepared by Dudek in April 2012, is provided as Appendix F.11 to this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Regulatory Framework

(1) Federal

(a) Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species and their associated critical habitats, which are formally listed, proposed for listing, or candidates for listing as Endangered or Threatened under FESA. FESA defines an "Endangered species" as "any species which is in danger of extinction throughout all or a significant portion of its range" and a "Threatened species" as "any species which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." Candidate species are species about which there is sufficient supporting scientific information for listing. There are two classes of candidate species. The first class is composed of species that have been proposed for listing. The second class is composed of species for which there is sufficient information on biological vulnerability and threat(s) to list, but the listing process has not begun or is in some preliminary stage. Under Section 9(a)(1)(B) of FESA, it is unlawful to "take" any listed species. "Take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the U.S. Fish and Wildlife Service (USFWS), through regulations, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." A "take" is determined on a case-by-case basis and often varies from species to species. If a project requires a permit from a federal agency and the project could affect a federally listed plant or animal species, the property owner and the federal agency must consult with the USFWS. Section 9(a)(2)(b) of FESA addresses the protections afforded to listed plants. FESA also discusses recovery plans and the designation of critical habitat for listed species.

The USFWS and the National Marine Fisheries Service (NMFS) share the responsibility for administration of FESA. During the CEQA review process, each agency is given the opportunity to comment on the potential of the Project to affect listed plants and animals.

(b) The Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, *et seq.,* prohibits the taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. The MBTA defines "take" as "to pursue, hunt, capture, collect, kill or attempt to

pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." Most birds are considered migratory under the MBTA.

(c) Clean Water Act Sections 404 and 401

The U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (USEPA) regulate the discharge of dredged or fill material into "waters of the U.S.," including wetlands, under Section 404 of the Clean Water Act (CWA), 33 U.S.C. Section 1344. "Waters of the U.S." are defined as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." Wetlands are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions." Activities in "waters of the U.S." regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports) and mining projects. Section 404 of the CWA requires a permit before dredged or fill material may be discharged into "waters of the U.S.," unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the CWA, 33 U.S.C. Section 1341, requires an applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into "waters of the U.S." to obtain a certification from the state in which the discharge originates or would originate that the discharge will comply with the applicable effluent limitations and water quality standards. In California, before the ACOE will issue a Clean Water Act Section 404 permit, an applicant must obtain a "water quality certification" under Section 401 from the State Water Resources Control Board (SWRCB) or one of the nine Regional Water Quality Control Boards (RWQCBs).

Over the years, the ACOE has modified its regulations, typically due to evolving policy or judicial decisions, through the issuance of Regulatory Guidance Letters, memoranda, or more expansive instruction guidebooks. These guidance documents help to update and define how jurisdiction is claimed, and how "waters of the U.S." will be regulated. The most recent significant modification occurred on June 5, 2007, subsequently updated in December 2008, when the ACOE and the USEPA issued a series of guidance documents outlining the requirements and procedures, effective immediately, to establish jurisdiction under Section 404 of the CWA and the Section 10 of the Rivers and Harbors Act 1899 (ACOE and USEPA 2006). These documents are intended to be used for all jurisdictional delineations and provide specific guidance for the jurisdictional determination of potentially jurisdictional features affected by the United States Supreme

Court rulings in *Rapanos v. the United States* and *Carabell v. the United States* 547 U.S. 715 (2006) (jointly referred to as "*Rapanos*").[1]

The *Rapanos* case outlines the conditions and criteria used by the ACOE to assess and claim jurisdiction over non-navigable, ephemeral tributaries. Under a plurality ruling, the Court noted that certain "not relatively permanent" (i.e., ephemeral), non-navigable tributaries must have a "significant nexus" to downstream traditional navigable waters to be jurisdictional. An ephemeral tributary has a significant nexus to downstream navigable "waters" when it has "more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a TNW [Traditional Navigable Water]." A significant nexus is established through the consideration of a variety of hydrologic, geologic, and ecological factors specific to the particular drainage feature in question.

(2) State

(a) California Endangered Species Act

Similar to FESA, the State of California enacted the California Native Plant Protection Act (CNPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. CESA expanded upon the original CNPPA and enhanced legal protection for plants, but the CNPPA remains part of the California Fish and Game Code. To align with FESA, CESA created the categories of "Threatened" and "Endangered" species. CESA defines an "Endangered species" as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a "Threatened species" as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently Threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of the special protection and management efforts." The State defines a "candidate species" as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of Endangered species or the list of Threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Any animal determined by the commission as rare on or before January 1,

[1] *In April 2011, the ACOE and the USEPA issued new "Draft Guidance on Identifying Waters Protected by the Clean Water Act." The draft guidance is intended to clarify how the agencies will identify protected waters and implement the Rapanos decision.*

1985, was converted into a "Threatened species" under the CESA; rare plants were not reclassified.

The California Department of Fish and Game (CDFG) implements CNPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. Under CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the State to allow "take" require permits or memoranda of understanding and can be authorized for "Endangered species, Threatened species, or candidate species for scientific, educational, or management purposes." Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

During the CEQA review process, the CDFG is given the opportunity to comment on the potential of a project to affect listed plants and animals.

(b) Fully Protected Species & Species of Special Concern

The classification of "Fully Protected" species was the CDFG's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. (Fish and Game Code Sections 5515, 5050, 3511 and 4700.) Most of the species on these lists have subsequently been listed under CESA and/or FESA. Under the Fish and Game Code, Fully Protected species "may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any Fully Protected species," although take may be authorized for necessary scientific research. This language makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with Fully Protected species were amended to allow the CDFG to authorize take resulting from recovery activities for State-listed species.

"Species of Special Concern" are broadly defined as animals not listed under FESA or CESA, but which are nonetheless of concern to the CDFG because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFG, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation is also intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research

and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

(c) California Department of Fish and Game "Special Animals"

"Special Animals" is a general term that refers to all of the taxa the CNDDB tracks, regardless of their legal or protection status. The list is also referred to as the list of "species at risk" or "special status species." The CDFG considers the taxa on this list to be those of greatest conservation need. The species on this list generally fall into one or more of the following categories: (1) officially listed or proposed for listing under CESA or FESA; (2) State or Federal candidate for possible listing; (3) taxa which meet the criteria for listing, even if not currently included on any list, as described in CEQA Guidelines Section 15380; (4) taxa considered by the CDFG to be a Species of Special Concern; (5) taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring; (6) populations in California that may be on the periphery of a taxon's range, but are threatened with extirpation in California; (7) taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands, vernal pools, etc.); and (8) taxa designated as a special status, sensitive, or declining species by other state or federal agencies, or a non-governmental organization (NGO).

(d) California Fish and Game Code Sections 3503 and 3513

Under California Fish and Game Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except non-natives, including English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered a "take" by the CDFG.

(e) California Native Plant Society

The California Native Plant Society (CNPS) publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (www.cnps.org/rareplants/inventory/6thedition.htm). The inventory assigns plants to the following Rare Plant Ranks:

- 1A—Presumed extinct in California.
- 1B—Rare, threatened, or endangered in California and elsewhere.

- 2—Rare, threatened, or endangered in California, but more common elsewhere.
- 3—Plants for which more information is needed.
- 4—Plants of limited distribution.

Additional endangerment codes are assigned to each taxon as follows:

- 1—Seriously endangered in California (over 80 percent of occurrences threatened/high degree of immediacy of threat).
- 2—Fairly endangered in California (20–80 percent occurrences threatened).
- 3—Not very endangered in California (<20 percent of occurrences threatened or no current threats known).

Plants assigned to Rare Plant Ranks 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing and are given special consideration under CEQA during project review. Although plants assigned to Rare Plant Ranks 3 and 4 have little or no protection under CEQA, they are usually included in the project review process for completeness.

(f) Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local conservation plans, policies or regulations. The CDFG ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in its CNDDB. Sensitive vegetation communities are also identified by the CDFG on its List of California Natural Communities Recognized by the CNDDB. Impacts to sensitive natural communities and habitats identified in local or regional plans, policies, regulations, or by federal or state agencies must be considered and evaluated. (Public Resources Code Section 21083.4; CEQA Guidelines Appendix G.)

Public Resources Code Section 21083.4 requires a county to determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If the county determines that there may be a significant effect to oak woodlands, the county must require one or more oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands. As stated in Section 21083.4, these alternatives include the following:

1. Conserve oak woodlands, through the use of conservation easements;

2. Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees. The requirement to maintain trees terminates seven years after the trees are planted. This mitigation cannot account for more than one-half of the mitigation requirement for the project. This mitigation may be used to restore former oak woodlands;

3. Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board; or

4. Other mitigation measures developed by the county.

(g) Porter-Cologne Water Quality Control Act

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) to preserve, enhance and restore the quality of the State's water resources. The Act established the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB) as the principal state agencies with the responsibility for controlling water quality in California. “Waters of the State” are defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. “Waters of the State” are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Act. Projects that require an ACOE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the State, the RWQCB has the option to regulate such activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements. Additional information regarding the Porter-Cologne Act is provided in Section V.D, Water Quality, of this Draft EIR.

(h) California Fish and Game Code Sections 1600, et seq.

The CDFG has jurisdiction over streams, lakes, and riparian vegetation as habitat for fish and other wildlife species under Sections 1600–1616 of the Fish and Game Code. Under Section 1602 of the California Fish and Game Code, “an entity may not substantially

divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waster or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless" the entity obtains a Streambed Alteration Agreement from the CDFG. The Streambed Alteration Agreement includes measures to protect the affected resource.

The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 Cal. Code of Regulations, Section 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.[2] "Riparian" is defined as "on, or pertaining to, the banks of a stream;" therefore, riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself."[3]

(3) Local

(a) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to biological resources. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to biological resources.

(b) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to biological resources. As discussed in the policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to biological resources.

---

[2] *CDFG, Environmental Services Division. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code. 1994.*

[3] *Ibid.*

(c) Los Angeles County Tree Preservation Guidelines

The County Oak Tree Ordinance, contained in County Code Sections 22.56.2050, *et seq*., mandates that no person shall cut, destroy, remove, relocate, inflict damage or encroach into a protected zone of any tree of the oak genus which is: (a) 25 inches or more in circumference (8 inches in diameter) as measured 4.5 feet above mean natural grade; or (b) in the case of an oak with more than one truck, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured 4.5 feet above mean natural grade unless an oak tree permit is first obtained.

(d) City of Santa Clarita Oak Tree Ordinance

The City of Santa Clarita (City) Oak Tree Preservation Ordinance (Ord. 89-10, 1989) protects all tree species of the oak genus that measure 6 inches or more in circumference (2 inches in diameter) as measured at a point 4.5 feet above natural grade. The ordinance also strictly controls work activities within the "protected zone" of the jurisdictional oak trees, which extends to 5 feet outside of the dripline of the oak tree or 15 feet from the trunk(s) of a tree, whichever distance is greater. The ordinance defines a "Heritage Oak Tree" as "any oak measuring 108 inches or more in circumference (34 inches in diameter), or in the case of a multiple trunk tree, two or more trunks measuring 72 inches (23 inches in diameter) each or greater in circumference, measured at 4.5 feet above the natural grade surrounding such tree." The ordinance defines "encroachment" as "any intrusion into the protected zone of an oak tree, which includes, but is not limited to, pruning, grading, excavating, trenching, dumping of materials, parking of vehicles, placements of incompatible landscaping or animal corals, storage of materials or equipment, or the construction of structures, paving or other improvements."

As conditions of approval, the oak tree permits typically require avoidance of jurisdictional trees to the maximum extent feasible, relocation, replacement with locally grown nursery stock, and mitigation measures intended to protect retained trees and to promote the survival of transplanted and planted trees.

b. Existing Conditions

(1) General Characteristics of the Ranch, the Project Site, and the Immediate Vicinity

The Ranch is located within the unincorporated Santa Clarita Valley area of the County, immediately east of State Route 14 (SR-14). The Ranch is situated at the bottom of Placerita Canyon with relatively steep hillsides and ridgelines to the north, east, and south measuring approximately 600 feet in height. The bottom of the canyon is relatively flat with topography descending gently toward the west. The eastern portion of the Ranch includes private in-holdings within Angeles National Forest. The USGS topographic

quadrangle depicts two blue line streams within the Ranch: Placerita Creek, which traverses the property in an east-west direction, and Heil Creek, which connects with Placerita Creek and extends to the north. Several small ephemeral drainage courses are located within the southern portion of the Development Area and on the Ranch south of Placerita Canyon Road. Specifically, the Development Area contains a portion of Placerita Creek and one small ephemeral tributary, while two small ephemeral tributaries are located within the Water Tank Area and Trail Area. Placerita Creek also flows just north of the northern Conditional Parking Area and through a portion of the Off-Site Infrastructure Improvement Areas. The Project site is comprised of areas referred to as the Development Area, the Water Tank Area, the Trail Area, the Potential Mobile Home Relocation Areas, and the Conditional Parking Areas, all located within the Ranch, and the Off-Site Infrastructure Improvement Areas.

The Development Area is comprised of approximately 58 acres in the westernmost portion of the Ranch. The Development Area is separated from the remainder of the Ranch by a 330-foot strip of land that traverses the Ranch in a generally northwest to southeast direction and is used to support existing electrical transmission lines. Comprising roughly 30 acres, this area is owned by the City of Los Angeles Department of Water and Power (LADWP). Approximately 12 acres of the Development Area falls within the LADWP transmission corridor. The southwest corner of the Ranch includes two smaller transmission corridors owned by LADWP, which total approximately four acres. The Development Area is bordered by generally undeveloped open space and the Golden Valley Ranch planned community to the north, the LADWP transmission corridor (a portion of which is included within the Development Area) to the east, Placerita Canyon Road to the south, and SR-14 to the west and northwest.

Much of the Development Area is comprised of two large, mostly barren fill pads created when Caltrans deposited dirt and gravel from grading during the construction of SR-14 in the early 1970s. These two fill pads comprise approximately 23.6 acres and are separated by Placerita Creek. Like the remainder of the Ranch, the topography of the Development Area varies, with the lowest elevation at approximately 1,400 feet above mean sea level (MSL) within Placerita Creek near SR-14 and the highest elevation at approximately 1,567 feet above MSL within the northernmost portion of the Development Area. There is a 60-foot drop in elevation on the eastern slope of the southern fill pad, extending into the remaining southern portion of the Development Area.

Due to the heavy gravel content of the fill, minimal vegetation exists within the fill pad areas of the Development Area. As described further below, the Development Area includes limited areas of coast live oak woodland (4.79 acres), mixed willow riparian woodland (3.01 acres), southern willow scrub (0.75 acre), and an area of buckwheat scrub/chamise chaparral (11.15 acres, of which 4.59 acres are disturbed). The remainder

of the Development Area supports agricultural fields (11.32 acres) and disturbed/developed areas (27.45 acres). (See Table V.F-1 on page V.F-16, discussed below, for details.)

The area surrounding the Ranch includes a variety of uses. Residential development in the area includes the 1,259-acre Golden Valley Ranch planned community to the north of the Development Area. Residential subdivisions are also located to the northwest of the Ranch on the other side of SR-14 within the City of Santa Clarita and are not generally visible from the Ranch due to distance and topography. To the south and southeast of the Ranch are U.S. Forest Service land (Angeles National Forest) and State Park land (Placerita Canyon State Park, known as Placerita Canyon Nature Center, operated by the County), with residential subdivisions further to the southwest. To the east of the Ranch are undeveloped areas and a small residential subdivision that is also separated from uses within the Ranch by steep ridgelines. This eastern residential subdivision is located approximately 1.25 miles from the Development Area. To the west of the Ranch and the Development Area across SR-14 in the City of Santa Clarita, there are oil production wells and industrial uses, with The Master's College and residential subdivisions further to the west.

For purposes of this biological analysis, the study area (which is defined differently than the Project site) includes the Development Area as well as approximately 38 acres located outside of the Development Area: approximately 12 acres within the Ranch (i.e., the on-site portions of the Project site, including the Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas, as well as an area across from the current Ranch main entrance where a retaining wall may be needed in conjunction with a proposed traffic signal) and approximately 25 acres outside of the Ranch (i.e., the Off-Site Infrastructure Improvement Areas, associated buffer areas, and portions of nearby intersections where roadway improvements are proposed).[4] More specifically, these portions of the study area include: the Water Tank Area, which is an area of the Ranch south of Placerita Canyon Road where a water tank, a water line, and improvements to an existing access road would be constructed; the Trail Area, also located south of Placerita Canyon Road and overlapping with a portion of the Water Tank Area, where a public multi-use trail would be developed and which encompasses a 20-foot wide buffer area (corresponding to the maximum 20-foot wide easement that would be dedicated for the trail); two Conditional Parking Areas located east of the Development Area which may be developed as parking lots should LADWP revoke the parking license agreement for the lots within its transmission corridor; two Potential Mobile Home Relocation Areas, also east of

[4] *Acreage totals may not sum precisely due to rounding. Refer to Table V.F-1 below for more accurate acreages.*

the Development Area in a developed portion of the Ranch where the Ranch foreman's mobile home may be moved and an associated septic system installed; an area across from the current Ranch main entrance along the south side of Placerita Canyon Road where a retaining wall may be needed in conjunction with a proposed traffic signal; and the Off-Site Infrastructure Improvement Areas, where off-site water and sewer lines, an associated booster pump station (at one of two optional locations), certain roadway improvements, and replacement of approximately nine Southern California Edison (SCE) power poles are proposed, plus buffer areas that include a potentially 20-foot-wide construction area on both sides of the proposed utility lines and a 40-foot buffer area around the limits of grading for the proposed off-site booster pump station locations. The location of various areas of the Project site are depicted in Figures IV-4 and IV-5 in Section IV, Project Description.

The Water Tank Area is located on the Ranch in hilly terrain south of the Development Area and Placerita Canyon Road. Elevations within the Water Tank Area range from approximately 1,470 feet above MSL at the bottom of the existing unpaved access road to 1,668 feet above MSL at the water tank pad. The footprint of the water tank and access road improvements generally encompass areas previously disturbed by past and current oil drilling operations. These disturbances include prior clearing and grading to create level pads, which remain readily evident today and are largely devoid of native vegetation. South of the Water Tank Area, in the southernmost portion of the Ranch, oil production uses continue.

Near the Water Tank Area, the Trail Area is also located in hilly terrain south of the Development Area and Placerita Canyon Road. The Trail Area extends from the SR-14 northbound off-ramp adjacent to Placerita Canyon Road to southeast of the Water Tank Area at the Ranch's southern property line and includes a proposed trailhead/staging area of approximately 19,000 square feet at the base of the water tank access road. Elevations within the Trail Area range from approximately 1,455 feet above MSL at the SR-14 off-ramp to approximately 1,755 feet above MSL at the crest of the proposed trail alignment. The Trail Area comprises generally undisturbed land containing native vegetation, including chamise chaparral, coastal sage scrub, and oak woodlands; the trailhead/staging area, however, has been previously disturbed to create access to the past and current oil production uses in the southern areas of the Ranch and mostly contains non-native grasses.

The Conditional Parking Areas are located east of the Development Area in undeveloped, previously disturbed areas of the Ranch. These areas are generally flat with an average elevation of approximately 1,440 feet above MSL within the northern lot and ranging from 1,450 feet to about 1,470 feet above MSL within the southern lot. Much of the

southern Conditional Parking Area is used for parking and staging for existing Ranch and filming operations.

The Potential Mobile Home Relocation Areas, including the proposed locations for a septic tank for the mobile home, are situated in the southeast corner of the Ranch near an existing, developed area where the Ranch office, a barn, and a workshop are located. These areas are generally flat with elevations ranging from approximately 1,506 feet to 1,523 feet above MSL.

West of the Ranch and SR-14 and within the City of Santa Clarita, a variety of utility lines and associated infrastructure (i.e., the Off-Site Infrastructure Improvement Areas) are proposed as part of the Project. The majority of these proposed improvements are located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential development, in areas where limited natural communities are present. A limited portion of the proposed sewer alignment runs through private property in a developed/disturbed area. These areas are generally flat with elevations ranging from approximately 1,290 feet above MSL at the lowest point along the proposed sewer line alignment (Oak Orchard Alignment) to approximately 1,550 feet above MSL at the highest point along the Dockweiler Drive water line alignment (Alternative A).[5]

(2) Plant Communities

The study area includes common and sensitive plant species, with a total of 16 plant communities identified during surveys. Descriptions of the plant communities mapped within these areas are provided below. The plant communities and associated acreages are summarized in Table V.F-1 on page V.F-16. Maps showing the locations of each of the plant communities identified within the Ranch portions of the Project site are shown in Figure V.F-1 through Figure V.F-3 on pages V.F-17 through V.F-19; maps showing the plant communities identified within the off-site portions of the study area are shown in Figure V.F-4 through Figure V.F-11 on pages V.F-20 through V.F-27.

(a) Common Plant Communities

(i) Coastal Sage Scrub

There is approximately 0.38 acre of coastal sage scrub associated with the Off-Site Infrastructure Improvement Areas. Coastal sage scrub contains low, soft woody shrubs that are most active in winter and early spring. Many taxa are facultatively drought-

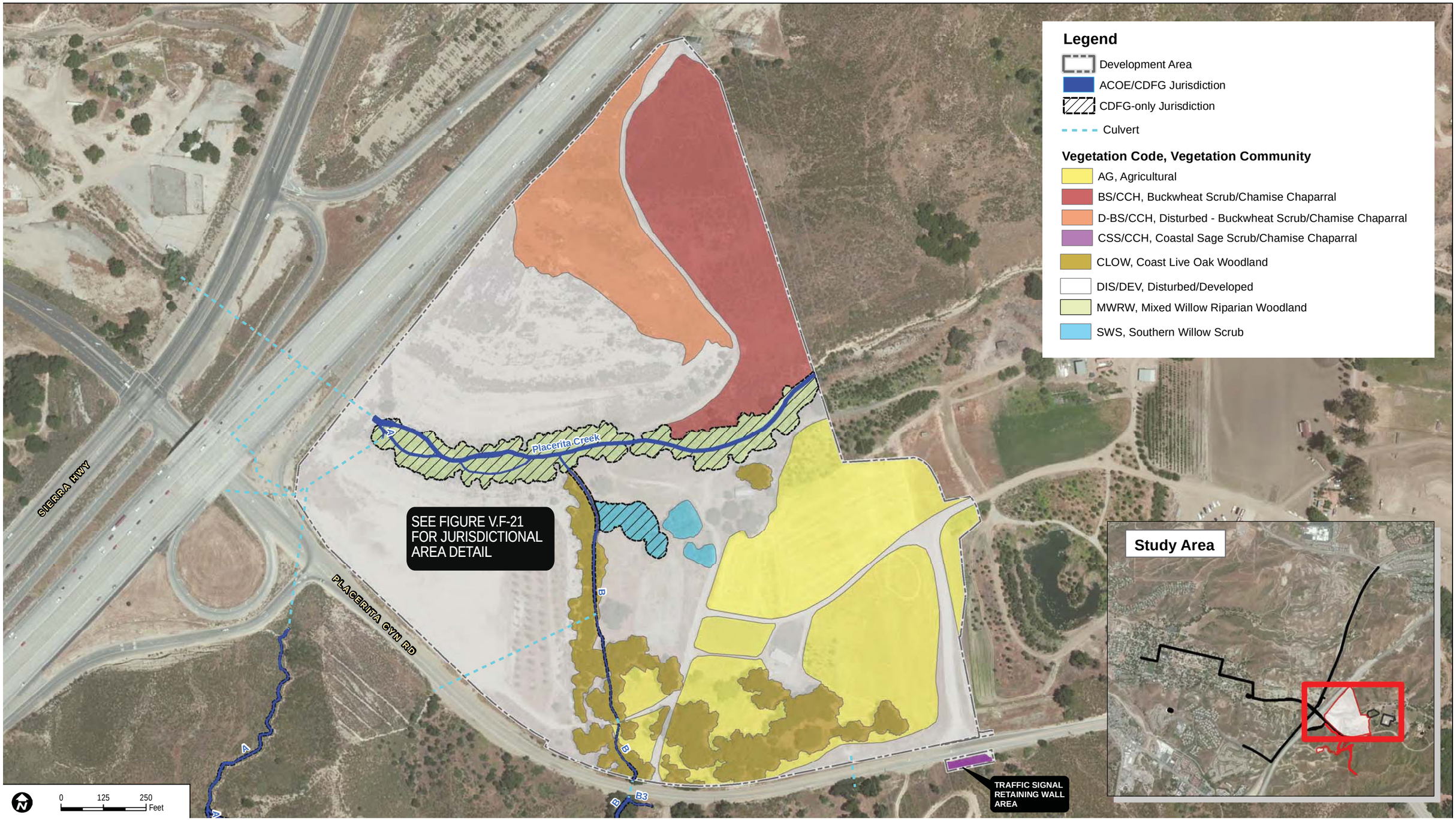
[5] *The point of connection of these systems to the proposed on-site system is at an elevation of approximately 1,450 feet MSL.*

Table V.F-1
Existing Plant Communities

Plant Communities	Development Area (acres)	Water Tank Area (acres)	Trail Area[a] (acres)	Potential Mobile Home Relocation Areas[b] (acres)	Conditional Parking Areas[c] (acres)	Current Ranch Main Entrance (Retaining Wall) (acres)	Off-Site Infrastructure Improvement Areas & SR-14 Interchange (acres)	Total (acres)
Coast Live Oak Woodland[d]	4.79	0.15	0.02	–	–	–	0.01	4.97
Disturbed Coast Live Oak Woodland[d]	–	–	0.19	–	–	–	0.19	0.38
Mixed Willow Riparian Woodland[d]	3.01	–	–	–	–	–	–	3.01
Southern Willow Scrub[d]	0.75	–	–	–	–	–	–	0.75
Coastal Sage Scrub	–	–	–	–	–	–	0.38	0.38
Disturbed Coastal Sage Scrub	–	–	–	–	–	–	0.04	0.04
Coastal Sage Scrub/Chamise Chaparral	–	0.58	0.45	–	–	0.09	–	1.12
Disturbed Coastal Sage Scrub/Chamise Chaparral	–	0.29	0.25	–	–	–	–	0.54
Buckwheat Scrub/Chamise Chaparral	6.56	–	–	–	–	–	0.26	6.82
Disturbed Buckwheat Scrub/Chamise Chaparral	4.59	–	–	–	–	–	–	4.59
Disturbed Buckwheat Scrub	–	–	0.21	–	–	–	0.12	0.33
Chamise Chaparral	–	–	0.91	–	–	–	–	0.91
Non-Native Grassland	–	0.06	–	–	–	–	0.76	0.82
Agricultural Land	11.32	–	–	0.10	2.84	–	–	14.26
Ornamental	–	–	–	–	0.04	–	–	0.04
Disturbed/Developed	27.45	1.44	–	0.10	4.39	0.05	23.67	57.10
Total	**58.47**	**2.52**	**2.03**	**0.20**	**7.27**	**0.14**	**25.43**	**96.06**

[a] *Portions of the Trail Area and Water Tank Area overlap; the Trail Area acreages represent only those areas that are not within the Water Tank Area.*
[b] *Only one of the two identified Potential Mobile Home Relocation Areas would be developed as part of the Project.*
[c] *The Conditional Parking Areas would only be developed in the event LADWP were to revoke the parking license agreement for the lots within its transmission corridor.*
[d] *Sensitive plant communities.*

Source: Dudek, 2012.



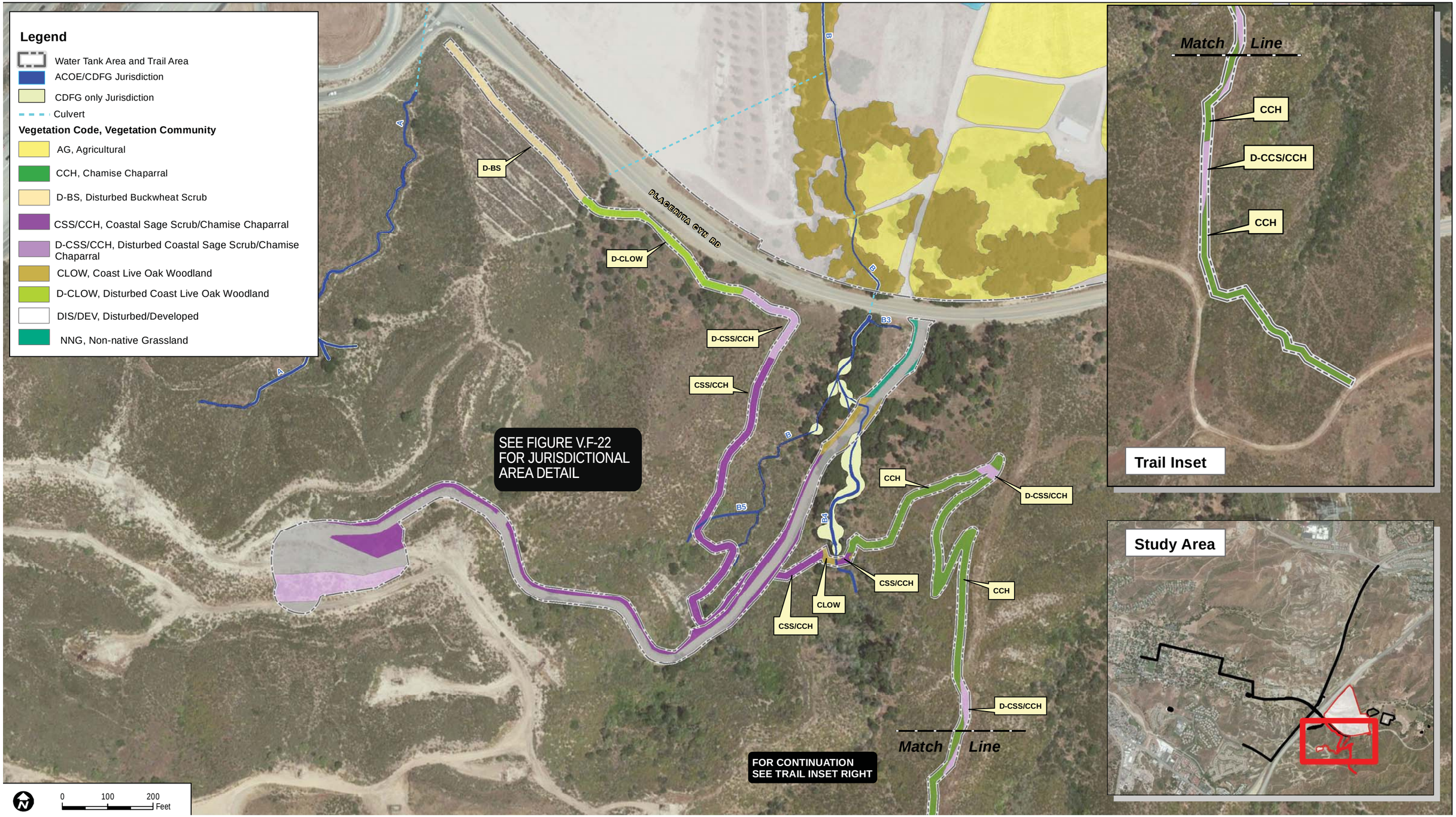
Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

matrix environmental

Figure V.F-1

Plant Communities and Jurisdictional Features – Development Area



Source: DUDEK, 2012.

matrix environmental

Figure V.F-2

Plant Communities and Jurisdictional Features – Water Tank Area and Trail Area

Source: DUDEK, 2012.

matrix environmental

Figure V.F-3

Plant Communities –

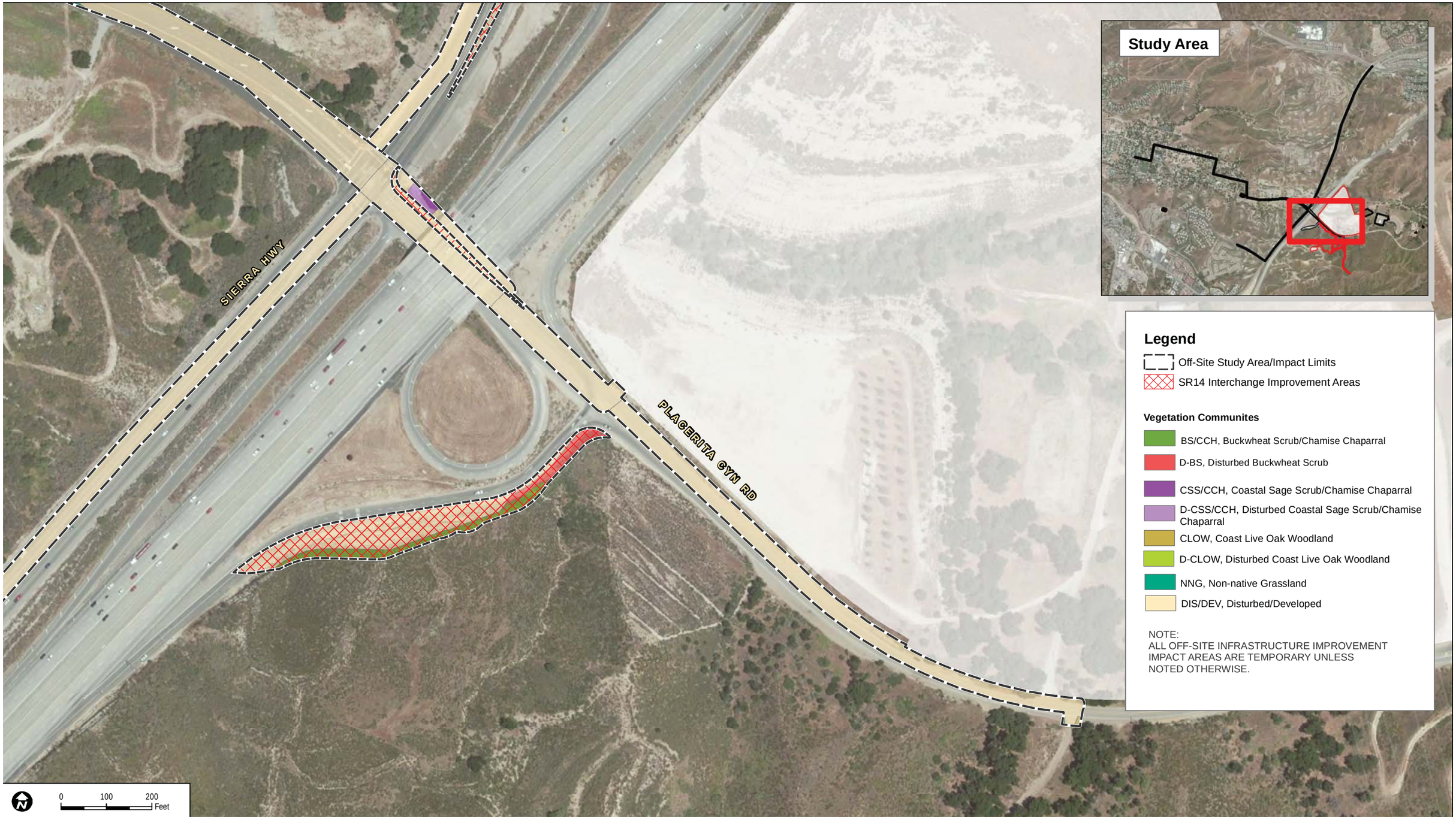
Conditional Parking Areas and Potential Mobile Home Relocation Areas

Source: DUDEK, 2012.

matrix environmental

Figure V.F-4

Plant Communities – Off-Site Infrastructure Improvement Areas (Southwest of Development Area)



Source: DUDEK, 2012.

matrix environmental

Figure V.F-5
Plant Communities –
Off-Site Infrastructure Improvement Areas and SR-14
Interchange Improvements (Southwest of Development Area)

Source: DUDEK, 2012.

matrix environmental

Figure V.F-6
Plant Communities – Off-Site Infrastructure Improvement Areas (West of Development Area)

Source: DUDEK, 2012.

matrix environmental

Figure V.F-7
Plant Communities – Off-Site Infrastructure Improvement Areas (West of Development Area)

Source: DUDEK, 2012.

matrix environmental

Figure V.F-8
Plant Communities – Off-Site Infrastructure Improvement Areas (West of Development Area)

Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

Figure V.F-9

Plant Communities –
Off-Site Infrastructure Improvement Areas and SR-14 Interchange Improvements (North of Development Area)

matrix environmental

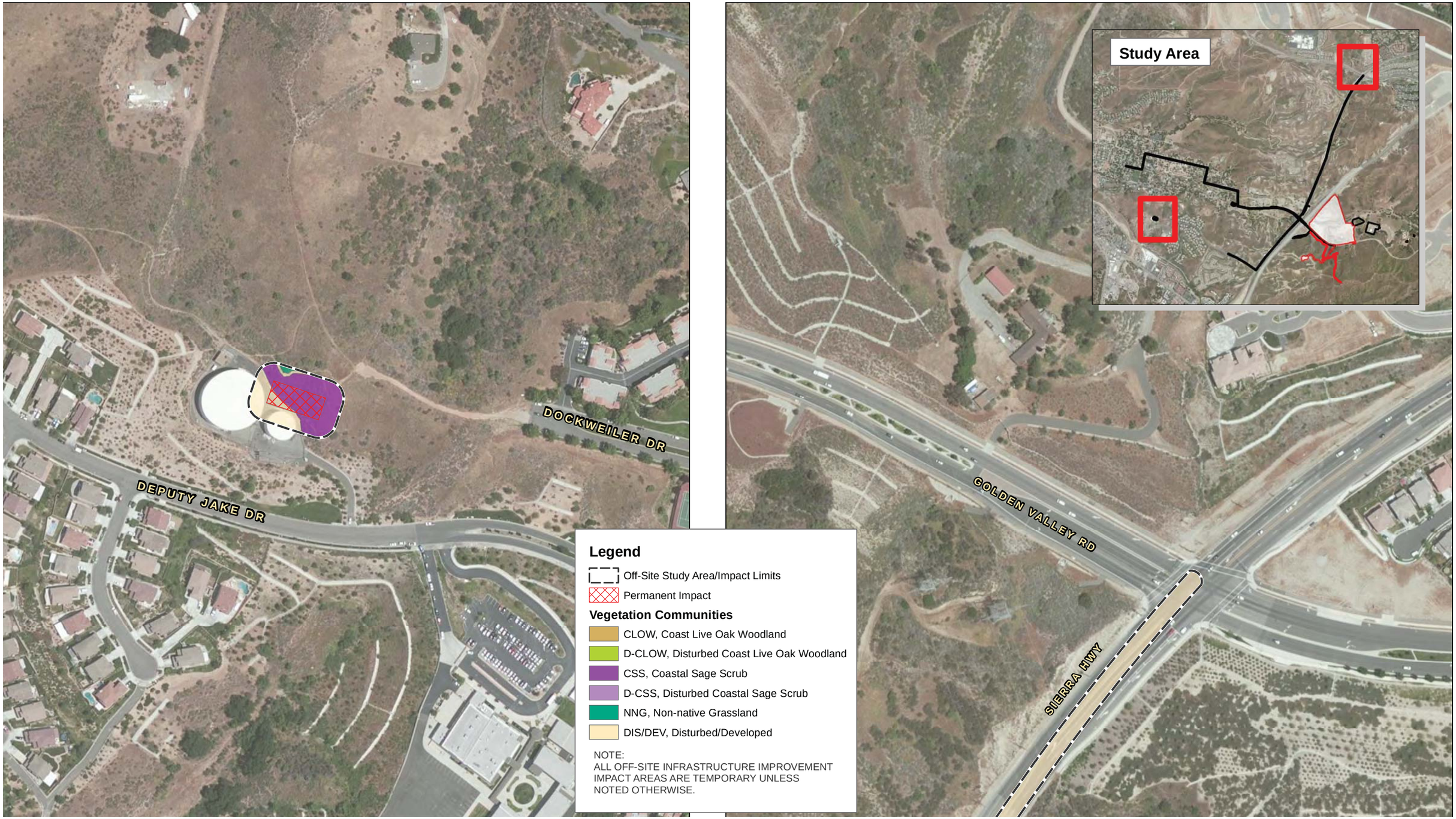
Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

Figure V.F-10

Plant Communities –
Off-Site Infrastructure Improvement Areas (North of Development Area)

matrix environmental



Source: DUDEK, 2012.

matrix environmental

Disney | ABC Studios at The Ranch

Figure V.F-11

Plant Communities –
Off-Site Infrastructure Improvement Areas
(North and West of Development Area)

deciduous. Within the study area, this community is dominated by California sagebrush (*Artemisia californica*) and California buckwheat. Associated plant species included ripgut grass, foxtail chess, big sagebrush (*Artemisia tridentata*), storksbill (*Erodium botrys*), short-podded mustard, black sage (*Salvia mellifera*), Russian thistle (*Salsola tragus*), chamise (*Adenostoma fasciculata*), western sycamore, chaparral nightshade (*Solanum xanti*), deerweed, mulefat, tree tobacco (*Nicotiana glauca*), purple sage (*Salvia leucophylla*), Our Lord's candle (*Yucca whipplei*), toyon, and wild cucumber (*Marah macrocarpa*).

(ii) Disturbed Coastal Sage Scrub

There is 0.04 acre of disturbed coastal sage scrub associated with the Off-Site Infrastructure Improvement Areas. These areas are primarily located along Sierra Highway and are highly disturbed due to human activities. This community supports a sparse cover of the coastal sage scrub species mentioned above.

(iii) Coastal Sage Scrub/Chamise Chaparral

There are 1.12 acres of coastal sage scrub/chamise chaparral associated with the Ranch (0.58 acre within the Water Tank Area, 0.45 acre within the Trail Area, and 0.09 acre across from the current Ranch main entrance). Coastal sage scrub/chamise chaparral contains components of both coastal sage scrub and chamise chaparral vegetation communities. This mixed community is dominated by California sagebrush, black sage, buckwheat and chamise.

(iv) Disturbed Coastal Sage Scrub/Chamise Chaparral

There is 0.54 acre of disturbed coastal sage scrub/chamise chaparral associated with the Ranch (0.29 acre within the Water Tank Area and 0.25 acre within the Trail Area). The species makeup of this community resembles the coastal sage scrub/chamise chaparral community but shows signs of prior disturbance.

(v) Buckwheat Scrub/Chamise Chaparral

There are approximately 6.82 acres of the buckwheat scrub/chamise chaparral plant community located in the study area (6.56 acres in the Development Area and 0.26 acre near the SR-14 interchange). Within the Development Area, this community occurs in the northeastern corner, particularly on the hillsides to the northeast of the northern fill pad. Buckwheat scrub/chamise chaparral contains components of both buckwheat scrub and chamise chaparral vegetation communities. This mixed community consists of low growing buckwheat and chamise (*Adenostoma fasciculatum*), often occurs on xeric slopes and ridges, and is adapted to frequent fires by crown sprouting. Associated species include California sagebrush (*Artemisia californica*), deerweed, Our Lord's candle (*Yucca whipplei*),

toyon, fasiculated tarweed (*Hemizonia fasciculata*), and white sage (*Salvia apiana*). Within the study area, this community also contains scrub oak (*Quercus berberidifolia*), wild oat, ripgut grass, foxtail chess, wild mustard, and black mustard (*Brassica nigra*).

(vi) Disturbed Buckwheat Scrub/Chamise Chaparral

One area of the disturbed buckwheat scrub/chamise chaparral plant community occurs within the Development Area. This area encompasses 4.59 acres on of a portion of the northern fill pad and is the result of on-going natural re-establishment of this community on the completely disturbed fill pad. This area contains many of the buckwheat scrub/chamise chaparral species present on the surrounding hillsides, with a large amount of unvegetated land and larger percentages of non-native species, including wild oat, ripgut grass, foxtail chess, and wild mustard and black mustard.

(vii) Disturbed Buckwheat Scrub

There is 0.33 acre of disturbed buckwheat scrub within the study area (0.21 acre associated with the Trail Area and 0.12 acre near the SR-14 interchange). These areas are primarily along Placerita Canyon Road and are highly disturbed due to human activities. This community supports a sparse cover of California buckwheat, chamise, California sagebrush, toyon, scrub oak wild oat, ripgut grass, foxtail chess, and black mustard.

(viii) Chamise Chaparral

The Trail Area includes 0.91 acre of chamise chaparral. Within this area, the chamise chaparral is densely vegetated and dominated by chamise.

(ix) Non-Native Grassland

Non-native grassland is dominated by invasive, exotic grass species. A total of 0.82 acre occurs within the study area (0.06 acre within the northeastern portion of the Water Tank Area, and 0.76 acre within a portion of the Off-Site Infrastructure Improvement Areas.

(x) Agricultural Land

There are approximately 14.26 acres of intermittently farmed agricultural fields located primarily in the southeastern corner of the Development Area (11.32 acres within the Development Area, 0.10 acre within the Potential Mobile Home Relocation Areas, and 2.84 acres within the Conditional Parking Areas). Areas characterized as agricultural lands include several well-defined fields recently disked for the planting of horse and cattle feed grasses. While some of this area is used periodically for the production of grain hays and

alfalfa, it also is used frequently for the construction of filming sets and outdoor filming pursuant to the Ranch's Conditional Use Permit (CUP) No. 04-089-(5).

(xi) Ornamental

Ornamental areas are dominated by non-native, landscaped plantings. Approximately 0.04 acre occurs within the Conditional Parking Areas.

(xii) Disturbed/Developed

Disturbed/developed areas comprise the majority of the study area, totaling approximately 57.10 acres (27.45 acres within the Development Area, 1.44 acre within the Water Tank Area, 0.10 acre within the Potential Mobile Home Relocation Areas, 4.39 acres within the Conditional Parking Areas, and 23.67 acres within the Off-Site Infrastructure Improvement Areas, including the SR-14 interchange). Disturbed/developed areas consist of areas of bare ground (i.e., fill pads and dirt roads), which have little or no vegetation growing on them; areas of remnant (i.e., less than 20 percent) native vegetation that are now vegetated with predominantly non-native species; and also areas planted with non-native tree species, including eucalyptus (*Eucalyptus* sp.) and Peruvian pepper (*Schinus molle*) tree groves. Developed areas include constructed building sites and associated structures, parking areas, and graded land. Disturbed/Developed areas within the study area were either barren or vegetated with a variety of non-native species, including wild oat, ripgut grass, foxtail chess, wild mustard, black mustard (*Brassica nigra*), fiddleneck (*Amsinckia* sp.), and red-stemmed filaree (*Erodium cicutarium*). Disturbed/Developed lands are not considered a sensitive plant community.

(b) Sensitive Plant Communities

Four sensitive plant communities were identified within portions of the study area: mixed willow riparian woodland, southern willow scrub, coast live oak woodland, and disturbed coast live oak woodland. No sensitive communities occur within the Conditional Parking Areas, Potential Mobile Home Relocation Areas, the SR-14 interchange improvement areas, or across from the current Ranch main entrance.

(i) Mixed Willow Riparian Woodland

Within the Development Area, a mixed willow riparian woodland community occurs on 3.01 acres in the riparian corridor associated with Placerita Creek. This community is typically dominated by mature willows (*Salix* spp.) forming a less than 100 percent canopy cover. This community occurs in habitats that are seasonally flooded such as floodplains and low gradient depositions along rivers and streams. Other species that may occur within this community include black cottonwood (*Populus trichocarpa*), bigleaf maple (*Acer*

macrophyllum), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), Mexican elderberry, and mulefat (*Baccharis salicifolia*).

Within the Development Area, the mixed willow riparian woodland supports a dominance of mature arroyo willow (*Salix lasiolepis*) and red willow (*S. laevigata*). Other species observed include mulefat, mugwort (*Artemisia douglasiana*), foxtail chess, ripgut brome, Mexican elderberry, deerweed (*Acmispon glaber*), a few Fremont cottonwood, and a few coast live oak trees. The mixed willow riparian woodland plant community is a CNDDB high inventory priority community and is considered sensitive due to its decline in the region and its ability to support sensitive species.

(ii) Southern Willow Scrub

Within the Development Area, the southern willow scrub community occurs on approximately 0.75 acre along a swale that receives runoff from adjacent agricultural fields. This community is typically dominated by arroyo willow with lesser amounts of other willow species and mulefat. Characteristically, southern willow scrub occupies wet and moist soils and is restricted in its distribution to the edges of ponds, lakes, and other areas where water pools, such as drainages and seeps.

Within the Development Area, scattered patches of this community support a dominance of arroyo willow and red willow. Other species observed include mulefat, mugwort and foxtail chess that primarily occur around the outer margins of the willows. Southern willow scrub is a CNDDB high inventory priority community and is considered sensitive due to its decline in the region and its ability to support sensitive species.

(iii) Coast Live Oak Woodland

Coast live oak woodland is not designated as a sensitive plant community by CDFG or in the CNDDB, however, CEQA Section 21083.4 requires analysis of a project's impacts on oak woodlands and mitigation for significant impacts to oak woodlands. Therefore, oak woodlands are considered a sensitive community for purposes of compliance with CEQA.

The coast live oak woodland plant community occurs on approximately 4.97 acres in the study area (4.79 acres within the Development Area, 0.15 acre within the Water Tank Area, 0.02 acre within the Trail Area, and approximately 0.01 acre within the Off-Site Infrastructure Improvement Areas). Coast live oak woodland is defined as a community that is dominated by large, mature to overly mature coast live oak (*Quercus agrifolia*), with at least a 10 percent canopy cover of oak trees and with a poorly developed shrub layer. This plant community typically occurs on north-facing slopes and in shaded ravines. Characteristic species of coast live oak woodland include coast live oak, toyon (*Heteromeles arbutifolia*), Mexican elderberry (*Sambucus mexicana*), poison oak

(*Toxicodendron diversilobum*), ripgut grass (*Bromus diandrus*) and goose grass (*Galium aparine*).

Areas within the Project site with at least a 10 percent canopy cover of oak trees were mapped as oak woodland. The dominant plant species of this community observed within the study area was coast live oak. Additional plant species observed within the study area included ripgut grass, foxtail chess (*Bromus madritensis*), Mexican elderberry, short-podded mustard (*Hirschfeldia incana*), wild oat (*Avena fatua*), California buckwheat (*Eriogonum fasciculatum*), and manzanita (*Arctostaphylos* sp.). A discussion of existing regulated oak trees within the study area is provided below.

(iv) Disturbed Coast Live Oak Woodland

There is 0.38 acre of disturbed coast live oak woodland within the study area, (0.19 acre within the Trail Area, and 0.19 acre associated with the Off-Site Infrastructure Improvement Areas outside the Ranch). These areas showed evidence of disturbance, such as fire and/or human activities associated with residential/industrial development.

(c) Sensitive Plant Species

Nine-quad queries were conducted of the CNDDB and CNPS for the Mint Canyon and San Fernando U.S. Geologic Survey (USGS) 7.5-minute quadrangles, within which the Project site is located. A 9-quad query includes a subject quadrangle and the eight surrounding USGS quadrangles. As the Mint Canyon and San Fernando quadrangles are adjacent to one another, the 9-quad query conducted for each of the subject areas produced overlapping quadrangles, resulting in a total of 12 quadrangles queried, as follows: Mint Canyon, San Fernando, Warm Springs Mountain, Newhall, Oat Mountain, Green Valley, Sleepy Valley, Agua Dulce, Sunland, Canoga Park, Van Nuys, and Burbank.

The query resulted in a total of 43 special-status plant species that have the potential to occur within the Project vicinity.[6] Refer to Table 2 within the BRA Addendum (Appendix F.3 of this Draft EIR) for a summary of each sensitive plant species recorded within the general vicinity or with a known range within the vicinity and its potential to occur within the study area. Botanical surveys were performed in May and June 2009; due to the highly disturbed conditions that exist over most of the area in which the Project would be located, including disturbed understories in oak woodlands, only limited focused plant

[6] *Seventeen sensitive plant species were considered in the Biological Resources Assessment. The BRA Addendum considered all 43 species with the potential to occur in the 12 USGS quadrangles and concurred with the findings in the Biological Resources Assessment regarding the original 17 species.*

surveys were conducted (see Appendix A within Appendix F.1 for a list of all observed plant species). Of the total 43 species with the potential to occur in the vicinity, 42 are not expected to occur within the study area either due to a lack of suitable habitat or based on negative results from the field investigations. One species, white rabbit-tobacco (*Pseudognaphalium leucocephalum*), has a low potential to occur due to the presence of suitable habitat but a lack of observation during field investigations.

In response to a USFWS comment letter regarding the Notice of Preparation (NOP) for the Project, focused surveys were conducted in June 2010 for the slender-horned spineflower and San Fernando Valley spineflower within potential habitat in the study area during their known blooming periods. Neither of these species was observed within the study area and they are not expected to occur given the lack of suitable habitat. Additionally, the study area is not located within any known proposed or final critical habitat areas for listed plants.

(d) Significant Ecological Areas

The existing Significant Ecological Area (SEA) overlay maps, which are a part of the County's General Plan, do not overlap with the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, current Ranch main entrance, or the Off-Site Infrastructure Improvement Areas, including the intersections where roadway improvements are proposed. As such, existing County policies regarding SEAs do not currently apply to the Project. The County, however, is in the process of updating the SEA overlay maps for the Santa Clarita Valley as part of the One Valley One Vision Plan, which is the Draft 2012 Santa Clarita Valley Area Plan. In the Draft SEA overlay maps, portions of the Development Area, in particular the hillside above the northern fill pad, Placerita Creek, the Water Tank Area, and the Trail Area have been proposed for designation within the Santa Clara River SEA (SEA 20). This proposed designation excludes most of the Ranch floor and the two large, mostly barren fill pads within the Development Area. However, as currently drafted, the Draft 2012 Area Plan allows complete project applications filed prior to the effective date of the Draft Area Plan to be reviewed for consistency under the current Santa Clarita Valley Area Plan. The County deemed complete the entitlement applications for the Project on May 4, 2010. Accordingly, the Project is not anticipated to be subject to the Draft 2012 Area Plan and associated SEA regulations. However, any future applications for new development beyond the requests of this Project after the adoption of the Draft 2012 Area Plan would be subject to the 2012 Area Plan and associated updated SEA regulations.

(3) Wildlife Inventory

(a) General Wildlife Inventory

The various plant communities found in the study area provide habitat for wildlife. As mentioned above, biological field surveys were conducted in May and June 2009 and again during focused plant surveys in June 2010. The wildlife species observed within the Development Area and the remaining portions of the study area include:

- western tiger swallow tail (*Papilio rutulus*)
- cabbage white (*Pieris rapae*)
- Pacific treefrog (*Pseudacris hypochondriaca*)
- western fence lizard (*Sceloporus occidentalis*)
- side-blotched lizard (*Uta stansburiana*)
- southern Pacific rattlesnake (*Crotalus viridis*)
- turkey vulture (*Cathartes aura*)
- Cooper's hawk (*Accipiter cooperii*)
- red-tailed hawk (*Buteo jamaicensis*)
- red-shoulder hawk (*Buteo lineatus*)
- California quail (*Callipepla californica*)
- mourning dove (*Zenaida macroura*)
- white-throated swift (*Aeronautes saxatalis*)
- American crow (*Corvus brachyrhynchos*)
- common raven (*Corvus corax*)
- oak titmouse (*Baeolophus inornatus*)
- bushtit (*Psaltriparus minimus*)
- house wren (*Troglodytes aedon*)
- northern mockingbird (*Mimus polyglottos*)
- California towhee (*Melozone crissalis*)
- spotted towhee (*Pipilo maculatus*)
- song sparrow (*Melospiza melodia*)
- house finch (*Carpodacus mexicanus*)
- lesser goldfinch (*Spinus psaltria*)
- desert cottontail (*Sylvilagus audubonii*)
- California ground squirrel (*Spermophilus beecheyi*)

- Anna's hummingbird (*Calypte anna*)
- northern flicker (*Colaptes auratus*)
- acorn woodpecker (*Melanerpes formicivorus*)
- Nuttall's woodpecker (*Picoides nuttallii*)
- ash throated flycatcher (*Myiarchus cinerascens*)
- black phoebe (*Sayornis nigricans*)
- western scrub-jay (*Aphelocoma californica*)
- coyote (*Canis latrans*)
- gray fox (*Urocyon cinereoargenteus*)
- raccoon (*Procyon lotor*)
- striped skunk (*Mephitis mephitis*)
- bobcat (*Lynx rufus*)
- mule deer (*Odocoileus hemionus*)

(b) Sensitive Wildlife Species

Sensitive wildlife species include those species listed as Endangered or Threatened under FESA or CESA, candidates for listing by the USFWS or CDFG, and special species of concern to the CDFG. The 9-quad query conducted for the study area resulted in a total of 47 special-status wildlife species that have the potential to occur within the Project vicinity.[7] Refer to Table 3 within the BRA Addendum (Appendix F.3 of this Draft EIR) for a summary of each sensitive wildlife species recorded within the general vicinity or with a known range within the vicinity and its potential to occur within the study area.

Focused surveys for the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, arroyo toad, and the western spadefoot toad were conducted between January 2010 and August 2010 in the Development Area and the Water Tank Area (which includes much of the Trail Area), the results of which are included as Appendix F.10 of this Draft EIR.[8] None of these species were detected within the Development Area

---

[7] *Twenty-eight sensitive wildlife species were considered in the Biological Resources Assessment. The BRA Addendum considered all 47 species with the potential to occur in the 12 USGS quadrangles and concurred with the findings in the Biological Resources Assessment regarding the original 28 species.*

[8] *Focused surveys are typically conducted for listed species or special-status species for which CDFG or USFWS have adopted protocols. The presence/absence of special-status species for which there are no established survey protocols is generally determined by assessing the potential for that species to occur. If a Project is within the species' range, the site contains suitable habitat, and the species has been documented in the vicinity of the Project site, it is considered to have a potential to occur on the site. With respect to this Project, the potential for on-site occurrence of each of the species documented in the queries was determined based on the results of the field investigations provided in the Biological Resources Assessment (Appendix F.1).*

or the Water Tank Area.[9] These species are not expected to occur within the Trail Area, Conditional Parking Areas, the Potential Mobile Home Relocation Areas, or the Off-Site Infrastructure Improvement Areas, or across from the current Ranch main entrance, due to lack of suitable habitat.

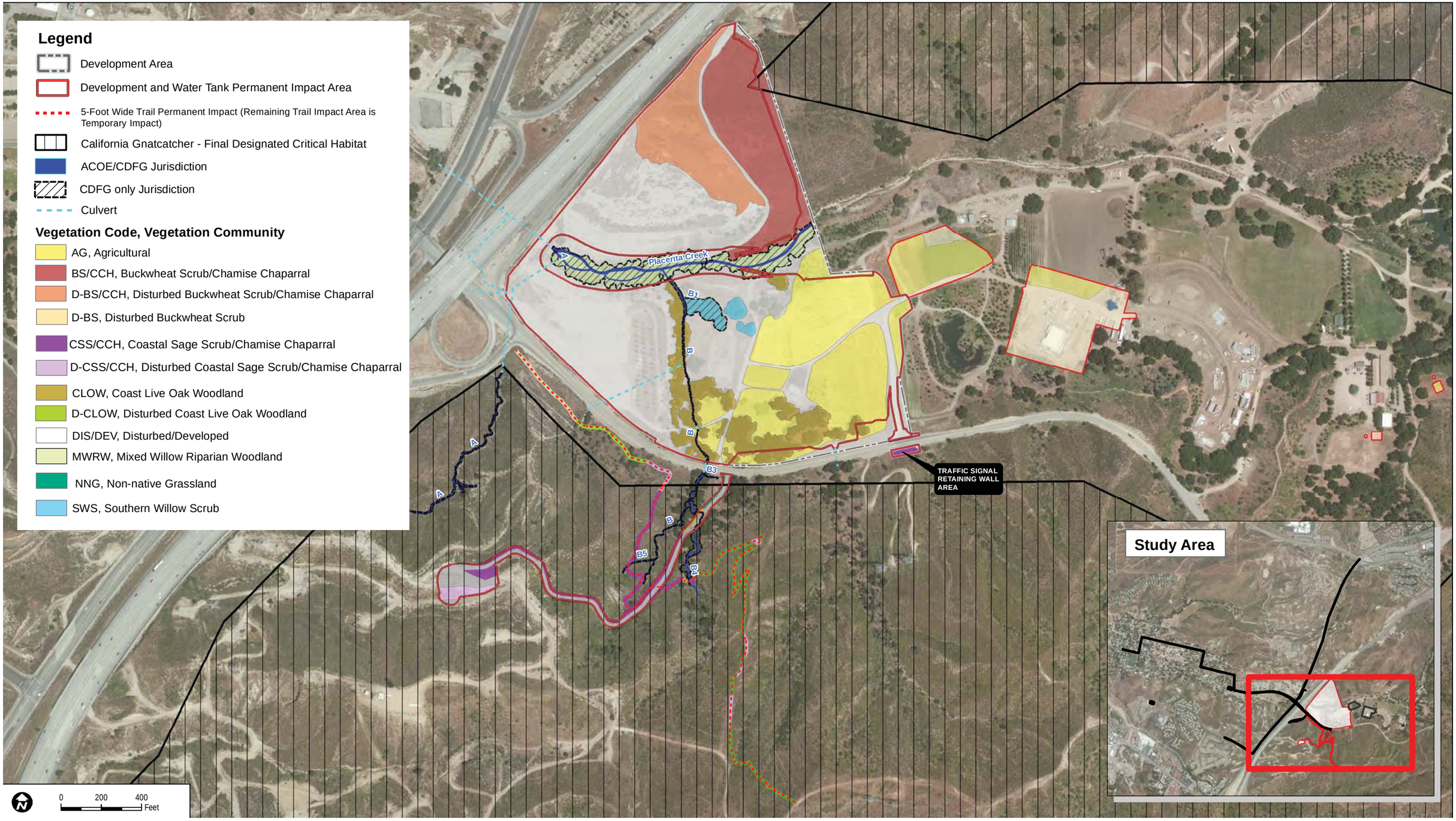
Of the total 47 species considered in this analysis, 2 were observed on-site (Cooper's hawk and yellow warbler) and 17 additional species have the potential to occur on-site, including 4 reptile species (coast horned lizard, silvery legless lizard, coastal western whiptail, and rosy boa), 3 raptor species (golden eagle, white-tailed kite, and prairie falcon), 3 passerine species (Bell's sage sparrow, loggerhead shrike, and Southern California rufous-crowned sparrow), and 7 mammal species (western mastiff bat, hoary bat, spotted bat, pallid bat, San Diego desert woodrat, Los Angeles pocket mouse, and American badger). Although none of these species were detected during surveys conducted on-site, these species would not necessarily be observed during the types of surveys conducted even though they may use on-site habitats based on the habitats present and the geographic location of the site relative to the species' ranges.

As shown in Figure V.F-12 on page V.F-37, the northern tip of the Development Area clips the final critical habitat for the coastal California gnatcatcher (Unit 13: West Los Angeles and Ventura Counties), and the Water Tank Area and Trail Area are also located within areas of designated critical habitat. However, no coastal California gnatcatchers were observed or otherwise detected during the focused surveys. The Conditional Parking Areas, the Potential Mobile Home Relocation Areas, and the Off-Site Infrastructure Improvement Areas are not within designated critical habitat for the coastal California gnatcatcher.

(4) Wildlife Movement

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, or individuals extending range distributions); (2) seasonal migration; or (3) movements related to home range activities (e.g., foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Although the nature of these types of movement is species-specific, large open spaces can generally support a diverse wildlife community with opportunities for all types of movement. Each type of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds on a local level to many

[9] *Willow flycatcher was observed but was not identified as southwestern willow flycatcher; additionally, these birds were determined to be transients and not resident breeding individuals.*



Source: DUDEK, 2012.

matrix environmental

Figure V.F-12
California Gnatcatcher Final Designated Critical Habitat

square mile home ranges of large mammals moving at a regional level. As explained below, movement on a local level does not necessarily constitute an established wildlife movement corridor.

Movement on a small or local scale occurs throughout the Ranch, including within the Development Area, primarily within Placerita Creek, and in the surrounding vicinity. Data gathered from biological surveys indicate the Development Area contains habitat that supports a variety of species of invertebrates, amphibians, reptiles, birds, and mammals. The home range and average dispersal distance of many of these species may be contained entirely within the Development Area and immediate vicinity. Populations of animals such as insects, amphibians, reptiles, small mammals, and a few bird species may find all their resource requirements without moving far or outside of the Development Area. Occasionally, individuals expanding their home range or dispersing from their parental range will attempt to move outside of a limited area such as the Development Area.

From a regional perspective, the Project site is situated east of the Santa Susana Mountains, west of the San Gabriel Mountains, and south of the Castaic Ranges. Angeles National Forest is located to the south and southeast of the Development Area as well as further to the north with intervening development. The presence of SR-14 and urbanized areas to the west of the Ranch, including the predominantly developed/paved Off-site Infrastructure Improvement Areas, inhibit the movement of larger mammals that require large home range areas and dispersal distances or dense vegetative cover (e.g., mountain lions). However, several large culverted crossings under SR-14 in the Project area, including one at the western end of the Development Area, provide wildlife the potential to cross under SR-14 and allow movement between open space blocks.

A local wildlife movement analysis was conducted for eight consecutive weeks from May to June 2008 (see Appendix B within Appendix F.1 to this Draft EIR, supplemented with information provided in Appendix F.3) to determine how animals move between areas of open space within and surrounding the Project site and the Ranch. Focal species were selected for analysis based on their ability to represent a large range of species, ecological niches, movement preferences and needs, and data availability. The modeled group of focal species was comprised of the American badger (*Taxidea taxus*), cougar (*Felis concolor*), mule deer, Pacific kangaroo rat (*Dipodomys agilis*), California quail, and western toad (*Anaxyrus boreas*). The results of this analysis revealed the presence of three wildlife corridors in the Ranch vicinity:

- Corridor #1, located approximately 0.75 mile south of the study area, encompasses portions of Whitney Canyon, Elsmere Canyon, and Towsley Canyon and has permeability levels ranging from 95 to 99.9 percent;

- Corridor #2, less than 0.5 mile north of the study area, encompasses portions of Whitney Canyon and Placerita Canyon, as well as some of the crossings between Canyon Country, west of I-5 and Sulphur Springs, southwest of the study area and has permeability levels ranging from 95 to 99.9 percent; and

- Corridor #3, located approximately six miles north of the study area, is north of Elsmere Canyon, Whitney Canyon, Placerita Canyon, and Sulphur Springs; northeast of Towsley Canyon, Weldon/Bee, and the crossings between Canyon Country and Sulphur Springs and has a permeability level ranging from 95 to 99 percent.

All three corridors are generally constrained by crossing opportunities (e.g., culverts, bridges, underpasses) available along SR-14, which forms a continuous wildlife movement barrier in the Ranch vicinity. None of the highest permeability areas of the three corridors traverse the Ranch, including the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas, or the Off-Site Infrastructure Improvement Areas. A detailed description of the three identified corridors can be found in the Biological Resources Assessment, included as Appendix F.1 of this Draft EIR.

Many factors influence the definition of movement corridors, including the resources present, adjacent uses, and physical obstacles (e.g., freeways, aqueducts, deep fissures, walls or fences). The software Corridor Design used in the wildlife movement analysis to model the least-cost path wildlife corridor only takes a few of these factors into account (habitats, elevation, roads, topographic position, slope, soils, and distance to streams) but not other factors that might physically impede wildlife movement. All such factors need to be evaluated on a case-by-case basis for actual ground conditions. Because the life history of the focal species is taken into account (maximum movement distance, territory size, etc.), it is assumed within the model that the 95 percent least-cost result will provide the best movement area for a given species.

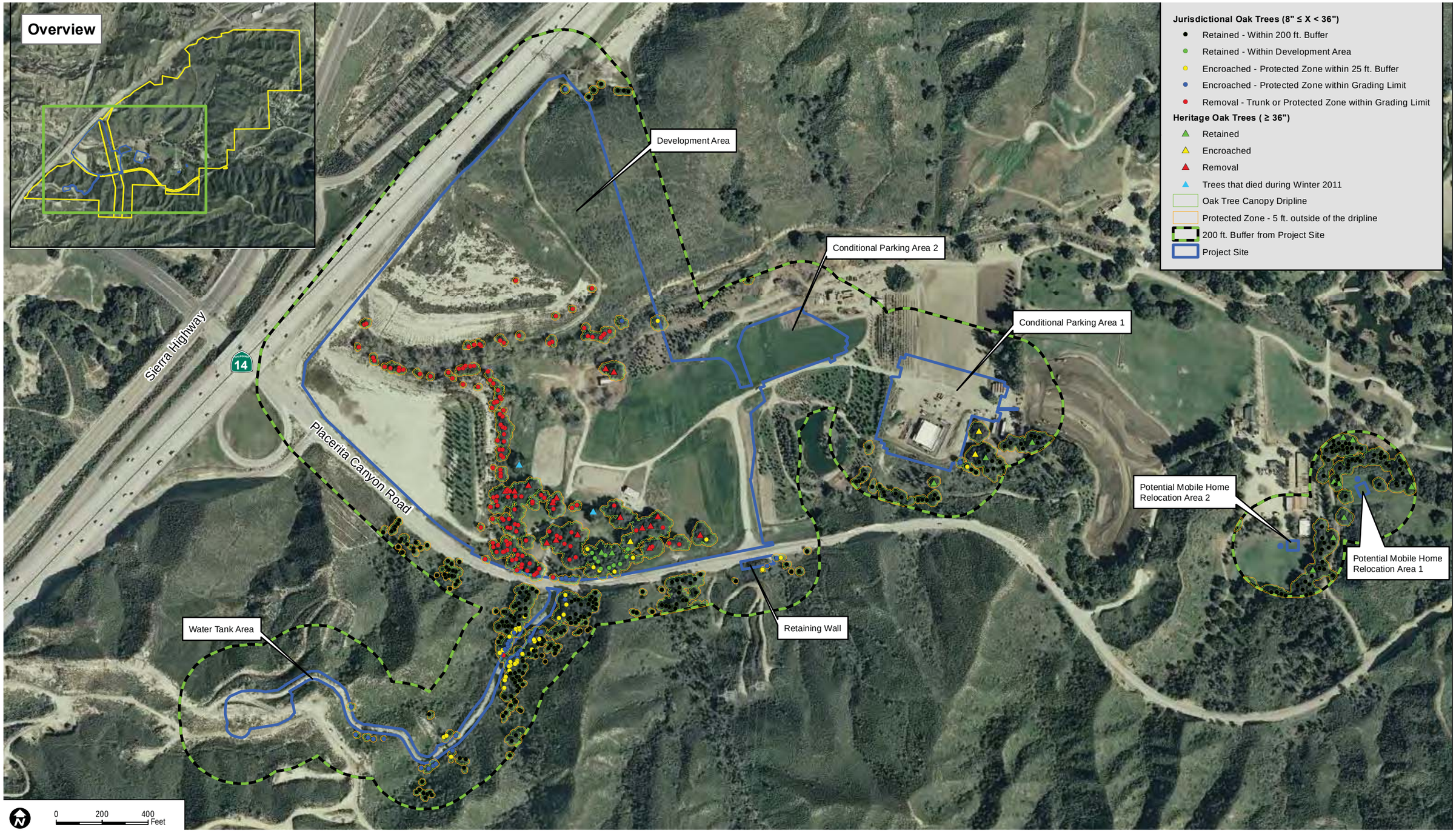
The results of the wildlife movement analysis suggest the study area (including the Ranch portions and off-site areas of the Project site) and Placerita Creek, in particular, support wildlife habitat for species on a local level that are less restricted in movement pathway requirements or are adapted to urban areas (e.g., deer, raccoon, skunk, coyote, and birds). However, given the length of the culverted crossing, other physical obstructions, and nearby urban development, the study area is not likely to support preferential wildlife movement for larger mammals on a regional scale. More specifically, the wildlife movement analysis found Placerita Creek provides for local movement of wildlife for foraging/watering but does not function as an established regional wildlife movement corridor.

The area of mapped oak woodland at the southern end of the Development Area is located within a wildlife corridor band with a permeability ranking of 95 to 97 percent. This permeability ranking includes the oaks as well as the surrounding and adjacent habitats. Due to the number of factors that contribute to the permeability ranking of the individual locations that collectively make up a modeled corridor, it is unlikely that the presence of the sparse group of oak trees affected the outcome of the overall permeability percentage. The oak woodland is currently constrained by Placerita Canyon Road to the south, the fill pad to the west, and agricultural uses to the east. This oak woodland supports few native understory species and does not constitute a complete band of oak habitat through which species could move. This woodland area may provide cover for wildlife, including large-bodied human-tolerant animals such as deer and coyotes, to move from the undeveloped areas south of Placerita Canyon Road north to Placerita Creek for foraging/watering. The wildlife corridor analysis also identified portions of the Ranch located east of the Development Area to have a higher permeability ranking (97 percent). These portions of the Ranch would be unaffected by the Project and would continue to provide opportunities for wildlife movement.

(5) Regulated Trees

A survey of oaks on the entire Ranch identified over 3,000 oak trees, including approximately 130 heritage oak trees, which qualify for protection under the County's Oak Tree Ordinance. A total of 563 oak trees of Ordinance-protected size exist and were inventoried, assessed, and mapped throughout the Ranch portions of the Project site and within 200 feet of the grading required for the construction of the Project within the Ranch. All trees surveyed are native coast live oak. Of these 563 oak trees, 32 are heritage oaks (36-inch diameter at breast height [dbh] or larger). A total of 182 of these trees, including 19 heritage oaks, occur within the Development Area, as shown in Figure V.F-13 on page V.F-41. An additional 63 of the inventoried trees (no heritage oaks) occur within the Water Tank Area, 4 trees including 2 heritage oaks occur near the southern Conditional Parking Area, 4 trees (no heritage oaks) occur across from the current Ranch main entrance, and the remaining 310 trees including 11 heritage oaks are located within the 200-foot buffer area. There are no oak trees within the northern Conditional Parking Area or the Potential Mobile Home Relocation Areas, although oaks are located within the adjacent buffer area of the latter. In addition, oak trees are located within and adjacent to portions of the Trail Area.[10] The tree counts are summarized in Table V.F-2 on page V.F-42, and additional

[10] *Other than those oaks that were surveyed within the adjacent/overlapping portions of the Water Tank Area, the oaks within or adjacent to the Trail Area were not formally surveyed, since the proposed trail has been specifically designed to avoid impacts to all oak trees. Refer to the impact analysis below for further discussion.*



Source: DUDEK, 2012.

matrix environmental

Figure V.F-13
Oak Tree Map (On-Site)

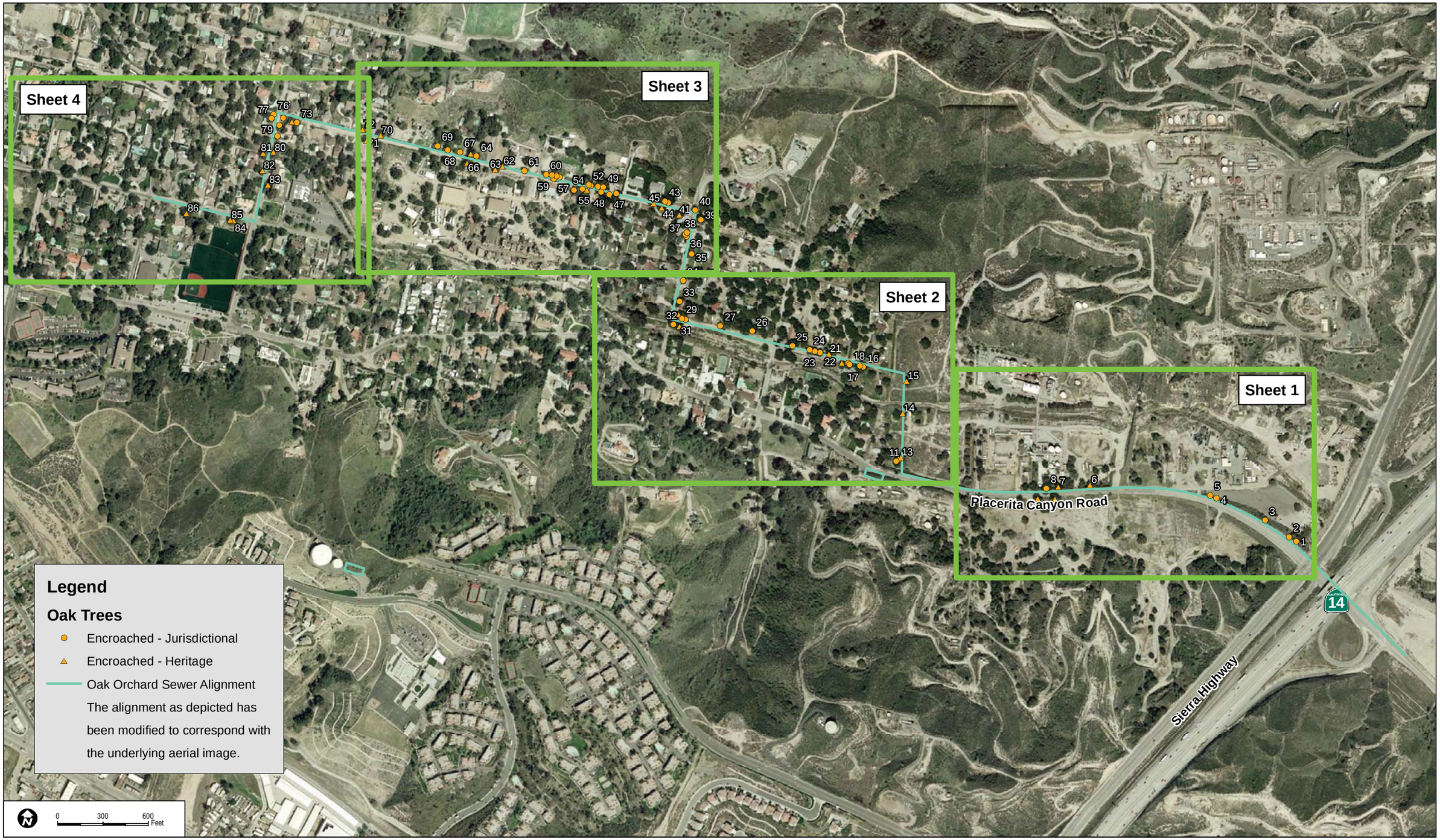
Table V.F-2
Tree Assessment Summary

Tree Location	Trunk Diameter (dbh)		Total
	8–35 inches	≥ 36 inches (Heritage)	
Development Area	163	19	182
Water Tank Area	63	0	63
Conditional Parking Areas	2	2	4
Potential Mobile Home Relocation Areas	0	0	0
Across From Current Ranch Main Entrance	4	0	4
200 feet Buffer Zone	299	11	310
Total	**531**	**32**	**563**

Source: Dudek, 2012.

details regarding the surveyed trees are provided in the County Oak Tree Report, included as Appendix F.4 of this Draft EIR.

Within Off-site Infrastructure Improvement Areas, which are within the City's jurisdiction (west of SR-14), a total of 86 oak trees of Ordinance-protected size were inventoried, assessed, and mapped, as shown in Figure V.F-14 on page V.F-43. This survey area encompassed the alignment for a gravity sewer line proposed in conjunction with the Project, referred to as the Oak Orchard Alignment, which is described in Section IV, Project Description, and further discussed in Section V.L.2, Utilities and Service Systems—Wastewater/Sewage Disposal, of this Draft EIR. The City would install the portion of the Oak Orchard Alignment within its jurisdictional limits as it is part of the City's sewer master plan and would allow existing development in the area to connect to the public sewer system. Of the 86 surveyed trees, 31 are heritage oaks. Additional details are provided in the City Oak Tree Report, included as Appendix F.5 of this Draft EIR. Tree surveys were not conducted for the two potential water line alignments, the SCE power pole replacements, or the roadway improvements including those at the SR-14 interchange, also proposed as part of the Project, as these improvements would occur within paved roadways, adjacent right-of-way, and developed areas where oak trees would not be affected.



Source: DUDEK, 2011. "Refer to the City Oak Tree Report for Sheet details."

matrix environmental

0' 300' 600' Feet
Approximate Scale in Feet

Figure V.F-14
Oak Tree Map (Off-Site)

(6) Jurisdictional Delineation of Wetlands, Waters of the US, and Waters of the State

Placerita Creek and one small tributary have been delineated within the Development Area, as shown in Figure V.F-1 on page V.F-17. Two small ephemeral tributaries to the creek have been delineated within the Water Tank Area and Trail Area, as shown in Figure V.F-2 on page V.F-18. No ephemeral tributaries to the creek have been delineated within the Conditional Parking Areas or the Potential Mobile Home Relocation Areas. Only Placerita Creek has been delineated within the Off-Site Infrastructure Improvement Areas, outside of the Ranch. The delineated jurisdictional areas within the creek and its tributaries (Tributaries A and B, and associated Sub-Tributaries) total approximately 5,898 linear feet of streambed, with 0.57 acre of ACOE/RWQCB jurisdictional "waters of the U.S./waters of the State" and 4.43 acres of CDFG jurisdictional streambed and associated riparian habitat, as indicated in Table 7 within the Biological Resources Assessment, included as Appendix F.1 of this Draft EIR. Within the defined study area, jurisdictional areas comprise approximately 3,127 linear feet of streambed, with 0.40 acre of ACOE/RWQCB jurisdictional "waters of the U.S./waters of the State" (0.38 acre within the Development Area, less than 0.01 within the Water Tank Area, less than 0.01 acre within the Trail Area, and 0.01 acre associated with the Off-Site Infrastructure Improvement Areas), and 3.30 acres of CDFG jurisdictional streambed and associated riparian habitat (3.24 acre within the Development Area, 0.01 acre within the Water Tank Area, and 0.05 acre associated with the Off-Site Infrastructure Improvement Areas), as detailed in Table 9 within the BRA Addendum (Appendix F.3).

Within the Development Area, Placerita Creek is confined within outer earthen banks, which define the creek's active floodplain and generally contain the wooded riparian corridor associated with the drainage channel. The stream channel is relatively straight, with vertical sandy inner banks and a streambed composed of sands and cobble substrate. The creek flows between the two gravel fill pads, which further confine the riparian corridor, and flows off the Development Area to the west through a large, 20-foot-diameter culvert underneath SR-14. Two high-flow channels, or braids, have also been mapped. These braids are generally small, sandy stream channels, which receive sufficiently frequent flows to maintain well defined channels. Tributaries A and B are small earthen channels or swales that collect surface flows from the surrounding uplands and discharge them into the creek.

South of the Development Area and Placerita Canyon Road, Sub-Tributaries B4 and B5 cross portions of the Trail Area and eventually connect to Tributary B, as shown in Figure V.F-2 on page V.F-18. Just downstream within the lower portion of the Water Tank Area, flows in Sub-Tributary B4 travel along an incised drainage channel and intersect with the existing access road, which is a foot or two above the grade of the streambed. Discharge then flows onto, down, and across the access road for a fairly short distance and

then reconnects to its historic channel. The access road does not sever the connection between the upstream and downstream flows.

Placerita Creek and its tributaries are characterized as having ephemeral flows, meaning they carry flows only during and immediately following storm events and are typically only supported by precipitation and stormwater runoff. Due to this ephemeral hydrology, most of the on-site tributaries support upland plant communities and well drained soils. None of the drainage features in the study area support federally jurisdictional wetlands.

3. ENVIRONMENTAL IMPACTS

a. Methodology

Detailed descriptions of the various methodologies employed for the biotic resources assessments are provided in the Biological Resources Assessment, BRA Supplement, BRA Addendum, County Oak Tree Report, City Oak Tree Report, Jurisdictional Waters Report, and Wildlife Impacts Analysis, provided as Appendices F.1, F.2, F.3, F.4, F.5, F.7, and F.9, respectively, of this Draft EIR.

Several resources surveys were completed to identify biological resources, wildlife movement corridors, regulated trees, and jurisdictional waters occurring within the study area. These resources surveys included, among others: field investigations to inventory plant and wildlife species in May and June 2009, with additional incidental observations occurring through September 2009 in conjunction with other surveys; a field investigation to inventory plant species within the Conditional Parking Areas and the Potential Mobile Home Relocation Areas in June 2011; focused surveys for sensitive wildlife species conducted between January 2010 and August 2010; the monitoring of motion-triggered cameras to observe wildlife movements within Placerita Creek from May 2008 through June 2008; oak tree surveys conducted throughout the Development Area and Water Tank Area from March 2009 through August 2010; an oak tree survey along the Oak Orchard Alignment in October 2010; an oak tree survey around the Conditional Parking Areas and the Potential Mobile Home Relocation Areas in June 2011; an assessment of jurisdictional features in the Development Area in May 2008, which was verified by ACOE and CDFG representatives in August 2009; an assessment of jurisdictional features within the Water Tank Area (including those features that traverse the Trail Area) and the Off-Site Infrastructure Improvement Areas in April 2010; an assessment of jurisdictional features within the Conditional Parking Areas and the Potential Mobile Home Relocation Areas in June 2011; a field investigation to inventory plant species within the Trail Area in December 2011; and existing ambient noise and light level measurements taken in November 2009 and June 2010, respectively, for use in the wildlife analysis. All surveys were conducted by credentialed biologists, wetland ecologists, and ISA Certified Arborists, as appropriate.

The biotic resources analyses also included reviews of relevant literature, including the CNDDB, CNPS, and various regulatory documents.

The results of the surveys were used to determine the Project's potential impacts to the resources identified within the study area. For purposes of this assessment, Project-related impacts can take two forms: direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which, in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals may also directly affect regional population numbers of a species or result in the physical isolation of populations, thereby reducing genetic diversity and, hence, population stability.

Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), non-native predators (e.g., domestic cats and other non-native animals) and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or operation of a project; therefore, these impacts may be short-term and/or long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to the study area.

The biological values of resources within, adjacent to, and outside of the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, the Off-Site Infrastructure Improvement Areas, and the SR-14 interchange improvements potentially affected by the Project were determined by considering several factors: the overall size of habitats potentially affected; previous land uses and disturbance history; the surrounding environment and regional context; the biological diversity and abundance within the area; the presence of sensitive plant and wildlife species; the importance of the area to regional populations of these species; and the degree to which habitats within the area are limited or restricted in distribution on a regional basis and, therefore, are considered sensitive in themselves. While this assessment is comprehensive, the focus is on regulated resources and sensitive resources.

Where it is concluded that either potential direct or indirect impacts could occur from either Project construction or Project operation, these impacts are then compared against applicable regulations to determine if any resulting impacts would be considered significant by the regulatory authority having jurisdiction over the resource. Where potentially

significant impacts are identified, mitigation measures are proposed to reduce these impacts. A discussion of the applicable regulatory thresholds is provided below.

b. Significance Thresholds

The potential for the Project to result in impacts associated with biological resources is based on the CEQA significance thresholds specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the State CEQA Guidelines and are as follows:

Threshold F-1: 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 CDFG or USFWS?

Threshold F-2: Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations, or by the CDFG or USFWS?

Threshold F-3: Would the project have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by Section 404 of the federal CWA or California Fish & Game Code Section 1600, et seq. through direct removal, filling, hydrological interruption, or other means?

Threshold F-4: 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?

Threshold F-5: Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10 percent canopy cover with oaks at least 5-inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, southern California black walnut, etc.)?

Threshold F-6: Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, § 22.56.215), and Sensitive

Environmental Resources Areas (SERAs) (L.A. County Code, Title 22, Ch. 22.44, Part 6)?

Threshold F-7: Would the project conflict with the provisions of an adopted State, regional, or local habitat conservation plan?

Threshold F-8: Would the project's grading, fire clearance, or flood related improvements remove substantial natural habitat areas?

Threshold F-9: Is a drainage course located on the project site that is depicted on USGS quad sheets by a dashed blue line or that may contain a bed, channel, or bank of any perennial, intermittent or ephemeral river, stream, or lake?

As discussed above, none of the drainage features in the study area support federally jurisdictional wetlands. As such, no impacts to wetlands would occur and no analysis regarding wetlands is provided below with respect to Thresholds F-2 or F-3. The Project site and its vicinity are not located within an area covered by a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Therefore, no impacts would occur and no further analysis of Threshold F-7 is required.

In addition, as discussed above, the existing SEA overlay maps do not overlap with the Project site, which would typically preclude the need for analysis of SEAs under Threshold F-6. However, given that the proposed, updated SEA overlay maps designate portions of the Development Area (in particular the hillside above the northern fill pad and Placerita Creek), the Water Tank Area, and the Trail Area as falling within the proposed Santa Clara River SEA (SEA 20), analysis is provided below with respect to the SEA.

c. Project Design Elements

The Project would provide for the development of a state-of-the-art studio and associated film and television production facilities within the approximately 58-acre Development Area. A complete description of the Project and associated development characteristics is provided in Section IV, Project Description, of this Draft EIR. To accommodate the Project, the entire Development Area would be cleared and mass graded. This earthwork would occur over a period of approximately six months (not taking into account possible nighttime hauling, discussed below, which could reduce the total duration of earthwork activities) during the initial phase of construction. Refer to Section V.A, Geotechnical Hazards, for a full description of earthwork activities throughout the Project site, including cut, fill and export quantities. Per Mitigation Measure (MM) V.E.1-7 in Section V.E.1, Air Resources—Air Quality, mass grading would be limited to 10 acres per day.

In addition to daytime construction activities, a second work shift from approximately 7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M. may occur for soil export activities. Activities scheduled during this night shift would be limited to loading and hauling (e.g., the arrival of empty trucks to the Development Area, on-site loading of these trucks with dirt (which will only occur in the area south of the creek), and departure of the loaded trucks) and would include measures to ensure there would be no noise disturbance to residential uses off-site due to these hauling activities (i.e., alternative routes along residential streets would not be used). If needed, lighting for nighttime hauling activities would be similar in nature to that currently used within the Ranch for filming activities and would be directed towards the center of the work area, away from Placerita Creek. It is estimated that approximately 250 to 300 haul truck trips may occur during a nighttime shift, with an average of roughly 40 trips per hour. Assuming no change in the number of daytime trips, implementation of a nighttime hauling shift would serve to reduce the overall hauling period by up to two months.

During the construction phase of the Project, a 20-foot wide temporary unpaved construction road would be developed around the base of the fill pad slopes into Placerita Creek, with a temporary creek crossing located approximately midway between the eastern and western sides of the Development Area (in the location of an existing unpaved crossing), as illustrated in Figure IV-13 in Section IV, Project Description, necessitating limited grading and vegetation removal. The temporary access road and associated creek crossing would be removed and ultimately replaced with a permanent bridge, and the creek would be restored after the completion of construction. The 220-foot bridge would span the width of the creek, with the bridge footings placed above the banks such that there would be no paved surfaces within Placerita Creek, thus minimizing impacts to the creek and the associated jurisdictional features. To provide for stable slopes and to address existing erosion of the slopes, the banks of Placerita Creek within the Development Area would be graded, stabilized with slope armor, covered with soil and replanted with native plant species. This slope stabilization would occur from the base of the creek to the top of the slopes along the entire portion of the creek within the Development Area (i.e., between the culvert under SR-14 and the eastern boundary of the Development Area). Additionally, a 15-foot-wide slope stabilization access road paved with soil cement and designed for County use for maintenance purposes would be introduced at the top of the stabilized slopes of the creek, as also illustrated in Figure IV-13 in Section IV, Project Description. This access road would extend from the northern parking lot within the LADWP transmission corridor west to the edge of the Development Area, then loop around to the northern side of the creek and terminate near the easternmost parking area in the northern pad. The road would allow for access to several new drainage outlets and the slope armor and would pass under the proposed bridge. The creek and the reconstructed slopes would then be revegetated with native plant species as part of a HMMP that would be implemented in conjunction with Project mitigation, discussed below.

As part of the Project, a comprehensive landscaping plan would be implemented to enhance the existing natural features within the Development Area. Placerita Creek would continue to serve as an integral natural amenity and focal point for the Ranch, enhanced by implementation of a habitat restoration plan. In accordance with the County's Drought-Tolerant Landscaping ordinance, at least 75 percent of the Project's landscaped area would contain plants from the Los Angeles County Drought-Tolerant Plant List. In addition, consistent with existing practices on the Ranch, mature native trees, including oak trees, would be planted and enhanced with complementary native vegetation. The steep slopes along the south side of the creek would be terraced and planted with native grasses and other native riparian vegetation. Native trees and other plantings along the existing entrance road would create a landscaped "gateway" to the Ranch. To screen off-site views of the Project, a vegetation barrier (i.e., including a screening berm with native plants) heavily planted with trees and shrubs would be created along the western perimeter of the Development Area adjacent to SR-14 and a portion of the southern perimeter along Placerita Canyon Road. A series of vegetated bioswales would be installed within some of the parking areas, as further detailed in Section IV, Project Description.

Since the Development Area is located in a County-designated Very High Fire Hazard Severity Zone, a fuel modification plan would be required to minimize the risk of wildfires. The fuel modification plan for the Project would set forth buffer zones around the proposed structures and would dictate the types of vegetation permitted within the zones. The fuel modification buffers would be modified near the proposed electrical substation to avoid thinning and brush removal in the small area of designated critical habitat for the coastal California gnatcatcher. Fuel modification activities would not be necessary within gnatcatcher critical habitat in the Water Tank Area or Trail Area as no habitable structures would be developed in that portion of the Project site. Refer to Section V.K.2, Public Services—Fire Protection, for further discussion and Figure V.K.2-2 therein for an illustration of the preliminary fuel modification plan for the Project. The preliminary fuel modification plan was approved by the Los Angeles County Fire Department's Forestry Division on August 30, 2011.[11]

The Project would incorporate a number of design features to minimize indirect, or secondary, impacts to wildlife from noise and lighting during construction and over the

[11] *As noted in a cover letter to the preliminary fuel modification plan, following approval of the plan the Project boundary was slightly changed and the Development Area increased from 56 acres to approximately 58 acres. These changes will be reflected in the final fuel modification plan to be prepared based on the Project's final design plans, which will be submitted to the Los Angeles County Fire Department's Forestry Division for review and approval.*

course of the long-term operation of the studios. The Project would include the following features to minimize noise impacts during construction:

- Project contractor(s) would equip all construction equipment, fixed or mobile, with properly operating and maintained noise mufflers, consistent with the equipment manufacturers' standards.
- The majority of Project construction-related truck trips would be scheduled outside of the A.M. (7:00 A.M. to 9:00 A.M.) and P.M. (4:00 P.M. to 6:00 P.M.) peak traffic hours to reduce both traffic levels and associated traffic noise during peak commute periods.
- Construction activities and related noise associated with the off-site infrastructure improvements would depend on the governing jurisdiction of the various segments of the water and sewer line alignments. Specifically, for segments within the jurisdiction of the County of Los Angeles or the City of Santa Clarita, construction would be permitted from 7:00 A.M. to 7:00 P.M. Monday through Friday and 8:00 A.M. to 6:00 P.M. on Saturday. For segments under Caltrans' jurisdiction, construction hours would be from 11:00 P.M. to 5:00 A.M. Monday through Friday.

The Project would include the following features to minimize noise impacts during operation of the Project:

- Building mechanical/electrical equipment would be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control.
- Mechanical equipment buildings (e.g., the central plant) and the proposed booster pump station would be designed to meet the noise limit requirements of Los Angeles County Code, Chapter 12.08—Noise Control.

A set of conceptual lighting guidelines has been developed to direct the design and implementation of lighting in the Development Area, as discussed further in Section V.I, Visual Qualities. These are as follows:

- There would be minimal light trespass on adjacent native habitat areas, including groves of trees and Placerita Creek. Fixtures would be carefully placed and directed to reduce glare.
- The use of control devices on fixtures, such as lenses, louvers, barn doors, and snoots would provide optimum beam control and minimize glare. The locations of fixtures would be carefully selected based on desired angles of light and intended use.

- Along bridges, certain small minor parking areas (e.g., some of the single rows of parking with a limited number of spaces), and some of the mill areas, lighting would have a defined optical system to project lumens downward to minimize light trespass with no backlight on the creek below.

- Within the main parking areas (e.g. the two parking lots within the LADWP transmission corridor), post lights would have optimum beam control, including sharp cut off with no uplight component. The fixtures would be located at the perimeters of parking areas. Beam patterns would be asymmetric with the majority of light aimed at parking, and reduced light falling behind post lights. A minimum amount of light would trespass on surrounding foliage.

- Only emergency lighting would be placed around the electrical substation and at the water tank. These would only be used in cases of emergency and not during normal operations.

- Lighting for the Conditional Parking Areas, if developed, would consist of soft light adequate for visibility and security.

d. Impact Analysis

Threshold F-1: 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 CDFG or USFWS?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Common Wildlife Species

The Project's primary potential impacts on wildlife resources involve the removal and disruption of habitat and the loss and displacement of wildlife, resulting in a less diverse and less abundant local faunal population. Adverse impacts to wildlife are generally associated with the degree of habitat loss and fragmentation from the standpoint of physical character, quality, diversity, and abundance of vegetation. The Project could cause the direct mortality of some common wildlife species and the displacement of more mobile species to suitable habitat areas nearby. Given the limited scale at which such impacts would occur as compared to total population sizes, regional range, etc., these impacts by themselves would not be expected to reduce general wildlife populations below self-sustaining levels within the region, and as such, impacts to common wildlife species would be less than significant.

(b) Sensitive Wildlife Species

As previously indicated, the focused surveys for the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, arroyo toad, and western spadefoot toad did not detect any of these species within the Development Area and/or Water Tank Area (including overlapping portions of the Trail Area). These species are not expected to occur within the Conditional Parking Areas or the Potential Mobile Home Relocation Areas due to lack of suitable habitat and the developed/disturbed nature of these areas, and the Conditional Parking Areas and the Potential Mobile Home Relocation Areas are not located within designated critical habitat. The northern portion of the Development Area does clip designated critical habitat for the coastal California gnatcatcher (Unit 13: West Los Angeles and Ventura Counties), and the Water Tank Area and Trail Area are also within designated critical habitat for the coastal California gnatcatcher. However, no coastal California gnatcatchers were observed or otherwise detected during the focused surveys in these areas. The Project grading footprint within the Development Area would not occur within critical habitat and thus would avoid impacts to critical habitat. With respect to the Water Tank Area, there is a small patch of vegetation mapped as disturbed coastal sage scrub/chamise chaparral within the proposed water tank pad and coastal sage scrub/chamise chaparral adjacent to the access road, which is a vegetation community that can be used by coastal California gnatcatcher. However, given the disturbed quality of this habitat, its fragmentation by existing roads to both to the north and south, the marginal suitability of the habitat adjacent to the access road, and the absence of coastal California gnatcatcher during focused surveys, the habitat within the Water Tank Area is considered to be of low quality and is not expected to support the coastal California gnatcatcher.

Within the Trail Area, the coastal sage scrub/chamise chaparral and disturbed coastal sage scrub/chamise chaparral communities, which are located near the water tank access road, are marginally suitable for the coastal California gnatcatcher. However, most of the vegetation structure within this community is much denser than typical coastal California gnatcatcher habitat; open patches are present but comprise a small portion of the mapped area. As previously indicated, a large portion of the Trail Area was encompassed by the coastal California gnatcatcher focused survey conducted for the Water Tank Area. The portion of the Trail Area outside the survey area is comprised of disturbed vegetation believed to be a firebreak and is not expected to support the coastal California gnatcatcher. Also, given the proximity of the Trail Area to the coastal California gnatcatcher focused survey area, it is highly likely that if gnatcatcher were present in the Trail Area that it would have been detected during the surveys. Due to the marginal suitability of the habitat within the Trail Area, its location adjacent to the water tank access road (i.e., a highly disturbed area), the absence of coastal California gnatcatcher during focused surveys, and the distance of the nearest recorded occurrence (six miles southeast and nine miles northeast from the Project site), the Trail Area is not expected to support coastal California gnatcatcher. Based on the marginal suitability of habitat within the Water

Tank Area and Trail Area for coastal California gnatcatcher, the small amount of habitat to be removed (0.19 acre), and the absence of coastal California gnatcatcher during focused surveys, the Project would not appreciably diminish the ability of coastal California gnatcatcher to occupy the area, and impacts to elements crucial to the coastal California gnatcatcher within designated critical habitat would not occur.

Several other sensitive wildlife species have the potential to occur within the Development Area, Water Tank Area, and Trail Area, including coast horned lizard, silvery legless lizard, golden eagle (foraging only), loggerhead shrike, yellow warbler, western mastiff bat, San Diego desert woodrat, coastal western whiptail, rosy boa, Cooper's hawk, Bell's sage sparrow, Southern California rufous-crowned sparrow, white-tailed kite, prairie falcon, hoary bat, Los Angeles pocket mouse, and American badger. The Potential Mobile Home Relocation Areas and Conditional Parking Areas do not support habitat for special-status wildlife species. Refer to Table 3 within the BRA Addendum (Appendix F.3 of this Draft EIR) for a complete list of the 47 special-status wildlife species that were considered in this analysis. None of these species were detected during the surveys conducted on-site. While all of the 47 special-status wildlife species are considered sensitive by CDFG and/or USFWS, only the golden eagle is considered Threatened or Endangered.

Detailed discussion of impacts to the vegetation communities found within the Project site that have the potential to support the special-status wildlife species, and the associated potential impacts to such species is provided in the BRA Addendum (Appendix F.3). Permanent impacts to riparian habitat, which has the potential to support reptiles, birds, and some of the mammal species, would occur within 0.71 acre or approximately 19 percent of the approximately 3.7 acres occurring within the Project site on the Ranch. All temporarily impacted riparian habitat (2.09 acres) would be restored following Project construction, and additional riparian habitat occurs elsewhere within the Ranch. Similarly, approximately 11.7 acres of sage scrub and chaparral communities would be impacted, while existing conditions would be preserved within approximately 832 acres of the Ranch that support similar habitat. In summary, given the limited scale at which habitat impacts would occur as compared to available habitat elsewhere within the Ranch, the marginal suitability of the disturbed/developed areas that make up much of the Project areas, total population sizes and regional range of the species, etc., Project impacts would not be expected to reduce wildlife populations below self-sustaining levels within the region. In other terms, potential impacts would not threaten the regional populations of these species since Project development would occur over a limited area (approximately 71 acres within the Ranch, with permanent impacts occurring within approximately 62 acres or less than 7 percent of the total habitat available within the Ranch) of these species' known habitats and since the Project would restore and expand riparian areas (within 4.14 acres, for a net gain of 1.58 acres of new riparian habitat, discussed further below) and coast live oak woodland (oak trees would be planted within potential expansion and restoration areas that

collectively comprise approximately 21 acres) within the Ranch. In addition, potential direct impacts to individuals during construction activities are also expected to be minimal since individuals occurring within the Project footprint would have the ability to move into adjacent suitable habitat. Mortality of individuals would not adversely affect the overall population of any given species. Therefore, the Project would not have a significant impact on these species.

The golden eagle is a State Fully Protected species and may use portions of the Ranch, including portions of the Project site, and the surrounding vicinity for foraging. This species is considered sensitive during nesting and wintering (i.e., wintertime roosting); it was not observed at the Ranch during the surveys and is not expected to use the Development Area or other areas of the Project site for nesting or wintering activities. Project implementation would not threaten the regional population since only potential foraging habitat would be affected. Given the limited scale at which such impacts would occur (permanent impacts would occur within approximately 62 acres or less than 7 percent of the total foraging habitat available within the Ranch, and existing conditions would be maintained on 832 acres of the Ranch), the Project's removal of potential foraging habitat of the golden eagle would not have a potentially significant impact on this species.

(i) Indirect Impacts on Wildlife Due to Construction Noise and Lighting

Indirect or secondary impacts to sensitive wildlife are potentially associated with construction noise and lighting in the short-term, as well as operational noise and lighting in the long-term. While the majority of Project construction activities would occur during daytime hours, the Project may include nighttime hauling for soil export activities, which would reduce the overall duration of the earthwork phase. If implemented, this second work shift would occur from approximately 7:00 or 8:00 P.M. to approximately 2:00 or 3:00 A.M. Analysis of both daytime and nighttime construction noise and lighting and their effects on wildlife is provided below.

Construction noise can affect essential behavioral activities (e.g., roosting, breeding, foraging, etc.) in several ways, depending on the level and duration of construction. Most commonly, excessive noise may disturb nesting birds leading to nest failure and may interfere with acoustic communication during periods of breeding. As discussed in Section V.C, Noise, of this Draft EIR, daytime Project construction activities could produce maximum noise levels of 76 dBA to 101 dBA at up to 50 feet from the noise source. The upper end of this range would be associated with short-term, intermittent activity, such as a pile driver, with the majority of the construction equipment noise levels ranging from 78 to 84 dBA. Existing ambient noise levels within the Development Area range from 49 to 72 dBA during the day and 43 to 70 dBA at night. As detailed in the BRA Supplement (Appendix F.3), based on the existing minimum ambient daytime noise level of

approximately 50 dBA within the Development Area and the maximum daytime construction noise level of approximately 100 dBA, construction noise would drop off to 70 dBA at a distance of 100 feet and 60 dBA at 300 feet from the construction noise source, which would be comparable to the mid-range noise levels that currently occur on-site. In addition, best management practices (e.g., proper equipment maintenance and use of noise mufflers) would be applied during Project construction to reduce noise impacts, and the anticipated maximum noise levels would be of a temporary and intermittent nature.[12] Further, the hillsides surrounding the Ranch floor, existing landscaping and vegetation throughout the Ranch and surrounding area, and SR-14 would act as buffers for wildlife. As previously indicated, less than 7 percent of total potential habitat available within the Ranch would be impacted, and existing conditions would be maintained on 832 acres of the Ranch. Species present within the Development Area would be expected to move to adjacent undeveloped areas of the Ranch where suitable habitat occurs. Given the short range of increased noise from the Development Area, the opportunity for wildlife to move into adjacent undeveloped areas, and the range of existing ambient noise levels of up to 72 dBA, impacts to wildlife species, including special-status species, located within, adjacent to, and off-site from the Development Area would be less than significant.

While it would be possible for birds to nest in the habitat to be left undisturbed within Placerita Creek during construction (and thus to be subject to construction noise), the proposed mitigation measure for nesting birds (MM F-2) would require surveys to be conducted for nesting birds if construction activities take place during the breeding season. If nesting birds occur within 300 feet of the disturbance area, a suitable buffer would be implemented based on the particular location of the nest (typically 300 feet for most birds and 500 feet for raptors), and the nest would be monitored by a biologist to ensure activities do not result in nest failure. With implementation of the mitigation measure, construction noise would not result in significant impacts to nesting birds.

Within the Trail Area, construction of the trail would be conducted with hand tools and small equipment, including a Caterpillar D-4 grader, compaction equipment, and augers on a mini-excavator. Noise levels would be approximately 83 dBA at 50 feet from the source. Construction of the trail would take place during the daytime and is expected to last approximately 12 weeks. Due to the narrow, linear nature of the trail alignment located within a large undeveloped area consisting of native vegetation, wildlife species present

---

[12] *As discussed in more detail in Section V.C, Noise, maximum noise levels would occur when construction equipment is operating under full power conditions. However, equipment used on construction sites typically operates at less than full power. The acoustical usage factor is the percentage of time that particular equipment is anticipated to be in full power operation during a typical construction day. These values will vary on a daily basis based on the actual construction process and schedule.*

within or adjacent to the Trail Area would be expected to move to the adjacent undeveloped areas. Due to the short duration of elevated noise at any one location, the short range of increased noise from the construction area, and the opportunity for wildlife to move into adjacent undeveloped areas, potential affects to wildlife species, including special-status species, located within, adjacent to, and off-site from the Trail Area would be less than significant.

With respect to potential nighttime soil export activities, during nighttime hours, loading activities would occur within the interior of the Development Area to avoid impacting sensitive areas such as Placerita Creek. Further, nighttime work would be limited to the southern portion of the Development Area (south of the creek), while daytime work would be focused in the northern portion. Soil hauling would occur during the same timeframe as mass grading activities within the Development Area; therefore, wildlife species would only be present in those areas of the site not yet graded and in undeveloped areas adjacent to the Development Area. As discussed in the BRA Supplement (Appendix F.3), haul truck noise levels would be approximately 76 dBA at 50 feet from the source. At 200 feet, noise levels would drop to approximately 64 dBA, well within the range of existing nighttime ambient noise levels of 43 to 70 dBA experienced within the Development Area. Both Placerita Creek and adjacent undeveloped areas are greater than 200 feet from the approximate location of the haul route (i.e., from the interior of the southern portion of the Development Area to Placerita Canyon Road). Accordingly, as determined in the BRA Addendum as well as the Wildlife Impacts Analysis (Appendix F.9), given the low sensitivity (i.e., the ability of species in the area to adapt to urban conditions) and the limited presence of special-status wildlife receptors, the fact that the special-status species that do or may occur within the vicinity are well distributed in the region and have unimpeded access to adjacent suitable habitat, the temporary and intermittent nature of anticipated maximum noise levels associated with construction equipment (refer to the previous footnote regarding maximum noise levels), the implementation of the Project Design Features (PDFs) including best management practices (e.g., proper equipment maintenance and use of noise mufflers) to reduce such noise levels, and the fact that much of the projected noise would fall within the existing ambient noise range, the Project's potential indirect noise impacts on wildlife in as a result of nighttime truck hauling activities would be less than significant. The effects of night lighting during construction are also expected to be less than significant due to the limited use of lighting (since most construction would occur during daytime hours), the temporary use of lighting during construction, and the presence of some existing nighttime illumination in the area from street lights and automobile

headlights.[13] Should nighttime hauling activities be conducted, night lighting would be required within the loading area and potentially the ingress/egress, would be similar in nature (i.e., in terms of fixture types and brightness) to that currently used within the Ranch for filming activities, and would be directed towards the center of the work area, away from Placerita Creek.[14] As previously mentioned, it is anticipated that night work would be concentrated within the interior of the Development Area (south of the creek), and the addition of a nighttime shift would shorten the overall construction period, thus reducing the overall duration of any potential construction-related impacts to wildlife. MM F-6 provided below would ensure that night lighting, if needed, would be placed and directed away from sensitive habitat, including the creek and any retained oak woodlands. In addition, Project mitigation regarding nesting birds, detailed in MM F-2 below, would involve the use of designated buffers around bird nests, as necessary, in accordance with the federal MBTA, thus reducing construction-related impacts.

(ii) Indirect Impacts on Wildlife Due to Operational Noise and Lighting

Long-term increases in noise and lighting related to the Project may result from studio-related operations, including increased traffic volumes. Detailed discussion of impacts associated with the various potentially noise-producing Project elements (i.e., the proposed substation, mechanical equipment, soundstages and mills, parking uses, and loading dock/trash compactor) is provided in the BRA Addendum (Appendix F.3), based on the Project noise analysis provided in Section V.C, Noise, of this Draft EIR). As discussed, the power transformer proposed within the substation is estimated to generate a noise level of approximately 77 dBA at a distance of 50 feet; at 300 feet, this noise level would attenuate to approximately 61 dBA, well within the range of both daytime and nighttime ambient noise levels currently experienced within the Development Area. Similarly, the central utility plant would be designed such that exterior noise levels would not exceed 82 dBA at a distance of 50 feet; at a distance of 300 feet, noise levels would attenuate to approximately 64 dBA, also within both the daytime and nighttime ambient noise levels on-site. With respect to the proposed soundstages and mills, the buildings would include sound insulation to contain interior noise (including amplified sound) within the shell structures so as to meet the Project-intended functions. Parking uses would generate a noise level of approximately 65 dBA at a distance of 25 feet, while car alarm and horn noise (intermittent events) would generate maximum noise levels of up to 75 dBA at a

---

[13] *Existing lighting conditions within and surrounding the Development Area are described in detail in Section V.I, Visual Qualities. As discussed therein, the ambient light levels range from 0.1 foot-candle (fc) (i.e., approximate full-moon brightness) to 1.5 fc adjacent to SR-14.*

[14] *As indicated in the Wildlife Impacts Analysis, mule deer are frequently observed foraging near nighttime filming activities and do not appear to be bothered by the activities.*

distance of 25 feet. These noise levels would be similar to those that result from existing parking uses that occur within the Ranch (including parking uses that periodically occur within the Development Area and one of the Conditional Parking Areas, and to which local wildlife species have already acclimated) and would also attenuate with distance, thus falling within the range of ambient noise levels that currently occur on-site. The proposed loading dock facilities and trash compactors would generate noise levels of approximately 71 and 65 dBA, respectively, at a distance of 50 feet, attenuating to approximately 65 to 59 dBA at 100 feet from the source; all such noise levels fall within the range of existing noise levels within the Development Area. Further, as discussed in Section V.C, Noise, noise levels associated with off-site traffic (i.e., the Project's mobile noise impacts) would range from approximately 57 to 72 dBA along local roadways, which would also fall within the range of existing noise levels within the Development Area. Moreover, it is recognized that many species of wildlife can and do habituate and adapt to chronic noise levels. Consequently, Project operations would not have significant noise impacts upon wildlife, particularly considering that wildlife has already acclimated to noise associated with existing Ranch operations (e.g., filming activities, agriculture, maintenance, etc.) and the ability of wildlife to move into undeveloped portions of the Ranch, distant from Project operations.

Potential long-term impacts associated with Project lighting would be minimized by the Project's design features, including those specified in the Design Guidelines to be incorporated into the Project. Based on the lighting plan designed by LightVision, LLC, discussed in Section V.I, Visual Qualities, of this Draft EIR, little light would trespass beyond the Development Area's perimeter landscape plantings. Proposed lighting would be kept to the minimum amount necessary to adhere to planning guidelines and would implement a series of measures to protect adjacent resources from light pollution. (Refer to the Design Guidelines provided in Appendix H.2, which identify four distinct lighting zones based on the proposed land use activities and their associated lighting needs.) As discussed in the Wildlife Impacts Analysis provided in Appendix F.9, in no case would areas beyond the Development Area footprint be subject to light levels exceeding twilight (i.e., the period between full night and sunrise or sunset, when the sun is below the horizon; 1 fc), and in most cases, the light levels would be far less, closely mirroring a night under full moon to quarter-moon phases (0.1 fc or less), as illustrated in Figures 4 through 4c therein. As shown in Figure 4c in the Wildlife Impacts Analysis, light spillover of 0.1 fc (full moon brightness) would occur in extremely limited areas (less than 0.1 acre) near the top of Placerita Creek. Additionally, very little light would trespass into the remaining oak trees in the southern portion of the Development Area, and no light would trespass into habitat south of Placerita Canyon Road or east of the proposed electrical substation. Due to the minimal light encroachment that would occur, minimal light encroachment levels, and measures employed to minimize light pollution, the long-term impacts related to Project lighting within the Development Area, Water Tank Area, Trail Area, Potential Mobile Home

Relocation Areas, and the Conditional Parking Areas (if developed) would be less than significant.

Additional details regarding indirect impacts on wildlife are provided in the Wildlife Impacts Analysis and the BRA Addendum, included as Appendices F.9 and F.3, respectively, of this Draft EIR.

(c) Nesting Birds

The Ranch portions of the Project site have the potential to support raptor and songbird nests due to the presence of trees, shrubs, and ground cover. In Southern California, nesting activity typically occurs from mid-February to mid-August. Disturbing or destroying active nests is a violation of the MBTA. In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact of the Project. MM F-2, below, would be required during Project construction to: (1) limit construction activities during the nesting season that could potentially disturb suitable bird nesting habitat unless it is confirmed that such disturbance would not result in the failure of active nests (if present); and/or (2) establish appropriate buffers around active nests within which clearing and construction shall be postponed or halted until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting. Further, existing conditions would be preserved within approximately 832 acres of the Ranch, which support similar habitat as the impacted area and which could be used by nesting birds. As such, impacts to nesting birds would be reduced to a less than significant level.

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Common Wildlife Species

As with the on-site impacts, the Project's primary impacts to wildlife resources within the Off-Site Infrastructure Improvement Areas would not be expected to reduce general wildlife populations below self-sustaining levels within the region, and as such, impacts to common wildlife species within the Off-Site Infrastructure Improvement Areas would be less than significant.

(b) Sensitive Wildlife Species

The least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, arroyo toad, and the western spadefoot toad are not expected to occur within the Off-Site Infrastructure Improvement Areas due to lack of suitable habitat. Additionally, the Off-Site Infrastructure Improvement Areas are not within designated critical habitat for the coastal California gnatcatcher or any other species. Therefore, the Project would have a less than

significant impact on sensitive wildlife species within the Off-Site Infrastructure Improvement Areas.

(i) Indirect Impacts on Wildlife Due to Construction Noise and Lighting

Also similar to the on-site impacts discussed above, indirect or secondary impacts to sensitive wildlife may potentially be associated with short-term construction noise and lighting within the Off-Site Infrastructure Improvement Areas. Daytime ambient noise levels within the Off-Site Infrastructure Improvement Areas range from approximately 55 to 73 dBA, and nighttime ambient noise levels range from approximately 49 to 67dBA. As discussed in detail in Section V.C, Noise, and summarized in the Wildlife Impacts Analysis (Appendix F.9) as updated in the BRA Addendum (Appendix F.3), construction noise associated with installation of the off-site utility improvements would result in noise levels of up to 86 dBA during peak construction periods, with reduced levels of 74 dBA at 100 feet from the source and 51 dBA at a distance of 1,500 feet. Noise associated with replacement of the SCE power poles would be a maximum of 83 dBA at a distance 50 feet. This construction noise would be temporary as construction of the water and sewer lines would move quickly along each water/sewer alignment at approximately 75 to 100 linear feet per day, with construction in any given location along the pipeline route lasting only a few days. Similarly, replacement of the power poles is expected to last a maximum of several weeks. Given the low sensitivity and limited presence of the special-status wildlife receptors discussed above, the temporary and intermittent nature of anticipated maximum noise levels associated with construction equipment, and implementation of the Project features previously discussed, the Project's potential indirect construction noise impacts on wildlife in the area surrounding the construction zone would be less than significant.

Construction activities associated with the SR-14 interchange improvements would occur during nighttime hours per Caltrans requirements. This work would occur in proximity to a culvert that extends under SR-14 and is used for local-scale wildlife movement by urban-tolerant species. However, construction activities would be located more than 300 feet away from the culvert, a distance that would reduce the noise levels to between 60 and 70 dBA. This range is within the typical levels experienced by urban-tolerant species. Additionally, the concrete nature of the culvert would provide a buffer from construction noise. The culvert serves as a local corridor and does not serve a regional function; therefore, the Project would not impact a regional wildlife movement corridor. While the culvert provides for local movement of common urban-tolerant species within Placerita Creek under SR-14, due to the distance of the construction activity from the culvert, the noted use of the culvert by urban-tolerant species, and the buffering nature of concrete and soil, potential indirect effects to local wildlife movement would be less than significant.

The effects of night lighting during construction are also expected to be less than significant due to the limited use of lighting (most construction would occur during daytime hours), the temporary use of lighting during construction, and existing night light levels from street lights and automobile headlights. Construction of utilities and roadway improvements within Caltrans' jurisdiction would require lighting due to nighttime construction hours, but those areas currently experience lighting from street lights and passing vehicles, and such activities would be temporary. Any required security lighting would focus on equipment and not on the surrounding habitat. Further, the construction zones are located almost entirely within paved rights-of-way, which offer little if any habitat for sensitive wildlife species. Given these Project Design Features, the Project's potential short-term secondary construction lighting impacts on wildlife in areas surrounding the construction zone would be less than significant. In addition, Project mitigation regarding nesting birds, detailed in MM F-2 below, would involve the use of designated buffers around bird nests, as necessary, in accordance with the federal MBTA, thus reducing construction-related impacts.

(ii) Indirect Impacts on Wildlife Due to Operational Noise and Lighting

Implementation of the Off-Site Infrastructure Improvements would not result in long-term increases in noise as the majority of the improvements are not associated with any noise-producing uses. The booster pump station associated with the water infrastructure improvements could produce noise; however, in accordance with MM C-5, it would be designed and constructed such that noise levels at the nearest residence would not exceed the City of Santa Clarita's ambient noise limits of 55 dBA during nighttime hours (between 10:00 P.M. and 7:00 A.M.) and 65 dBA during daytime hours (between the 7:00 A.M. and 10:00 P.M.) or the lowest measured ambient noise level. These noise levels would be comparable to existing noise levels in the area. Thus, there would be less than significant impacts related to long-term noise. The Off-Site Infrastructure Improvement Areas would not include new signs, lights (other than limited emergency lighting), or other light-generating facilities. Therefore, there would also be no impacts related to lighting from the off-site Project components.

Additional details regarding indirect impacts on wildlife are provided in the Wildlife Impacts Analysis (Appendix F.9), as updated in the BRA Addendum (Appendix F.3 of this Draft EIR).

(c) Nesting Birds

Construction activities associated with the Off-Site Infrastructure Improvement Areas would occur on already disturbed areas. In addition, Off-Site Infrastructure Improvements would be limited both in scale and geographic extent, and would be entirely underground after installation (with the exception of the booster pump station and a sewer crossing of

the LADWP aqueduct). Further, Project mitigation regarding nesting birds, detailed in MM F-2 below, would involve the use of designated buffers around bird nests, as necessary, in accordance with the federal MBTA. As such, impacts to nesting birds within the Off-Site Infrastructure Improvement Areas would be less than significant.

Threshold F-2: Would the project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations, or by the CDFG or USFWS?

Threshold F-8: Would the project's grading, fire clearance, or flood related improvements remove substantial natural habitat areas?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The Project would result in temporary and permanent impacts to plant communities. These impacts are described below, with their acreages summarized in Table V.F-3 on page V.F-64. A depiction of impacts to plant communities within the Development Area is provided in Figure V.F-15 on page V.F-65, and a depiction of impacts to plant communities within the Water Tank Area and Trail Area is provided in Figure V.F-16 on page V.F-66. (Impacts to plant communities within the Potential Mobile Home Relocation Areas and Conditional Parking Areas are not depicted herein, as all areas shown in Figure V.F-3 would be impacted; however, refer to Figure 4B within the BRA Addendum provided in Appendix F.3 for an illustration of impacts to these areas.)

(a) Common Plant Communities

During construction within the Ranch, the Project would temporarily impact 0.33 acre of coastal sage scrub/chamise chaparral, 0.18 acre of disturbed coastal sage scrub/chamise chaparral, 0.19 acre of buckwheat scrub/chamise chaparral, 0.16 acre of disturbed buckwheat scrub, 0.68 acre of chamise chaparral, and 1.56 acres of disturbed/developed areas. An estimated 3.79 acres of these temporary impacts would occur within the Development Area, while 1.49 acres would occur within the Trail Area.[15] These communities/areas are not CNDDB sensitive plant communities; therefore, impacts to these plant communities/areas are considered less than significant.

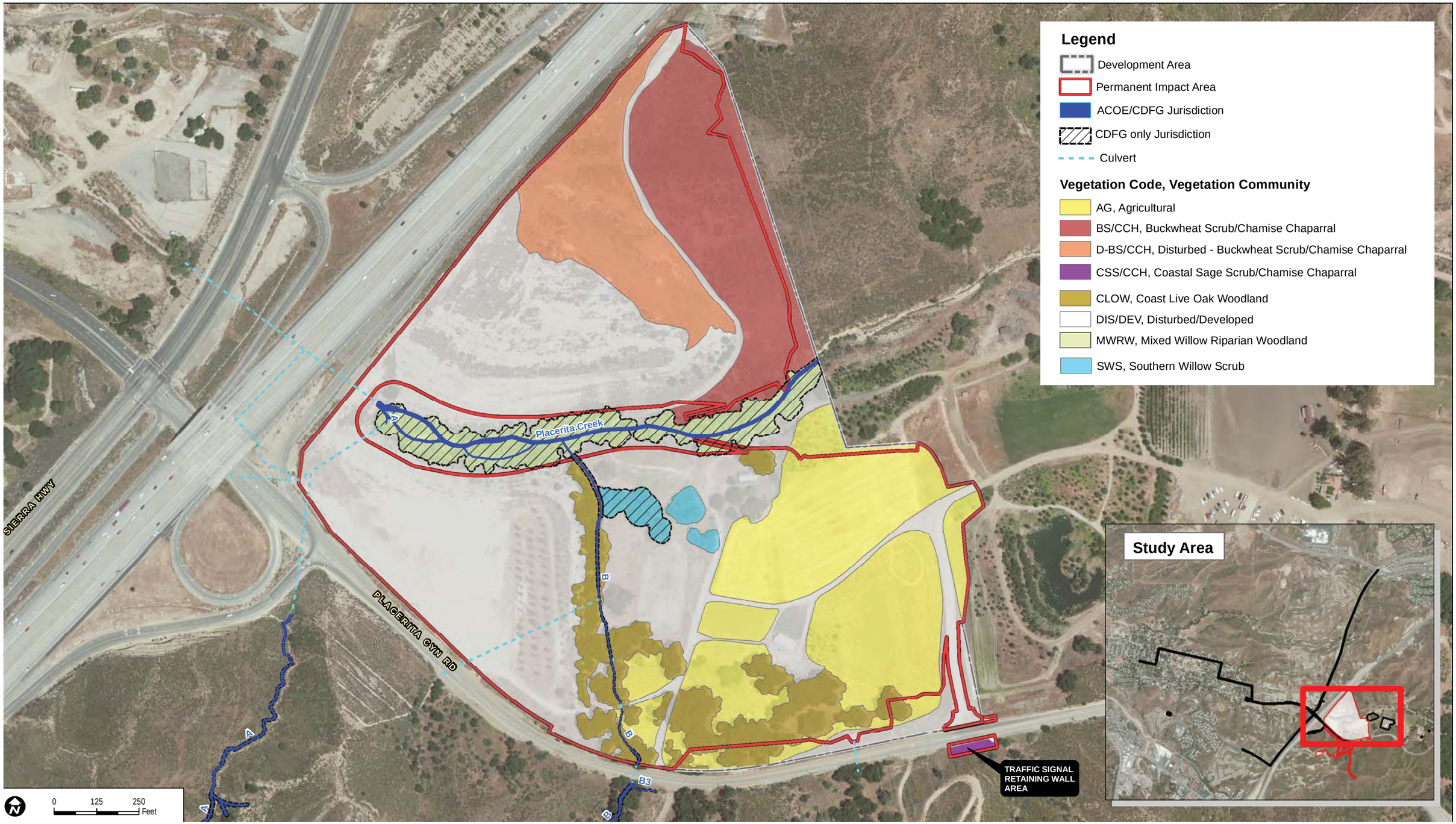
[15] *The temporary vegetation impacts within the Trail Area, generally associated with construction staging, were conservatively estimated to occur within the entire maximum 20-foot wide easement, except for that area permanently impacted by the trail tread.*

Table V.F-3
Temporary and Permanent Impacts to Plant Communities[a]

Plant Community	Development Area (acres)	Water Tank Area (acres)	Trail Area[b] (acres)	Potential Mobile Home Relocation Areas[c] (acres)	Conditional Parking Areas[d] (acres)	Current Ranch Main Entrance (Retaining Wall) (acres)	Off-Site Infrastructure Improvement Areas & SR-14 Interchange (acres)	Total Impacts (acres)
Coast Live Oak Woodland [f]	4.37 (0.01)	0.02	–	–	–	–	(0.01)	4.39 (0.02)
Disturbed Coast Live Oak Woodland [f]	–	–	0.05 (0.14)[e]	–	–	–	(0.19)	0.05 (0.33)
Mixed Willow Riparian Woodland [f]	0.08 (2.03)	–	–	–	–	–	–	0.08 (2.03)
Southern Willow Scrub [f]	0.75	–	–	–	–	–	–	0.75
Coastal Sage Scrub	–	–	–	–	–	–	0.11 (0.26)	0.11 (0.26)
Disturbed Coastal Sage Scrub	–	–	–	–	–	–	(0.04)	(0.04)
Coastal Sage Scrub/Chamise Chaparral	–	0.58	0.12 (0.33)	–	–	0.09	–	0.79 (0.33)
Disturbed Coastal Sage Scrub/Chamise Chaparral	–	0.29	0.07 (0.18)	–	–	–	–	0.36 (0.18)
Buckwheat Scrub/Chamise Chaparral	5.40 (0.19)	–	–	–	–	–	0.26	5.66 (0.19)
Disturbed Buckwheat Scrub/Chamise Chaparral	4.59	0.37	–	–	–	–	–	4.96
Disturbed Buckwheat Scrub	–	–	0.05 (0.16)	–	–	–	0.12	0.17 (0.16)
Chamise Chaparral	–	–	0.23 (0.68)	–	–	–	–	0.23 (0.68)
Non-Native Grassland	–	0.06	–	–	–	–	(0.76)	0.06 (0.76)
Agricultural Land	10.93	–	–	0.10	2.84	–	–	13.87
Ornamental	–	–	–	–	0.04	–	–	0.04
Disturbed/Developed	25.03 (1. 56)	1.44	–	0.10	4.39	0.05	1.18 (16.13)	32.19 (17.69)
Total	**51.15 (3.79)**	**2.76**	**0.52 (1.49)**	**0.20**	**7.27**	**0.14**	**1.67 (17.39)**	**63.71 (22.67)**

[a] *Numbers in parentheses represent total temporary impacts; they are not a subset of the total.*
[b] *Portions of the Trail Area and Water Tank Area overlap; the Trail Area acreages represent only those areas that are not within the Water Tank Area.*
[c] *Only one of the two identified Potential Mobile Home Relocation Areas would be developed as part of the Project.*
[d] *The Conditional Parking Areas would only be developed in the event LADWP were to revoke the parking license agreement for the lots within its transmission corridor.*
[e] *No oak trees would be removed or encroached upon; these acreages account for the disturbance of vegetation between oak trees within oak woodlands.*
[f] *Sensitive plant communities.*

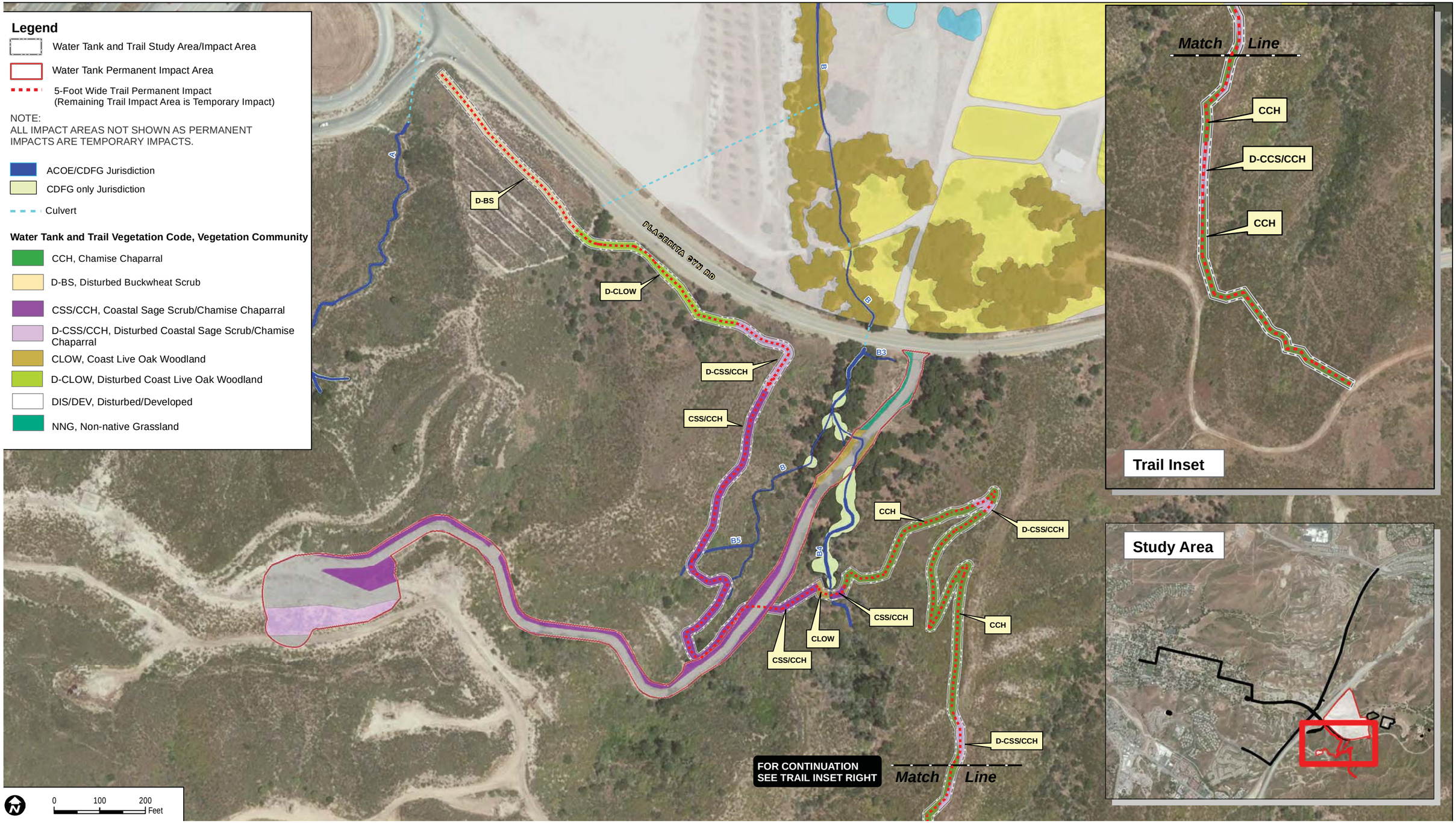
Source: Dudek 2012.



Source: DUDEK, 2012.

matrix environmental

Figure V.F-15
Impacts to Plant Communities and Jurisdictional Features – Development Area



Source: DUDEK, 2012.

matrix environmental

Figure V.F-16
Impacts to Plant Communities and Jurisdictional Features – Water Tank Area and Trail Area

The Project would result in permanent impacts to the following plant communities within the Ranch portions of the Project site: 0.70 acre of coastal sage scrub/chamise chaparral, 0.36 acre of disturbed coastal sage scrub/chamise chaparral, 5.40 acres of buckwheat scrub/chamise chaparral, 4.96 acres of disturbed buckwheat scrub/chamise chaparral, 0.05 acre of disturbed buckwheat scrub, 0.23 acre of chamise chaparral, 0.06 acre of non-native grassland, 13.87 acres of agricultural land, and 0.04 acre of ornamental areas, in addition to 31.01 acres of disturbed/developed areas. These communities are not CNDDB sensitive plant communities; therefore, impacts to these plant communities are considered less than significant.

(b) Sensitive Plant Communities

The Development Area supports 3.01 acres of mixed willow riparian woodland and 0.75 acre of southern willow scrub, both of which are CNDDB high inventory priority communities considered sensitive due to their decline in the region and their ability to support sensitive species. The Project would temporarily impact 2.03 acres of mixed willow riparian woodland due to the temporary removal of vegetation (which would be later restored). The Project would permanently impact 0.08 acre of mixed willow riparian woodland within Placerita Creek and 0.75 acre of southern willow scrub associated with Sub-Tributary B1 of Placerita Creek and an upland swale, due to permanent removal of vegetation in these areas. Detailed in Table V.F-3 and depicted in Figure V.F-15, these impacts are considered potentially significant. With implementation of MM F-1, detailed below, which requires restoration and would result in the expansion of riparian habitat by 1.58 acre within Placerita Creek as part of the HMMP, impacts to these sensitive plant communities on the Ranch would be less than significant.

As previously indicated, coast live oak woodland is not designated as a sensitive plant community by CDFG or in the CNDDB, however, CEQA Section 21083.4 requires analysis of a project's impacts on oak woodlands and mitigation for significant impacts to oak woodlands. Therefore, oak woodlands are considered a sensitive community for purposes of compliance with CEQA. The Project would temporarily impact 0.01 acre of coast live oak woodland and 0.14 acre of disturbed coast live oak woodland and would permanently impact 4.39 acres of coast live oak woodland, 0.05 acre of disturbed coast live oak woodland. Detailed in Table V.F-3 and depicted in Figure V.F-15 and Figure V.F-16, these impacts are considered potentially significant. However, with implementation of MM F-3, detailed below, which requires implementation of an Oak Tree and Woodland Mitigation and Monitoring Program (described further below), impacts to these sensitive plant communities on the Ranch would be less than significant.

(c) Sensitive Plant Species

While 43 sensitive plant species may occur within the general Ranch vicinity (see Table 2 within the BRA Addendum (Appendix F.3) for details), 42 are not expected to occur within the study area either due to a lack of suitable habitat or based on negative results from the field investigations. One species, white rabbit-tobacco (*Pseudognaphalium leucocephalum*), has a low potential to occur due to the presence of suitable habitat but a lack of observation during field investigations. Focused surveys for the slender-horned spineflower and the San Fernando Valley spineflower within potential habitat in the study area during their known blooming periods did not find these species. As there are no special-status plants with a moderate or greater potential to occur within the Ranch portions of the Project site, impacts on sensitive plant species would be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Common Plant Communities

As shown in Table V.F-3 on page V.F-64, the following temporary impacts to common plant communities would occur within the Off-Site Infrastructure Improvement Areas as a result of construction activities and construction staging: 0.01 acre of coast live oak woodland, 0.19 acre of disturbed coast live oak woodland, 0.26 acre of coastal sage scrub, 0.04 acre of disturbed coastal sage scrub, 0.76 acre of non-native grassland, and 16.13 acres of disturbed/developed areas. This analysis conservatively assumes that the entire buffer areas defined within the Off-Site Infrastructure Improvement Areas, except for the permanently impacted areas and the areas along Sierra Highway where the SCE power pole replacements would occur, would be temporarily impacted during construction. Thus, in combination with the permanent impacts (discussed below), essentially all off-site areas shown in Figure V.F-4 through Figure V.F-11 would be impacted, except for the areas along Sierra Highway where the SCE power pole replacements would occur (segments of which are shown in Figure V.F-9 through Figure V.F-11). Approximately 0.21 acres of the impact to disturbed/developed areas would occur in portions of the Off-Site Infrastructure Improvement Areas as a result of the SCE power pole replacements along public road rights-of-way on Sierra Highway and possibly Placerita Canyon Road. The exact location of the replacement poles has not been determined by SCE, but the poles are expected to be placed in approximately the same locations as the existing poles and could extend as far north along Sierra Highway as Golden Valley Road. The area to be disturbed during replacement activities is estimated at less than 1,000 square feet per pole, including space for the staging of vehicles and equipment, for a total of approximately 9,000 square feet (0.21 acre), and is expected to occur within areas mapped as disturbed/developed (which make up the majority of the area adjacent to the roadway segments). However, if it were conservatively assumed that such impacts could occur within areas mapped as coastal sage scrub, disturbed buckwheat scrub, or some combination of vegetation communities

that occur along portions of the roadway segments, the maximum 0.21 acre of impact would occur in habitat that is considered marginal at best given its location adjacent to a major roadway. Further, none of the impacted communities are CNDDB sensitive plant communities. Therefore, the temporary impacts to plant communities are considered less than significant.

As also indicated in Table V.F-3 on page V.F-64, the Project would result in permanent impacts to the following plant communities within the Off-Site Infrastructure Improvement Areas: 0.11 acre of coastal sage scrub, 0.26 acre of buckwheat scrub/chamise chaparral, 0.12 acre of disturbed buckwheat scrub, and 1.18 acres of disturbed/developed areas. These communities are not CNDDB sensitive plant communities; therefore, the permanent impacts to these plant communities are considered less than significant.

(b) Sensitive Plant Communities

As indicated in Table V.F-3, the Off-Site Infrastructure Improvement Areas do not support any sensitive plant communities. Therefore, no impact would occur.

(c) Sensitive Plant Species

While 43 sensitive plant species may occur within the general Ranch vicinity, 42 are not expected to occur within the study area either due to a lack of suitable habitat or based on negative results from the field investigations. One species, white rabbit-tobacco (*Pseudognaphalium leucocephalum*), has a low potential to occur due to the presence of suitable habitat but a lack of observation during field investigations. As there are no special-status plants with a moderate or greater potential to occur within the Off-Site Infrastructure Improvement Areas Impacts, off-site impacts on sensitive plant species would be less than significant.

Threshold F-4: 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) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas—and Off-Site Infrastructure Improvement Areas Impacts

The regional wildlife movement analysis model identified three main corridors in the Project site vicinity that provide wildlife the opportunity to move between suitable habitat in the San Gabriel Mountains and the Santa Susana and Castaic Ranges. As previously

discussed, the computer model takes a number of location-specific factors into account and assumes that the 95 percent least-cost result provides the best movement area for a given species. Because SR-14 acts as a barrier to wildlife movement in the area, the linkages are closely associated with undercrossings (e.g., bridges and culverts) under the freeway. While a culvert associated with Placerita Creek exists adjacent to the Development Area, the approximately 700-foot length of the culvert and the nature and extent of development downstream of the culvert (i.e., primarily industrial uses including oil production) limit the suitability of this undercrossing to function as part of a regional linkage. As such, the three identified corridors are considered more suitable for wildlife movement than the Development Area or other areas of the Project site. Therefore, although the Project site may provide areas of local-level movement and live-in habitat for a variety of species and habitat that may contribute to widespread regional movement, it does not function as a main wildlife corridor for the region. In any event, Placerita Creek would continue to provide opportunities for foraging/watering and local wildlife movement upon Project implementation. Improvements within the creek, including slope stabilization and establishment of native vegetation along the slopes (thus increasing the total area of native vegetation), would ultimately improve the functions of the creek for local wildlife. In this context, on-site and off-site impacts to local and regional movement would be incremental and less than significant.

With respect to the area of mapped oak woodland at the southern end of the Development Area, as previously discussed this area has a permeability ranking of 95 to 97 percent. The oak woodland is currently constrained by Placerita Canyon Road to the south, the fill pad to the west, and agricultural uses to the east. This oak woodland supports few native understory species and does not constitute a complete band of oak habitat through which species could move. This woodland area may provide cover for wildlife, including large-bodied human-tolerant animals such as deer and coyotes, to move from the undeveloped areas to the south into Placerita Creek to the north for foraging/watering. The wildlife corridor analysis identified portions of the Ranch east of the Development Area to have a higher permeability ranking (97 percent). These portions of the Ranch would be unaffected by the Project and would continue to provide opportunities for local wildlife movement. Therefore, impacts to this area would not result in a significant impact to an established wildlife movement corridor.

Threshold F-5: Would the project convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10 percent canopy cover with oaks at least 5-inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshuas, southern California black walnut, etc.)?

Threshold F-6: Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve

Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, § 22.56.215) and Sensitive Environmental Resources Areas (SERAs) (L.A. County Code, Title 22, Ch. 22.44, Part 6)?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

Areas within the Project site with at least a 10 percent canopy cover of oak trees were mapped as oak woodland. As previously discussed and summarized in Table V.F-3 on page V.F-64, the Project would temporarily impact 0.01 acre of coast live oak woodland located within the Development Area. The Project would also result in permanent impacts to 4.39 acres of coast live oak woodland located within the Development Area and Water Tank Area. In addition, while oak trees are located throughout portions of the Trail Area, the proposed trail has been designed to avoid impacts to oaks (as discussed below). Impacts to 0.19 acre of disturbed coast live oak woodland would occur in conjunction with the trail due to grading of the trail between avoided oak trees. .

In accordance with CEQA Section 21083.4(b), impacts to oak woodland must be mitigated through a combination of one or more of the following alternatives:

(1) Conserve oak woodlands, through the use of conservation easements;

(2) Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees. The requirement to maintain trees terminates seven years after the trees are planted. This mitigation cannot account for more than one-half of the mitigation requirement for the project. This mitigation may be used to restore former oak woodlands;

(3) Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board; or

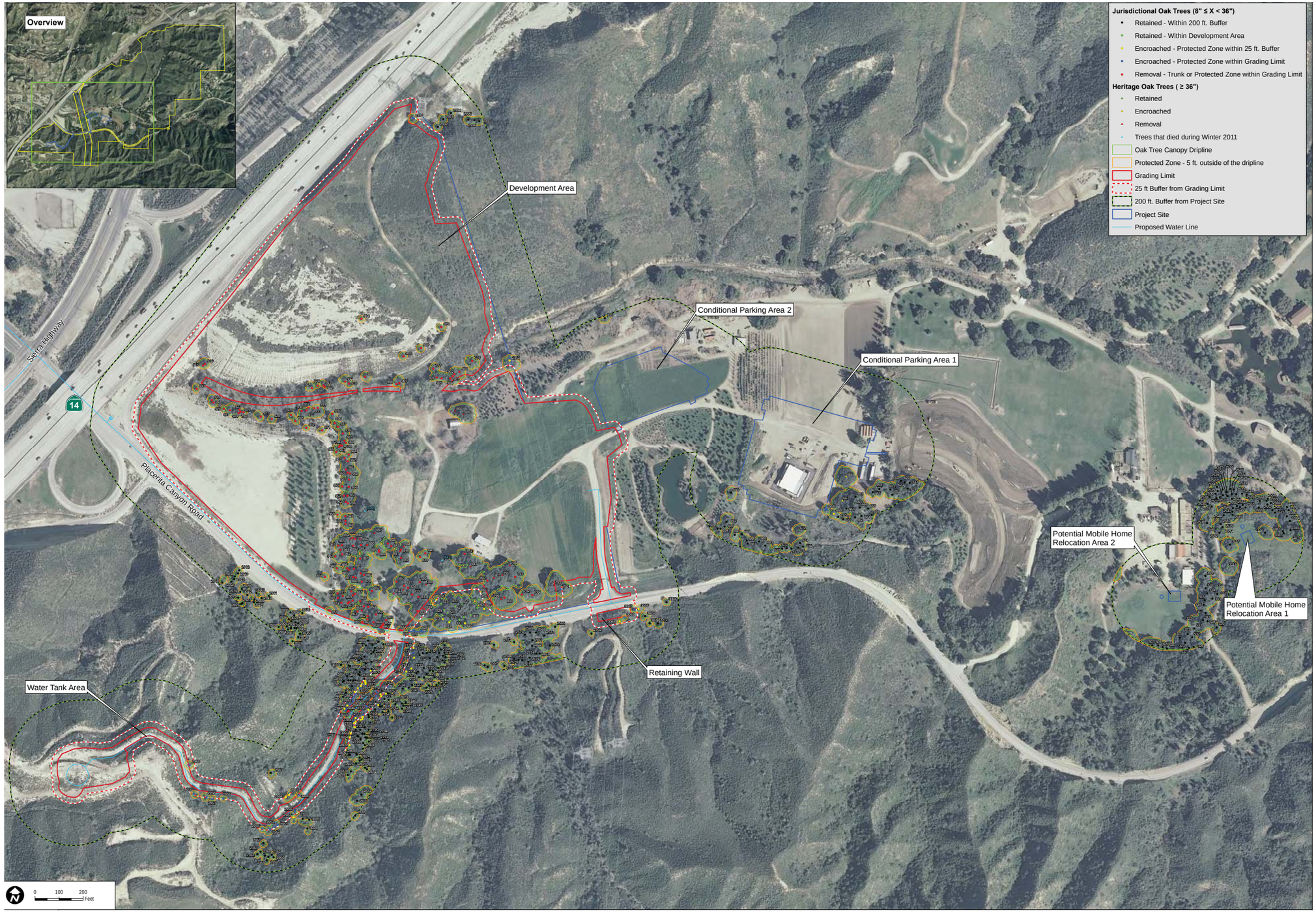
(4) Other mitigation measures developed by the County.

The Project would implement MM F-3, provided below, which requires compliance with the Oak Tree and Woodland Mitigation and Monitoring Program, included as Appendix F.6 of this Draft EIR. This OTWMMP considers the extent of oak woodland impacts and mitigates for them through the following measures:

- Planting of at least 1,600 oak trees within or adjacent to existing oak woodlands on the Ranch;
- Minimization of impacts by avoiding approximately 95% of the oak trees and oak woodlands on the Ranch;
- Restoration of fire-damaged oak woodlands through oak tree seedling planting;
- Enhancement of oak woodland regeneration through oak seedling planting in areas with limited natural recruitment;
- Enhancement of oak woodlands through the planting if native understory species;
- Increased habitat connectivity through oak tree planting in areas between existing woodlands and along Placerita Creek;
- Implementation of a seven-year monitoring, documentation, and reporting program; and
- Recordation of a use restriction over the mitigation areas in which planting occurs to protect the mitigation planting areas in perpetuity while recognizing the Applicant's ability to allow filming within these areas provided the planted oaks are protected;

Based on the quantity of oak woodlands avoided on the Ranch, the oak woodland preservation to impact ratio would be 21:1. The mitigation plantings required to survive the monitoring period would occupy approximately 10.5 acres of oak woodland expansion and enhancement area, resulting in a 2.4:1 oak woodland mitigation to impact ratio. Implementation of the OTWMMP in proportion to Project-related impacts would reduce the level of impacts to oak woodlands to a less than significant level, consistent with the requirements of CEQA Section 21083.4.

The Project would require the removal of 158 County Ordinance-protected oak trees, including 16 heritage oak trees, and encroachment upon an additional 82 oak trees, including 3 heritage oak trees, within the Ranch. Impacts to oak trees are depicted in Figure V.F-17 on page V.F-73. The 158 trees to be removed provide an estimated 184,260 square feet (4.33 acres) of canopy coverage. Many of these removals are located within oak woodlands, although some removals include isolated individual trees located outside oak woodlands. As tree removals and canopy loss would occur within areas of oak woodlands, the Project would result in a potentially significant impact to coast live oak woodlands.



Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

matrix environmental

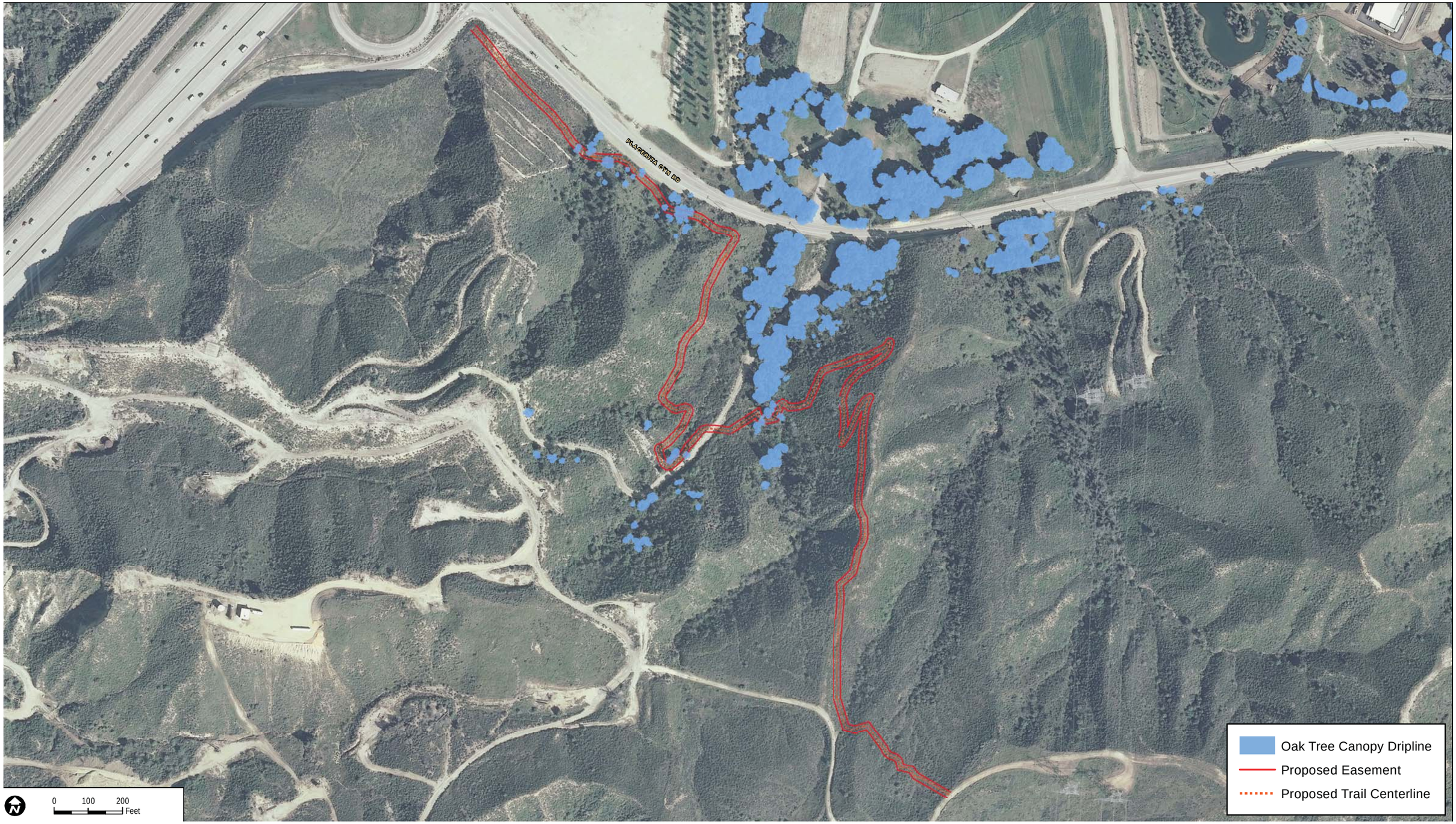
Figure V.F-17
Impacts to Oak Trees

Within the Trail Area, the proposed trail alignment crosses through oak areas, as shown in Figure V.F-18 on page V.F-75. However, the trail alignment has been defined to avoid oak canopy (and thus, individual oak trees) to the extent possible. In the instances where the trail would pass beneath oak canopy, the trail would remain unimproved in order to avoid grading beneath any oak tree canopies. Light and selective canopy raising (i.e., pruning lower branches according to American National Standards Institute (ANSI) A300 standards, where necessary) may occur along the alignment, but only in those areas where horizontal or vertical clearance is necessary. Based on this avoidance of oak trees, the lack of grading or soil removal beneath oak canopies, and the minimal canopy pruning expected for the proposed trail alignment, no oaks are considered to be impacted by encroachment from the proposed trail. This conclusion is supported by the County Forester based on his review of field conditions, the proposed trail alignment, and expertise in oak impact analysis in Los Angeles County.[16]

In accordance with the County's Oak Tree ordinance and current practice, removed oak trees must be replanted at a minimum 2 to 1 ratio for the loss of jurisdictional oak trees and at a minimum 10 to 1 ratio for the loss of heritage oak trees with 15-gallon-size trees. Accordingly, the ordinance and practices would require the planting of 444 new oak trees (284 for the 142 jurisdictional trees and 160 for the 16 heritage trees) that must reach minimum size requirements (i.e., 1 inch in diameter at 1 foot above the base of the trunk) and survive for a seven-year monitoring period.

The Project would implement MM F-3, provided below, which requires compliance with an extensive Oak Tree and Woodland Mitigation and Monitoring Program (OTWMMP), included as Appendix F.6 of this Draft EIR. The intent of the OTWMMP is to: satisfy oak tree mitigation requirements under the County of Los Angeles Oak Tree ordinance; to provide additional oak plantings above and beyond ordinance requirements to further mitigate impacts to oaks and oak woodlands in order to satisfy oak woodland mitigation requirements under CEQA Section 21083.4(b); and to further enhance the Ranch's existing oak woodlands and wildlife habitat. Under the OTWMMP, the Applicant would plant at least 1,600 oak trees of a variety of sizes within potential expansion and restoration areas on the Ranch east of the Development Area that collectively comprise approximately 21 acres, while retaining approximately 95 percent of the oak woodlands on the Ranch. The mitigation planting totals reflect more than the County-required replacement ratios for ordinance-size trees and heritage trees, as well as additional trees to account for potential tree mortality during the establishment period. Thus, in addition to ensuring the survival of the 444 ordinance-required oak trees for a seven-year monitoring period (which would

[16] *See correspondence from the County Forester, included in the Oak Tree Report (Appendix F.4).*



Source: DUDEK, 2012.

matrix environmental

Figure V.F-18
Oak Tree Assessment – Trail Area

mitigate the loss of the 158 oak trees), the Applicant would plant an additional 1,000 oak trees and ensure a minimum 70 percent survival at the conclusion of the seven-year monitoring period. In total, the Applicant would ensure the survival for seven years of 1,144 oak trees (444 oak trees required by the Oak Tree ordinance and 700 additional mitigation trees). The mitigation plantings required to survive the monitoring period would occupy approximately 10.5 acres of oak woodland expansion and enhancement area, resulting in a 2.4:1 oak woodland mitigation to impact ratio. Upon achieving these mitigation requirements, impacts to oak trees would be less than significant.

The sizes of planted trees would range from acorns and seedling plantings to larger oak trees, all of which would be grown from acorns harvested on the Ranch. Smaller stock has often been found to outperform larger 5- and 15-gallon trees in field plantings under favorable site and management conditions. The smaller stock trees tend to have higher survival rates and may surpass the growth of a 5- or 15-gallon tree over the life of the monitoring schedule. Therefore, the OTWMMP would allow for the planting of approximately the same amount of smaller stock as the larger, required 15-gallon trees to increase long-term sustainability and replace the diversity of sizes found in oak woodland habitat.

In an effort to proactively address Project-related impacts and initiate mitigation efforts, the Ranch's natural resources staff began propagating oak trees from Ranch-harvested acorns in 2009. Field planting of 460 seedlings occurred in November 2010 under the supervision of the County Forester. As indicated, the purpose of planting smaller stock (i.e., less than 15-gallon size) is to increase the likelihood of site adaptation and seedling survival. These planted trees will be counted toward the overall mitigation planting totals when they reach the appropriate size (i.e., 1 inch in diameter at 1 foot above the base of the trunk), unless slightly smaller trees are deemed acceptable to the County Forester. While the mitigation measures described in the OTWMMP are designed to satisfy ordinance requirements and further mitigate oak and oak woodland impacts to satisfy oak woodland mitigation requirements under California Public Resources Code Section 21083.4(b), they are also consistent with the Ranch's long-term oak woodland management objectives to improve oak woodland diversity and value on a long-term basis on the Ranch. Moreover, the Ranch's natural resource staff has an additional 2,381 seedlings on the Ranch that were propagated from Ranch-harvested acorns as well as an additional 1,837 Ranch-harvested acorns that were planted in containers during the Fall of 2011. These seedlings and acorns would ultimately be used to mitigate the Project's impacts on oaks and oak woodlands.

As previously indicated, to address the potential mortality of planted mitigation trees during the seven-year monitoring period, the Project would over-plant, resulting in a minimum of 1,600 planted mitigation trees. The Applicant could elect to plant more than

1,600 trees, depending on observations of tree health and survival during the seven-year monitoring period. The completed oak mitigation effort would result in the planting and survival for seven years of 1,144 oak trees. If mortality rates or actual tree impact totals exceed the totals used in determining the mitigation quantities presented in the OTWMMP, additional oaks would be planted using the guidelines discussed therein.

By allowing variation in the size of replacement plantings, the OTWMMP would also address impacts to oak woodland.[17] The locations and physical attributes of the existing oaks, other native trees, and plants in Placerita Canyon make them less of an aesthetic or public benefit, while the use of varied sizes is more representative of native oak woodlands and helps provide a balance to the mitigation program. Oak woodland as a wildlife resource cannot be replaced by planting container stock in a park or urban setting. Rather, replacement of woodland habitat requires restoration of the community, in this case oak woodland, riparian woodland, and other native plant communities. Consequently, the replacement of the oak woodland should include varied sizes of replacement oaks, ranging from seedlings to larger specimens, in association with planting of other native plant species known to naturally coexist with coast live oaks on hillsides, in woodlands, and in open space areas. Larger specimens are appropriate where immediate visual statements of the woodland landscape are conspicuous; smaller-sized container stock, including seedlings, one-gallon, and five-gallon stock, is appropriate in less visually critical areas, such as slope plantings and oak woodland rehabilitation areas. Direct planting of oak seedlings is most appropriate in either non-irrigated or limited access sites where habitat enhancement is the key concern. Most, if not all, of these types of plantings would be associated with other native plant restoration efforts. The goal of the mitigation program would be to create a landscape that maximizes the compensation for lost habitat values and reflects the natural habitat of Placerita Canyon.

In addition, the OTWMMP would require the recordation of a use restriction over the planted mitigation areas in which oak woodland planting, restoration, and enhancement occurs to protect these areas in perpetuity. The use restriction would recognize the ability to allow filming within these areas, provided the planted oaks are protected.

Thus, with implementation of the OTWMMP (MM F-3), impacts to jurisdictional oak trees and coast live oak woodlands would be less than significant. In addition, MM F-4 would be implemented to protect the retained trees that would be encroached upon by Project construction activities. Such measures may include avoiding the operation of

---

[17] *Refer to the OTWMMP (Appendix F.6) for discussion of State policy regarding oak woodlands (CEQA Section 21083.4(b)).*

heavy equipment around any retained tree, avoiding the placement or storage of construction materials within any oak tree's protected zone, and avoiding grade changes, including adding fill material, within the protected zone.

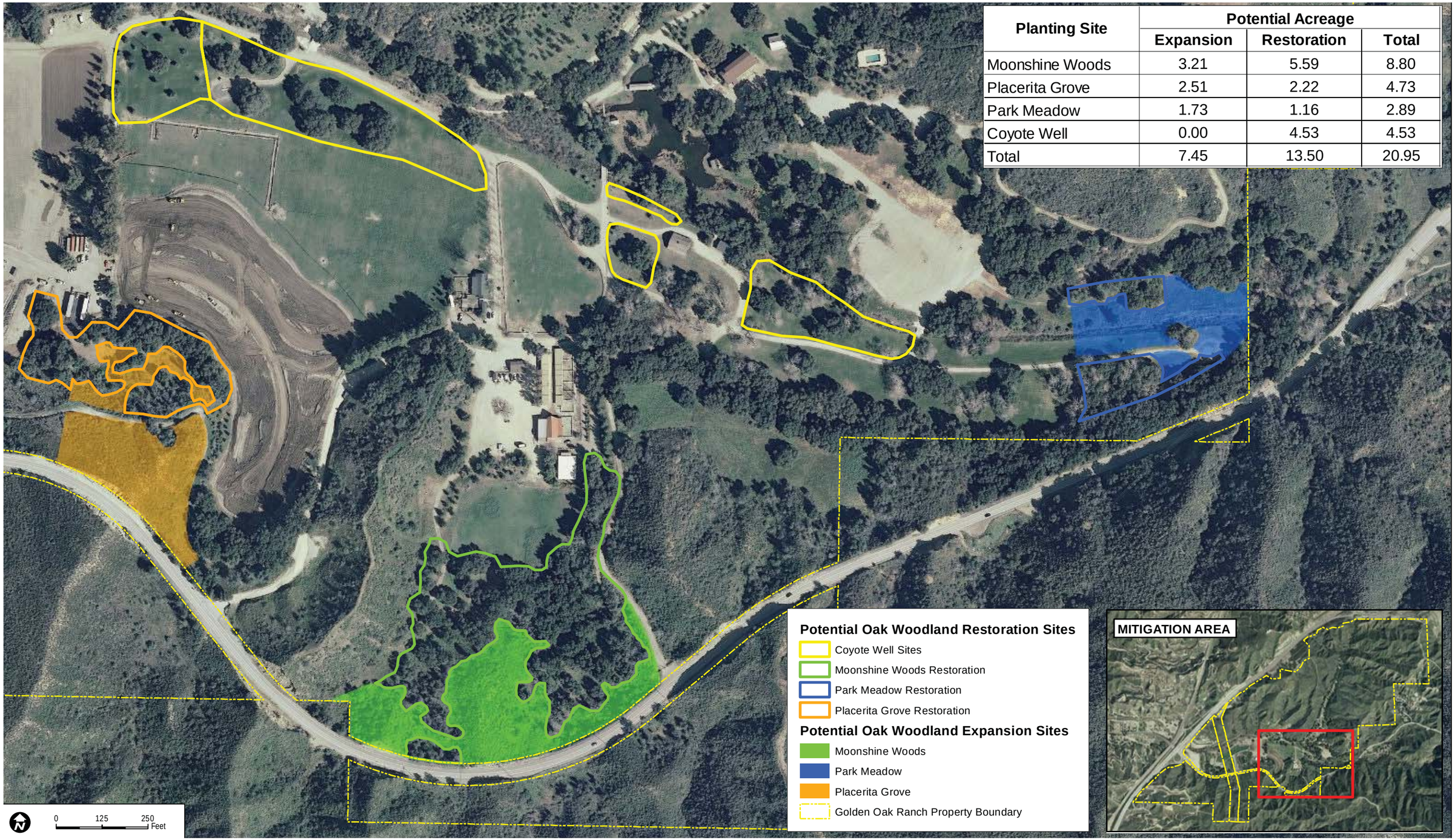
The potential restoration and expansion planting areas are located within suitable habitat in the southeast portion of the Ranch, as depicted in Figure V.F-19 on page V.F-79. Refer to Figure 1 in the OTWMMP provided in Appendix F.6 for a map of the restoration sites in the context of the entire Ranch.

(2) Off-Site Infrastructure Improvement Areas Impacts

The Off-Site Infrastructure Improvements are located within the City of Santa Clarita and are subject to the City's Oak Tree Ordinance, but not CEQA Section 21083.4(b), which only applies to counties. As such, the coast live oak woodland located within the Off-Site Infrastructure Improvement Areas is not considered a sensitive community. In any event, the off-site infrastructure improvements would not impact any oak woodland. While none of the 86 oak trees located within the Off-Site Infrastructure Improvement Areas would be removed as a result of the proposed sewer line installation, trenching for the Oak Orchard Alignment by the City of Santa Clarita, which would install the sewer line as part of the City's sewer master plan, would require temporary encroachment into the protected zones of the 86 oak trees, including 31 heritage oak trees, all of which are protected under the City's Oak Tree Ordinance. As such, the Project could result in a potentially significant impact to regulated oak trees within the Off-Site Infrastructure Improvement Areas. These oaks would be subject to protection measures determined by the City of Santa Clarita as well as construction monitoring that, when implemented, would minimize the possibility that trees would be damaged inadvertently during the construction process. These measures are outlined in the City Oak Tree Report (Appendix F.5) and include avoiding the operation of heavy equipment around any retained tree, avoiding the placement or storage of construction materials within any oak tree's protected zone, and avoiding grade changes, including adding fill material, within the protected zone, as determined and implemented by the City based on the City Oak Tree Report (Appendix F.5). Therefore, with the implementation of appropriate protective measures, impacts regarding oak trees within the Off-Site Infrastructure Improvement Areas would be reduced to a less than significant level.

(3) Significant Ecological Area

The existing SEA overlay maps, which are a part of the County's General Plan, do not overlap with the Development Area, Water Tank Area, Potential Mobile Home Relocation Areas, the Conditional Parking Areas, or the area across from the current Ranch main entrance. As such, existing County policies regarding SEAs do not currently apply to the Project. The County, however, is in the process of updating the SEA overlay maps for the Santa Clarita Valley as part of the One Valley One Vision Plan, which is the



Planting Site	Potential Acreage		
	Expansion	Restoration	Total
Moonshine Woods	3.21	5.59	8.80
Placerita Grove	2.51	2.22	4.73
Park Meadow	1.73	1.16	2.89
Coyote Well	0.00	4.53	4.53
Total	7.45	13.50	20.95

Source: DUDEK, 2012.

matrix environmental

Figure V.F-19

Potential Oak Woodland Expansion and Restoration Areas

Draft 2012 Santa Clarita Valley Area Plan. In the updated SEA overlay maps, portions of the Development Area (the hillside above the northern fill pad), Placerita Creek, the Water Tank Area, and the Trail Area have been proposed for designation within the Santa Clara River SEA (SEA 20). While not anticipated, given the close proximity of the proposed SEA to the Development Area, there is the potential for encroachment to occur. However, as currently drafted, the Draft 2012 Area Plan allows complete project applications filed prior to the effective date of the Draft Area Plan to be reviewed for consistency under the current Santa Clarita Valley Area Plan. The County deemed complete the entitlement applications for the Project on May 4, 2010. Accordingly, the Project is not anticipated to be subject to the Draft 2012 Area Plan and associated SEA regulations. Furthermore, the Project would enhance the proposed SEA area around the Development Area by improving Placerita Creek and planting native vegetation throughout. Therefore, the Project would not have a significant impact on the proposed SEA 20.

Threshold F-3: Would the project have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by Section 404 of the federal CWA or California Fish & Game Code Section 1600, et seq. through direct removal, filling, hydrological interruption, or other means?

Threshold F-9: Is a drainage course located on the project site that is depicted on USGS quad sheets by a dashed blue line or that may contain a bed, channel, or bank of any perennial, intermittent or ephemeral river, stream, or lake?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas—and Off-Site Infrastructure Improvement Areas Impacts

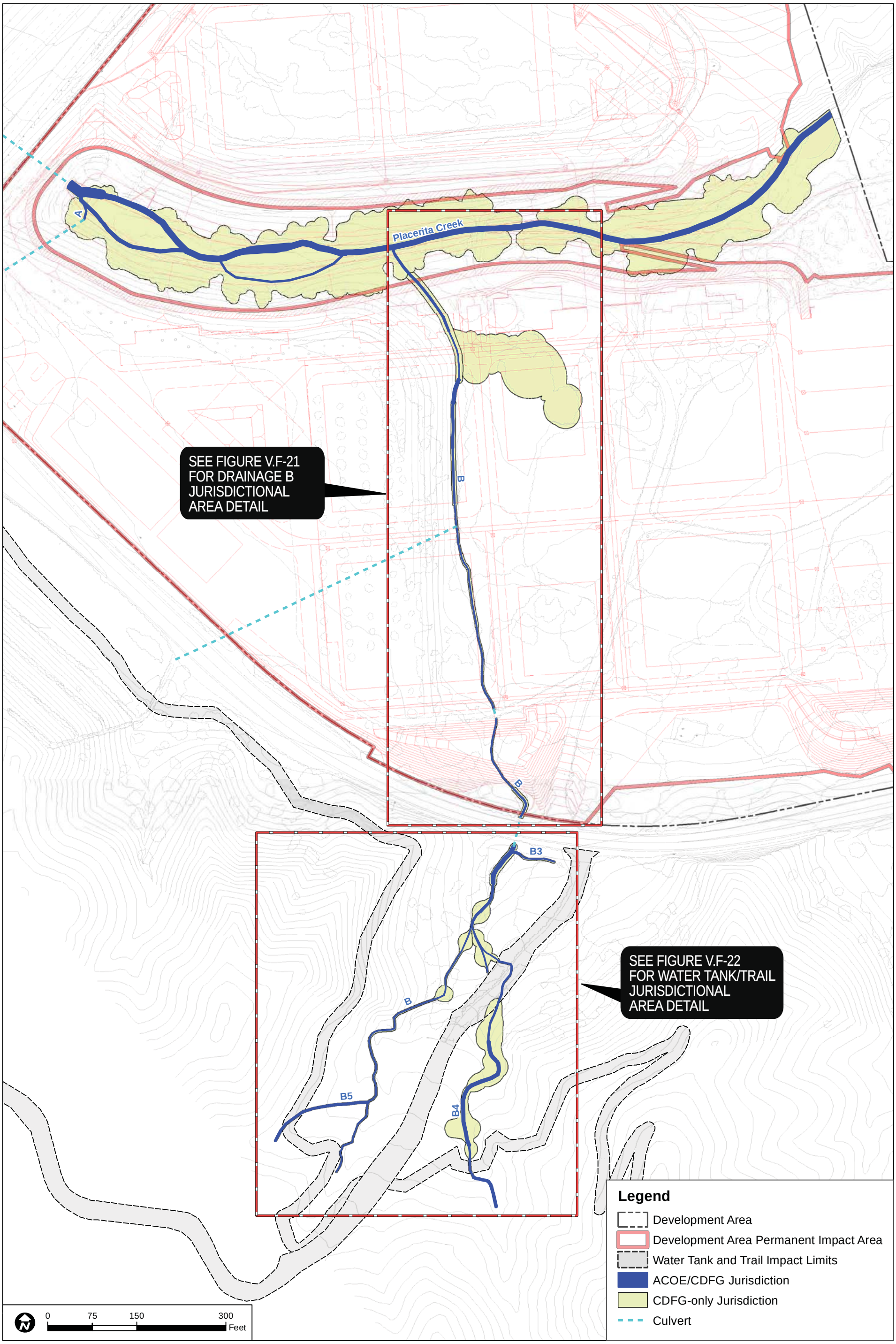
As mentioned above, the delineated jurisdictional features (Placerita Creek, ephemeral Tributaries A and B, and associated Sub-Tributaries) within the study area total approximately 3,234 linear feet of streambed. The jurisdictional area supported within these drainage courses totals 0.39 acre of ACOE/RWQCB jurisdictional “waters of the U.S./waters of the State,” and 3.30 acres of CDFG jurisdictional streambed. Construction activities within the Development Area would temporarily impact 0.12 acre (787 linear feet) of ACOE/RWQCB jurisdictional “waters of the U.S./waters of the State” and 1.91 acres of CDFG jurisdictional streambed within Placerita Creek in conjunction with the temporary crossing of Placerita Creek, the temporary construction road around the base of the fill pad slopes, and associated recontouring and stabilization of the slopes that would occur. No temporary construction impacts to jurisdictional waters would occur in the other areas of the Project site located within the Ranch. In addition, construction of the Oak Orchard sewer line would temporarily impact 0.01 acre (40 linear feet) of ACOE/RWQCB

jurisdictional "waters of the U.S./waters of the State," and 0.05 acre of CDFG jurisdictional streambed.

The Project would permanently impact approximately 0.08 acre (1,181 linear feet) of ACOE/RWQCB jurisdictional area, of which 0.07 acre is within the Development Area and less than 0.01 acre is within the Water Tank Area. The Project would permanently impact 0.63 acre of CDFG jurisdictional streambed and associated riparian habitat, of which 0.62 acre is within the Development Area and 0.01 acre is within the Water Tank Area. No permanent impacts would occur within the Off-Site Infrastructure Improvement Areas Impacts or near the SR-14 interchange. No ephemeral tributaries to Placerita Creek have been delineated within the Potential Mobile Home Relocation Areas or the Conditional Parking Areas. The impact areas within the Development Area are shown in Figure V.F-1 on page V.F-17, while the impacts within the Water Tank Area and Trail Area are shown in Figure V.F-2 on page V.F-18. These impacts are also depicted in the context of the Project site plan in Figure V.F-20 on page V.F-82, with detail areas shown in Figure V.F-21 on page V.F-83 and Figure V.F-22 on page V.F-84. Impacts are considered potentially significant.

Under MM F-5, below, the Project would be required to obtain regulatory permits for impacts to jurisdictional features. Such permits would include conditions to ensure that any loss in the functions and values of the tributary and associated habitat would be restored. Any impacts to ACOE/RWQCB jurisdictional "waters of the U.S./waters of the State" would require a CWA Section 404 Nationwide or Individual Permit issued by the ACOE and a CWA Section 401 Water Quality Certification issued by the RWQCB. Any impacts to CDFG jurisdictional streambed and associated riparian habitat would require a Streambed Alteration Agreement pursuant to Section 1602 of the Fish and Game Code. CDFG mitigation would require restoration of the riparian woodland within Placerita Creek so that the restored area mimics the vegetation that currently exists in the creek. Accordingly, the Project would implement an HMMP within the area illustrated in Figure V.F-23 on page V.F-85.

The Project's mitigation program reflects a multi-pronged approach that would include restoration, enhancement, establishment, and preservation. Restoration is defined as the return of areas that have been temporarily impacted by construction activities to pre-construction conditions. Enhancement improves the functions and values of existing habitat/jurisdictional waters, while establishment involves creating riparian habitat/ jurisdictional waters where they do not occur under existing conditions. The restoration/ enhancement/establishment areas are collectively referred to as mitigation areas. Preservation is also an important component of the mitigation program and involves the management and protection of existing communities (in this case, within Placerita Creek) in combination with the adjacent restoration areas, resulting in increased functions and values

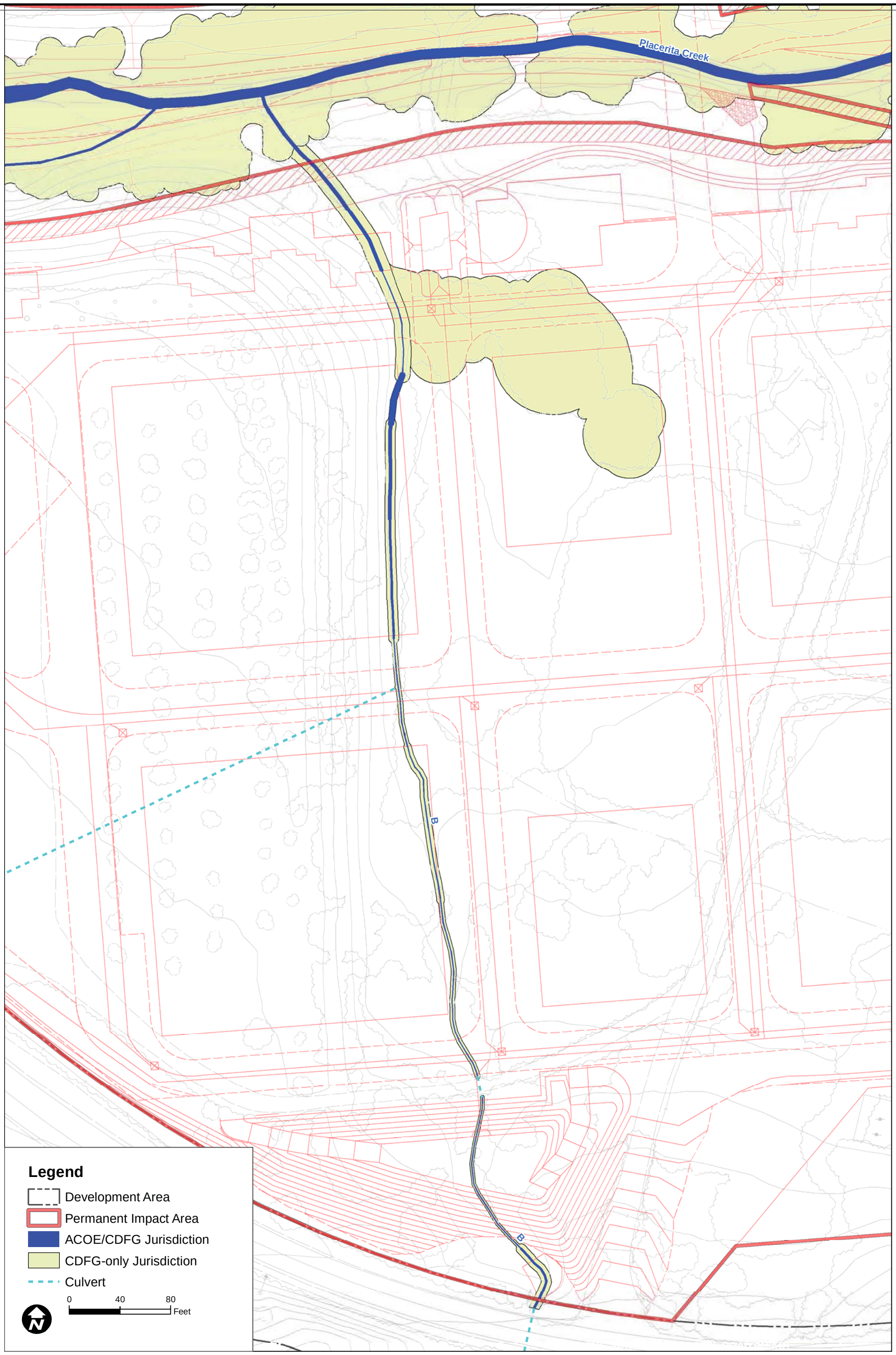


Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

matrix environmental

Figure V.F-20
Impacts to Jurisdictional Features (With Site Development Plan)

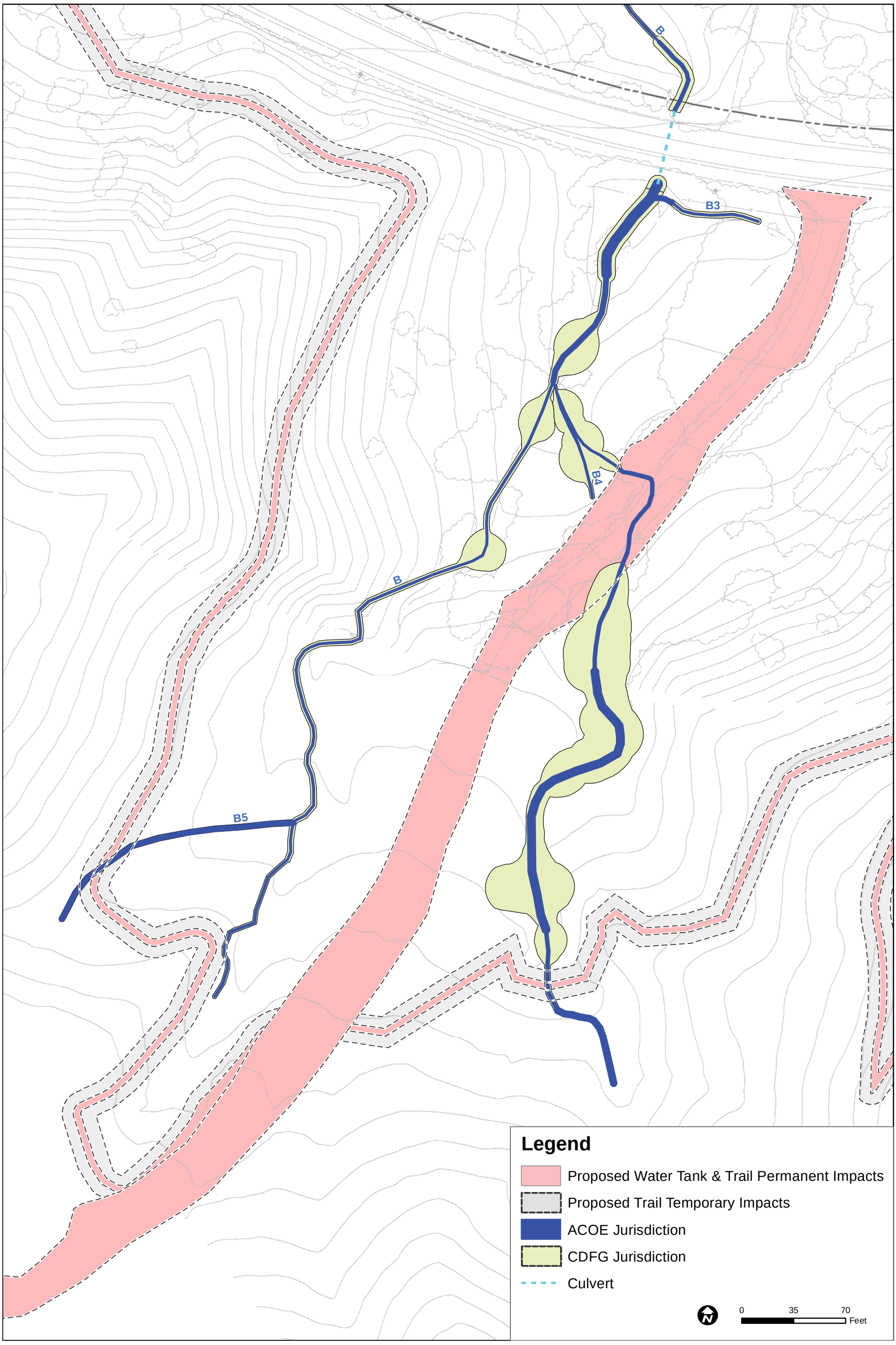


Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

matrix environmental

Figure V.F-21
Impacts to Jurisdictional Features – Drainage B Detail

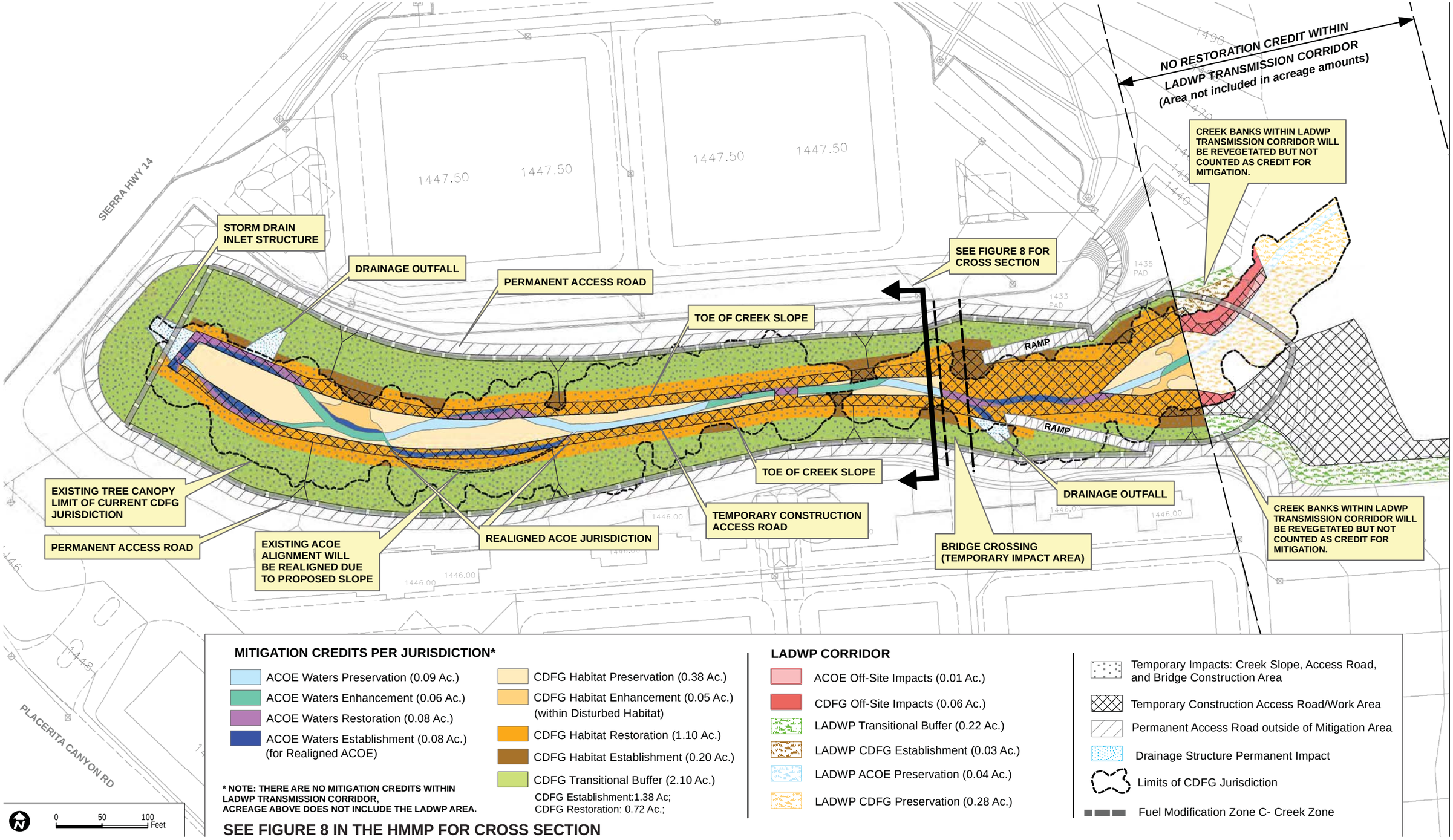


Source: DUDEK, 2012.

Disney | ABC Studios at The Ranch

matrix environmental

Figure V.F-22
Impacts to Jurisdictional Features – Water Tank Area and Trail Area Detail



Source: DUDEK, 2012.

matrix environmental

Figure V.F-23

Placerita Creek Restoration Plan

for both the preserved areas and mitigation areas. Together with the Project's bank stabilization improvements, this mitigation program would provide a net gain in functions and services both for the ACOE/RWQCB jurisdictional creek bottom and CDFG-only jurisdictional riparian and upland buffers in terms of geomorphic stability, nutrient processing/recycling, and wildlife habitat. Additionally, a net gain of 1.58 acres of CDFG jurisdictional habitat would be created due to new establishment areas within the upland portions of the creek.

Implementation of this mitigation program within Placerita Creek would adequately mitigate permanent impacts to jurisdictional waters, including permanent impacts to sensitive vegetation communities (i.e., mixed willow riparian woodland and southern willow scrub) by restoring, enhancing, establishing, and preserving impacted areas, creating a net gain of 1.58 acres of riparian habitat, and increasing the functions and values of the riparian habitat on-site. Temporary impacts to jurisdictional waters, including the sensitive vegetation communities, would be mitigated through restoration at a 1:1 ratio in the location of impact. Permanent impacts would be mitigated through restoration at a ratio of at least 1:1 in the location of impact. Refer to the BRA Addendum (Appendix F.3) and Tables 10 through 12 therein for further details regarding the mitigation program. In summary, implementation of the proposed mitigation program, including measures required by the ACOE, RWQCB, and CDFG, would reduce on- and off-site jurisdictional impacts to a less than significant level.

4. CUMULATIVE IMPACTS

For the cumulative analysis of impacts on biotic resources, a two-fold approach entailing two geographic scopes was used. In compliance with CEQA, the first approach involved the cumulative analysis of the Project in combination with 14 Related Projects identified within the vicinity of the Development Area, as listed in Table III-1 and mapped in Figure III-1 in Section III, Environmental Setting, of this Draft EIR.[18] Because, however, biological systems such as those associated with a large river system are also important to consider, the second approach involved an assessment of impacts to biological resources

[18] *A list of Related Projects was obtained from LACDPW in December 2009 and from the City of Santa Clarita in February 2010, yielding a total of 11 Related Projects near the Ranch. In April 2011, an updated list of known development projects was obtained from the County Department of Regional Planning and yielded an additional three Related Projects. As the updated list was obtained following completion of the Biological Resources Assessment in December 2010, the three additional Related Projects were not addressed therein. Therefore, where appropriate, the analysis below focuses on the original 11 Related Projects (Related Project Nos. 1 through 11), based on the data provided in the Biological Resources Assessment. In any case, the additional projects are generally accounted for in the broader regional analysis of future development throughout the Santa Clarita Valley Area Plan area, also discussed below.*

throughout the Santa Clara River upper watershed. As such, an approximately 300,000-acre area was reviewed as the region of biological relevance to resources within the study area.

This cumulative impact area incorporates the Santa Clarita Valley Area Plan area, which includes the Santa Clarita Valley and also much of the eastern Santa Clara River subbasin. Within the Santa Clarita Valley Area Plan area there are 196 pending, approved, and recorded parcel and tract maps, as shown in Figure 15 in the Biological Resources Assessment. This more regional cumulative impact area also encompasses several existing SEAs, including the Santa Clara River SEA.

(1) Cumulative Impacts to Vegetation Communities

The Related Projects include mostly infill developments that contain limited native vegetation, are mostly disturbed, fragmented and isolated, and/or are relatively small in scale. Due to their generally developed/disturbed nature and lack of native vegetation, these project sites do not contribute to the long-term sustainability of natural communities in the general vicinity of the Ranch and, therefore, would not significantly impact biological resources on a cumulative basis. Some of the Related Projects support regulated resources, such as limited riparian areas and/or oak trees. Impacts to such resources would be mitigated through existing local, state, and federal statutes such as the County Oak Tree Ordinance, Section 1602 of the California State Fish and Game Code, and Section 404 of the federal Clean Water Act, and therefore, significant impacts to regulated resources are not expected to result on a cumulative basis.

Similarly, in the context of the 300,000-acre regional cumulative analysis area that was reviewed, impacts to plant communities within the Project site (the Ranch portion of which comprises approximately 71 acres, or 0.02 percent of the regional cumulative analysis area) do not represent an overall cumulatively significant impact given their extremely limited scale with respect to the overall analysis area. Moreover, in each case of new development, local, state, and federal laws concerning resource regulation and conservation would be applied, thereby avoiding and/or minimizing the loss of biological components important to the viability of region-wide biological systems. Also, because the open space areas within Angeles National Forest would be preserved, much of the diversity of plant communities native to the Santa Clarita Valley would be protected. Furthermore, it is expected that impacts to more common plant communities would not substantially diminish or threaten to eliminate these communities on a regional basis due to their lack of sensitivity status and abundance throughout the region.

Two CNDDB sensitive plant communities, southern willow scrub and mixed willow riparian woodland, occur within the Development Area and would be impacted by the

Project. Although coast live oak woodland is not considered a CNDDB sensitive community, the Project would also impact oak woodland within the Development Area and Water Tank Area and disturbed oak woodland in the Trail Area. Impacts to these three plant communities would be mitigated through compliance with regulatory requirements. Therefore, impacts to these communities would not substantially diminish or threaten to eliminate any of these communities on a regional basis, and as a result, are not cumulatively significant.

In addition, a portion of the Development Area is within the proposed Santa Clara River SEA. As previously mentioned, although SEAs are not fully protected, proposed development impacts within them require a thorough review by the SEATAC and County of Los Angeles. As discussed above, the Project is not expected to result in significant impacts to the integrity and functioning of the proposed Santa Clara River SEA. Because the Related Projects would be required to comply with SEATAC regulations to the extent the Related Projects are located within a SEA, when combined with the Project, they are not expected to result in a significant impact on SEAs.

(2) Cumulative Impacts to Plants and Wildlife

The Santa Clarita Valley is an area marked by substantial plant and wildlife diversity. Much of this diversity is protected in perpetuity within the Angeles National Forest, which contains most of the vegetation communities (and therefore, plant and wildlife habitats) characteristic of the rest of the valley. Cumulatively, it is expected that more common plant communities would not be substantially diminished or threatened on a regional basis due to their lack of sensitivity status and abundance throughout the region. Additionally, the extent of impacts resulting from the Project would be limited. For sensitive plant communities, Project-related mitigation would be implemented to ensure that such communities would not be substantially diminished or threatened on a regional basis; therefore, impacts to these sensitive plant communities, and the plant and wildlife species which use these habitats, would not represent a cumulatively significant impact. Local, state, and federal laws would continue to regulate future development, protecting and preserving limited resources such as oak trees, waters and wetlands, listed species or sensitive species, and riparian habitats. In this manner, cumulative impacts would be minimized, and impacts would be less than significant.

(3) Cumulative Impacts to Special Status Plant Species

As previously discussed, a total of 43 special-status plant species have the potential to occur within the Project vicinity. Of these, 42 are not expected to occur within the study area either due to a lack of suitable habitat or based on negative results from the field investigations. One species, white rabbit-tobacco (*Pseudognaphalium leucocephalum*), has a low potential to occur due to the presence of suitable habitat but a lack of

observation during field investigations. In addition, one federally and state Endangered plant species, slender-horned spineflower, and the federal candidate San Fernando Valley spineflower have the potential to occur within the study area. Focused surveys were conducted for these species, however, and neither was observed within the study area. There is no suitable habitat for the slender-horned spineflower within the study area, and the few locations in the San Fernando Valley where spineflowers are known to exist are not near the study area. Because the Project would not have an adverse impact on a special status plant species, the Project would not contribute to any potentially significant cumulative impact on a local or regional scale.

(4) Cumulative Impacts to Special Status Wildlife Species

As previously discussed, a total of 47 special-status wildlife species have the potential to occur within the Project vicinity. Of these, 2 were observed on-site (Cooper's hawk and yellow warbler) and 17 additional species have the potential to occur on-site, including 4 reptile species (coast horned lizard, silvery legless lizard, coastal western whiptail, and rosy boa), 5 raptor species (golden eagle, loggerhead shrike, white-tailed kite, and prairie falcon), 2 passerine species (Bell's sage sparrow and Southern California rufous-crowned sparrow), and 7 mammal species (western mastiff bat, hoary bat, spotted bat, pallid bat, San Diego desert woodrat, Los Angeles pocket mouse, and American badger). Based on protocol surveys conducted in the study area, the Project is not expected to result in direct or indirect impacts to any state- or federally-listed wildlife species. Focused surveys for the least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, arroyo toad, and western spadefoot toad were conducted according to species-specific protocols, and none of these sensitive wildlife species were observed in the study area, nor were any of the other 19 species listed above. Because the Project would not have an adverse impact on special status wildlife species, the Project would not contribute to any potentially significant cumulative impact on a local or regional scale.

(5) Cumulative Impacts to Wildlife Movement

As previously discussed, although the Project may impact local-level movement and habitat for a variety of species, the Project would not have a significant adverse effect on any known regional wildlife movement corridors and would retain existing habitat linkages for migrating waterfowl and other mobile wildlife species using the riparian corridor of Placerita Creek. As a result, the Project's contribution to cumulative impacts on wildlife movement corridors would not be cumulatively considerable. Within the general area including the 14 Related Projects, as well as within the regional cumulative impact study area, proposed developments would expand urbanization to fill much of the open space between the northern and southern units of the Angeles National Forest, and therefore, would further restrict wildlife movement from north to south through an area already highly disturbed by Interstate 5 and surrounding development. The maintenance of buffer zones

along the Santa Clara River and continued preservation of land within the Angeles National Forest will maintain existing corridors for most wildlife species moving from east to west; thus, cumulative impacts to wildlife movement corridors are expected to be less than significant at both the area-wide and regional scales of analysis. Further, the anticipated general absence of urban sprawl in the area combined with the implementation of mitigation requirements set forth by local, state and federal statutes regulating biological resources would further ensure the persistence of wildlife movement corridors into the foreseeable future.

(6) Cumulative Impacts to Jurisdictional Waters

Cumulative impacts to jurisdictional waters were assessed based on the cumulative impact analysis area and Related Projects. The Related Projects include mostly infill developments that would either avoid jurisdictional waters or impact minimal areas (i.e., on the order of several square feet for outlets, riprap, etc.). If impacts were to occur to jurisdictional waters, they would be mitigated through regulatory requirements enforced by the ACOE and RWQCB for jurisdictional waters protected by the Clean Water Act and by CDFG for streambeds protected under the California Fish and Game Code, Section 1602. Enforcement of these regulations effectively serves as a programmatic vehicle to keep cumulative impacts below a level of significance, with these agencies typically requiring mitigation through preservation, restoration, or enhancement at a 1:1 or greater ratio. Therefore, impacts to jurisdictional waters within the cumulative impact analysis area would not substantially diminish or threaten to eliminate any of these resources on a regional basis, and as a result, are not cumulatively significant.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

PDF F-1: In accordance with the County's Drought-Tolerant Landscaping ordinance, at least 75 percent of the Project's landscaped area shall contain plants from the Los Angeles County Drought-Tolerant Plant List.

In addition, Project Design Features and Mitigation Measures provided in Sections V.C, Noise, and V.I, Visual Qualities, of this Draft EIR, that are designed to reduce noise impacts and light pollution would serve to reduce indirect impacts to biological resources. Project Design Feature K.2-5 within Section V.K.2, Public Services—Fire Protection, pertaining to the proposed fuel modification plan would also influence biological resources.

b. Mitigation Measures

MM F-1: The Project shall implement the requirements of the final approved Habitat Mitigation and Monitoring Program, consistent with the preliminary Habitat Mitigation and Monitoring Program contained in Appendix F.11 of the Draft EIR, to mitigate impacts to U.S. Army Corps of Engineers/Regional Water Quality Control Board "waters of the U.S./waters of the State" and California Department of Fish and Game jurisdictional streambeds. As part of the Habitat Mitigation and Monitoring Program, which shall restore and expand the riparian habitat along Placerita Creek following temporary impacts to stabilize the fill pad slopes, the Project shall mitigate for the impact to the southern willow scrub community and the mixed willow riparian woodland in the Development Area at a minimum of a 1:1 mitigation-to-impact ratio.

The Habitat Mitigation and Monitoring Program restoration efforts shall include the grading and recontouring of the existing fill pad slopes along Placerita Creek within the Development Area and the revegetation with native riparian species by planting and seeding. The Habitat Mitigation and Monitoring Program shall identify appropriate mitigation objectives, performance standards, planting and monitoring/reporting requirements to ensure successful restoration and enhancement of the mitigation area. The Habitat Mitigation and Monitoring Program shall also contain contingency measures identifying corrective actions required in the event that the performance standards are not met. A minimum of 4.04 acres of riparian habitat shall be established, restored, enhanced, and/or preserved, resulting in a net gain in California Department of Fish and Game jurisdictional area. Maintenance (i.e., weeding, pest control, irrigation system maintenance, trash removal, etc.) and monitoring of the mitigation area shall be conducted for five years or until such time as the Habitat Mitigation and Monitoring Program performance standards are achieved to ensure success of the plan. The final Habitat Mitigation and Monitoring Program shall be submitted to and approved by the County of Los Angeles Department of Regional Planning, the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Game, in compliance with Clean Water Act Sections 401 and 404 and California Fish and Game Code 1602 and supporting regulations, prior to issuance of a grading permit.

MM F-2: Project construction-related activities likely to have the potential of disturbing suitable bird nesting habitat shall be prohibited from February 1 through August 31, unless a biological monitor acceptable to the Director of the County of Los Angeles Department of Regional

Planning surveys the project area prior to disturbance to confirm that disturbance to habitat will not result in the failure of active nests on-site or immediately adjacent to the area of disturbance. Disturbance shall be defined as any activity that physically removes and/or damages vegetation or habitat, any action that may cause disruption of nesting behavior such as noise exceeding 90dB from equipment, or direct artificial night lighting. Surveys shall be conducted on the subject property within 500 feet of disturbance areas no earlier than three days prior to the commencement of disturbance. If ground disturbance activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than three days will have elapsed between the survey and ground disturbance activities. The Applicant or the Project's Construction Manager shall provide the biologist with plans detailing the extent of proposed ground disturbance prior to the survey effort.

If active nests are found, clearing and construction shall be postponed or halted within a buffer area established by the biological monitor that is suitable to the particular location of the nest (typically 300 feet for most birds and 500 feet for raptors) and acceptable to the Director of the County of Los Angeles Department of Regional Planning, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with highly visible construction fencing, and construction personnel shall be instructed on the sensitivity of nest areas. Occupied nests within the buffer established by the biological monitor and adjacent to the construction site shall also be avoided to ensure nesting success. A qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests occur. The results of the surveys, including graphics showing the locations of any active nests detected, and documentation of any avoidance measures taken, shall be submitted to the County of Los Angeles Department of Regional Planning and California Department of Fish and Game within 14 days of completion of the pre-construction surveys or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

MM F-3: The Project shall implement the requirements of the approved Oak Tree and Woodland Mitigation and Monitoring Program to mitigate impacts to oak trees protected under the Los Angeles County Oak Tree Ordinance and impacts to oak woodlands protected under California Public Resources Code 21083.4. As part of the Oak Tree and Woodland Mitigation and Monitoring Program, which shall restore and expand existing oak woodlands on the project site, the Project

shall mitigate for the impact to oak woodlands with at least a 2.4 acre to 1 acre mitigation-to-impact ratio.

The Project's Oak Tree and Woodland Mitigation and Monitoring Program shall include the following components:

- Planting of at least 1,600 oak trees within or adjacent to existing oak woodlands on the Ranch shall be completed prior to the issuance of a building permit;
- Minimization of impacts by avoiding approximately 95 percent of the oak trees and oak woodlands on the Ranch;
- Restoration of fire-damaged oak woodlands through oak tree seedling planting;
- Enhancement of oak woodland regeneration through oak seedling planting in areas with limited natural recruitment;
- Increased habitat connectivity through oak tree planting in areas between existing woodlands and along Placerita Creek;
- Planting of native understory species within oak woodland restoration areas in order to provide a more complete suite of oak woodland values apart from those provided by trees alone; and
- Implementation of a seven-year monitoring, documentation, and reporting program.

In addition, prior to the issuance of a building permit, the Applicant shall record a use restriction which shall run with the land in perpetuity over the planted mitigation areas in which oak woodland planting, restoration, and enhancement occurs to protect these areas for purposes of oak woodland conservation, restoration and enhancement. The use restriction shall recognize the Applicant's ability to allow filming within these areas, provided the oaks are protected. The use restriction language shall be submitted to the County of Los Angeles Department of Regional Planning for review and approval prior to recordation with the Los Angeles County Registrar-Recorder/County Clerk.

MM F-4: During project construction, the Applicant shall implement all measures to protect the oak trees that are encroached upon, as indicated in the approved Oak Tree and Woodland Mitigation and Monitoring Program.

MM F-5: Prior to issuance of a grading permit, the Project Applicant shall prepare and submit to the U.S. Army Corps of Engineers for verification a "Preliminary Delineation Report for Waters of the U.S." and a Streambed Alteration Notification package to the California Department of Fish and Game for alterations to Placerita Creek and its on-site jurisdictional tributaries. A Clean Water Act Section 404 permit shall be obtained from the U.S. Army Corps of Engineers, and the

Applicant shall comply with the permit conditions. A Streambed Alteration Agreement shall be entered into with the California Department of Fish and Game under Section 1602 of the California Fish and Game Code, and the Applicant shall comply with the associated conditions. A Clean Water Act Section 401 Water Quality Certification shall be obtained from the Regional Water Quality Control Board, and the Applicant shall comply with the certification conditions. Mitigation for unavoidable impacts shall be provided through conservation or restoration of U.S. Army Corps of Engineers and California Department of Fish and Game jurisdictional features (on- and off-site) at a minimum of a 1:1 mitigation-to-impact ratio.

MM F-6: Nighttime construction lighting, if needed, shall be situated at least 50 feet away from Placerita Creek and any retained oak woodlands, shielded, and directed towards the interior of the Development Area, away from native habitat.

MM F-7: Prior to issuance of a grading permit, a qualified biologist shall be retained by the Applicant as the biological monitor, subject to the approval of the County of Los Angeles Department of Regional Planning. The biological monitor shall ensure that impacts to biological resources (inclusive of special-status plants) are minimized and shall conduct pre-grading field surveys for special-status plant and animal species that may be affected and/or eliminated as a result of grading and/or site preparation activities. During earthmoving activities, the biological monitor shall be present to relocate any vertebrate species potentially impacted by Project construction to an appropriate off-site location of similar habitat. The biological monitor shall be authorized to stop specific grading activities if he or she suspects violations of Mitigation Measures MM F-1 through MM F-9 or any local, state, or federal laws regarding biological resources.

MM F-8: Work areas shall be surveyed for special-status reptile species prior to and during construction activities. Any special-status reptiles occurring within the work area prior to the start of work shall be collected and relocated to areas outside of the designated work zones. If ongoing biological monitoring of construction activities reveals the presence of any special-status reptiles within an active work area, then work shall be temporarily halted within that area until the animals can be collected and relocated to areas outside of the designated work zone(s).

MM F-9: The Applicant shall submit the Project landscape plan to the County of Los Angeles Department of Regional Planning for review and approval prior to issuance of a building permit. The landscape plan shall show the size, type and location of all plants and watering facilities, consistent with the County's established codes and procedures. Where feasible, native plants shall be used for landscaping. The landscape plan shall also specify the type and location of eight-foot

high decorative fencing to be installed along those portions of the Project site perimeter visible to the public along SR-14 and Placerita Canyon Road.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the above Mitigation Measures and Project Design Features, the Project would have less than significant impacts with respect to biological resources.

V. Environmental Impact Analysis

G. Cultural and Paleontological Resources

V. ENVIRONMENTAL IMPACT ANALYSIS

G. CULTURAL AND PALEONTOLOGICAL RESOURCES

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's potential impacts on cultural resources, including historic, archaeological and paleontological resources. This analysis is based on the Historic Resources Assessment and Potential Impacts Analysis for Disney | ABC Studios at The Ranch and the Phase I Archaeological and Paleontological Resources Assessment prepared by PCR Services Corporation, included as Appendices G.1 and G.2, respectively. A Supplement to the Phase I Archaeological and Paleontological Resources Assessment has been prepared by Statistical Research, Inc. for the Conditional Parking Areas, the Potential Mobile Home Relocation Areas, and the Water Tank Area and is included as Appendix G.3 to this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Regulatory Framework

Numerous laws and regulations require federal, state, and local agencies to consider the effects of a project on cultural resources. These laws and regulations establish a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office and the Advisory Council on Historic Preservation). The National Historic Preservation Act of 1966, as amended, the California Environmental Quality Act (CEQA), the California Register of Historical Resources, Public Resources Code Section 5024, and Chapter 3.30 of the Los Angeles County Code are the primary laws governing and affecting preservation of historical, archaeological and paleontological resources of national, state and local significance within the Project vicinity. A description of these laws and regulations is provided below.

(1) Federal Level—National Register of Historic Places

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the National Historic Preservation Act of 1966 (NHPA), as "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or

impairment." The National Register recognizes properties that are significant at the national, state, and local levels.

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. Four criteria have been established to determine the significance of a resource:

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 that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. It yields, or may be likely to yield, information important in prehistory or history.

A property eligible for the National Register must meet one or more of the above criteria. In addition, unless the property possesses exceptional significance, it must be at least fifty years old to be eligible for National Register listing. However, the National Register does not prohibit the consideration of properties less than fifty years in age whose exceptional contribution to the development of American history, architecture, archaeology, engineering, and culture can be clearly demonstrated.

As defined in *National Register Criteria Consideration G: Properties that have Achieved Significance Within the Past Fifty Years*, a property achieving significance within the past fifty years is eligible only if it is of *exceptional importance*, or if it is an integral part of a district that is eligible for listing in the National Register. Criteria Consideration G "guards against the listing of properties of passing contemporary interest and ensures that the National Register is a list of truly historic places." A property that is less than fifty years old must meet Criteria Consideration G, as must "a property that continues to achieve significance into a period less than 50 years before the nomination."

In addition to meeting the criteria of significance, a property must retain its historic integrity. "Integrity is the ability of a property to convey its significance." According to the *National Register Bulletin*, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity, a property will always possess several, and usually most, of these seven aspects. Thus, the retention of the

specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. The following is excerpted from the *National Register Bulletin, How to Apply the National Register Criteria for Evaluation,* which provides guidance on the interpretation and application of these factors:

- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting is the physical environment of a historic property.
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.
- Association is the direct link between an important historic event or person and a historic property.

In assessing a property's integrity, the National Register criteria recognize that properties change over time, therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity.

For properties which are considered significant under National Register Criteria A and B, the National Register Bulletin, How to Apply the National Register Criteria for Evaluation, states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). In assessing the integrity of properties, which are considered significant under National Register Criterion C, the National Register Bulletin, How to Apply the National Register Criteria for Evaluation, provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.

(2) State Level

The California Office of Historic Preservation (OHP), a division of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also carries out the duties as set forth in the Public Resources Code and maintains the California Historic Resources Inventory and California Register of Historical Resources. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state. Also implemented at the state level, CEQA requires the identification and mitigation of substantial adverse impacts that may affect the significance of identified historical resources and archaeological resources as part of the environmental review process conducted under CEQA.

(i) California Register of Historical Resources

Created by Assembly Bill 2881 in 1992, the California Register of Historical Resources (California Register) is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change." The criteria for eligibility for the California Register are based upon National Register criteria. The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places;
- California Registered Historical Landmarks from No. 770 onward;
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Resources Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Individual historical resources;
- Historical resources contributing to historic districts;
- Historical resources identified as significant in historical resources surveys with significance ratings of Category 1 through 5 as defined on the California Department of Parks and Recreation's Form 523 ;

- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

To be eligible for the California Register, a historic resource must be significant at the local, state, or national level, under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. 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

4. Has yielded, or has the potential to yield, information important in prehistory or history.

Additionally, a historic resource eligible for listing in the California Register must also retain its integrity. In other words, it must retain "enough of its historic character or appearance to be recognizable as a historic resource and to convey the reasons for its significance."

"Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. The resource must also be judged with reference to the particular criteria under which it is proposed for eligibility. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register."[1]

(ii) California Environmental Quality Act

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a project. Under CEQA, Public Resources Code Section 21084.1, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment." This statutory standard involves a two-part inquiry. The first involves a determination of whether the project involves a historic resource. If so, the lead agency must determine whether the project may involve a "substantial adverse change in the

[1] *California Code of Regulations, California Register of Historical Resources (Title 14, Chapter 11.5), § 4852(c).*

significance" of the resource. CEQA Guidelines Section 15064.5 provides, for the purposes of CEQA compliance, the term "historical resources" shall include the following:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC Section 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 a historical resource survey meeting the requirements in Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat such resources 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 (PRC Section 5024.1, Title 14 CCR, Section 4852).

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a 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 a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

CEQA Guidelines Section 15064.5 also provides that "[s]ubstantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." Material impairment occurs when a project materially alters or demolishes in an adverse manner "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" in the California Register or a local historic registry or that justify its eligibility for inclusion.

CEQA also considers project impacts to "unique archaeological resources." As used in CEQA, Public Resources Code Section 21083.2(g), "a unique archaeological resource"

means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA requires the lead agency to consider whether the project would have a significant effect on unique archaeological resources or resources eligible for listing in the California Register, and to avoid these resources when feasible or to mitigate any effects to less than significant levels. (Public Resources Code Sections 21083.2 and 21084.1). CEQA Guidelines Section 15064.5(c)(4) notes that if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

CEQA Guidelines Section 15064.5(e) provides procedures to be followed in the event of the accidental discovery of human remains. If remains are discovered, the county coroner examines the remains to determine the nature of the remains and cause of death. If the remains are determined to be of Native American origin, the county coroner contacts the Native American Heritage Commission (NAHC), which identifies the person or persons it believes to be the most likely descendent(s) of the deceased Native American. The most likely descendent may make recommendations for the excavation work and for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. Under certain conditions, the landowner or his authorized representative may rebury the human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance. Native American burials in California are protected by Public Resources Code Sections 5097.9–5097.991 and Section 7050 of the Health and Safety Code.

Paleontological resources are also afforded protection under CEQA. Appendix G of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, which states, “a project will normally result in a significant impact on the environment if it will…disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study.” Section 5097.5 of the Public Resources Code also specifies that any unauthorized removal of paleontological remains is

a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for the unauthorized damage or removal of paleontological resources.

(3) Local Level

(i) County of Los Angeles Historical Landmarks and Records Commission

Historic resources located within unincorporated areas of Los Angeles County fall within the jurisdiction of the County's Historical Landmarks and Records Commission. The Commission is responsible for considering and recommending to the Los Angeles County Board of Supervisors local historical landmarks deemed worthy of registration either as "California Historical Landmarks" or as "Points of Historical Interest," and may consider and comment for the Board on applications relating to the National Register of Historic Places. The Commission was established by Board Order pursuant to Chapter 3.30 of the Los Angeles County Code. The Commission criteria for designation, including significance and access and provision for maintenance, are specified in state law, including the Public Resources Code, or in regulations and interpretations of the State Historical Resources Commission.

(ii) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to cultural resources. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to cultural resources.

(iii) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to cultural resources. As discussed in the policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to cultural resources.

(4) Native American Consultation

Government Code Section 65352.3 (Senate Bill 18) requires local governments to consult with California Native American tribes identified by the California Native American Heritage Commission prior to the adoption or amendment of a general plan, area plan or specific plan for the purpose of protecting traditional tribal cultural places. The State Office of Planning and Research's technical advice series strongly recommends that agencies solicit the concerns of Native Americans and other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associates and societies as part of the process of cultural resources inventory.

b. Background/Context

The discussion provided below presents the primary themes associated with past activities on the Ranch during the 19th and 20th centuries: ranching and agriculture, gold mining, oil exploration, horse breeding, and film production. A period of significance is identified for each theme, which specifies the span of years the Ranch was associated with each past activity. Also provided below is an overview of the ethnographic (Native American) context of the Ranch and Project vicinity.

(1) Mission San Fernando, Estancia de San Francisco (1804–1833)

The period of significance for the area's association with the Mission San Fernando and Estancia de San Francisco Xavier begins with the establishment of the Estancia de San Francisco Xavier in 1804 and ends in 1833 when the Mexican Congress began to dismantle mission properties. Published local histories indicate that the vicinity of Placerita Canyon was once associated with the ranching operations of Mission San Fernando, one of the major missions of early Los Angeles that encompassed, at its peak, most of the San Fernando Valley. No documentation specifically linking the Ranch, including the Development Area and other Ranch areas of the Project site, with the Mission was uncovered; however, given the scope of the Mission's vast ranching activities in the vicinity, it appears likely that the Ranch was used by the Mission as rangeland.

Mission San Fernando Rey de España (Mission) was established in 1797, approximately 30 miles south of the Ranch.[2] Shortly thereafter, the Mission established an *estancia,* or outpost, near Castaic Junction on the site of the Valencia community. In 1804, Estancia de San Francisco Xavier (Estancia) was constructed approximately 14 miles to the northwest of the Ranch. The Estancia's primary function was to manage the Mission's vast ranching operations.[3]

The Ranch is located relatively equidistant from the former Mission San Fernando and the Estancia, which, combined with its canyon topography, would have made it well suited as a range for the Mission's livestock. The Mission's large-scale ranching activities appear to have occupied much of the Santa Clarita Valley. The most important ranching activity in the Santa Clarita Valley was cattle ranching for the exportation of leather. By

---

[2] *Darryl Manzer, "Evolution of the Local Rancho," Old Town Newhall Gazette (March–April 2006).*

[3] *Ibid.*

1813, the Santa Clarita Valley was reportedly so flush with cattle that a fence had to be constructed across Newhall Pass in order to contain the herds securely within the valley.[4]

The Mission's large-scale ranching activities continued to function throughout the era of the Mexican Revolution, which began in 1821. However, by 1833, Mexico successfully gained its independence from Spain and the Mexican Congress began to take possession of church-owned mission properties.[5]

(2) Rancho Era (1834–1862)

The period of significance for the area's association with the Rancho era begins with the arrival of Antonio Del Valle in 1834 and ends when the Del Valle family sold their holdings in 1862. Antonio Del Valle, a Spanish soldier, arrived at Mission San Fernando in 1834 charged with the task of inventorying and dismantling the Mission. In 1839, he obtained a large portion of the former Mission San Fernando for himself in the form of a 48,829-acre land grant called Rancho San Francisco from Juan B. Alvarado, the Governor of California. The former Rancho San Francisco was located approximately one mile west of the western boundary of the Ranch, possibly within the Off-Site Infrastructure Improvement Areas.

Nearly a decade of erratic weather—heavy flooding combined with severe droughts—during the 1850s and 1860s created severe difficulties for the area's ranching and agricultural operations. Many ranches did not survive and were subdivided and sold. Oil speculators stepped in to purchase many of the heavily indebted ranch lands. In the early 1860s, the Del Valle property was sold for back taxes. In 1875, Henry Mayo Newhall, a businessman who bought many of the area's former Mexican land grants in the hope of striking oil, purchased the land. In 1883, after Newhall's death, his descendants established the Newhall Land and Farming Company.[6]

No written descriptions, historic photographs or maps were found that are directly associated with the Ranch, including the Development Area and other Ranch areas of the Project site, during this era. No evidence was found, either documentary or physical, to indicate that any permanent settlements or cultural landscape features, other than possibly an old trail, were located on the Ranch during this era.

---

[4] *Ibid.*

[5] *Ibid.*

[6] *Leon Worden, "Prime Valencia Real Estate, $2 an Acre," Santa Clarita Valley Historical Society (June 7, 1995).*

(3) Gold Discovery (1842–1848)

The period of significance associated with gold discovery in the area begins with the date gold was discovered in 1842 and ends when the finds were exhausted in 1848. Gold mining in the vicinity of the Ranch ceased over a century ago. However, the history of the 1842 gold discovery is well-documented in local folklore and history. No documentation was found that definitively links the Ranch, including the Development Area and other Ranch areas of the Project site, with the gold discovery. Nonetheless, the Ranch retains an association with the discovery as it is reputed to be the home of the "Oak of the Golden Dream" under which gold was first found in Placerita Canyon. However, this name has also has been given to several other trees in Placerita Canyon, with the State of California officially designated "Oak of the Golden Dream" located at the nearby Placerita Canyon Nature Center.[7] The oak in question on the Ranch is at least 0.5 mile east of the Development Area and would not be impacted by the Project.

It is well known that gold mining activities took place in Placerita Canyon. Several unverified reports suggest Placerita Canyon was already a well-known source for gold in the years prior to its official discovery in 1842. These reports include references to the Los Padres mine as early as the 1790s and other undocumented gold discoveries from the early 1830s. On March 9, 1842, Francisco Lopez, Manuél Cota and Domingo Bermudez found gold in Placerita Canyon under a large oak tree, nicknamed the "Oak of the Golden Dream," and filed a claim with the Governor of California shortly thereafter. News of the find spread rapidly and an estimated 2,000 miners, primarily from Sonora, Mexico, worked Placerita Canyon for the next several years. By 1848, the find was exhausted, having yielded 125 pounds of gold.[8]

While no 19th century documents were found to verify this oral history, tax assessor maps from 1902–1910 and 1926–1932 indicate the location of the Montezuma Place Mining Claim. Additionally, the Placerita Mining, Milling, and Water Company was listed on assessor maps from 1902–1910. Both holdings were located within the existing Ranch, indicating its past association with mining activities. It is very likely the setting of the Ranch and the surrounding area experienced a dramatic shift as the gold rush brought an estimated 2,000 miners to this undeveloped area. Even if it was not directly associated with gold recovery operations, the Ranch very likely experienced the effects of these operations in the form of temporary tent cities along with the installation of corrals, wells,

---

[7] *Oak of the Golden Dream, Placerita Canyon Nature Center, State Historic Landmark #168.*

[8] *Arthur B. Perkins, "The Story of Our Valley: The History of the Santa Clarita Valley, The Crossroads of Southern California, and Other Works," originally published in the Newhall Signal and Saugus Enterprise (Santa Clarita Historical Society, 1954).*

roads and pathways, as well as the use of gold recovery machinery typical of the mid-19th century period. It is also likely that this infrastructure was quickly dismantled or abandoned as the find was exhausted. An intensive pedestrian survey of the area found no existing evidence of historic gold mining activities on the Ranch.

(4) 20th Century Ranching (1902–1996)

According to assessor records research, historic aerial maps, and oral history, there are three existing resources associated with the Early 20th Century Ranching period on the Ranch. As discussed in detail below, assessor records indicate that a Ranch House was constructed circa 1913 in the eastern portion of the Ranch, and another Ranch House was constructed circa 1920 in the western portion of the Ranch. According to oral history, the Ragwing Barn was constructed circa 1920 near the center of the Ranch and was later enclosed during the 1980s for a film production. Other types of ranching features most likely present on the Ranch during this period would have included fencing, corrals, barns and breeding facilities, storage buildings, possibly additional dwellings, wells, hayfields, pasture, original roads, footpaths and plantings. Documents or photographs that depict either the plan of the Ranch or information regarding the individual buildings that existed during this period are limited. As described below, other structures developed at the Ranch during this timeframe included a guest house within the eastern portion of the Ranch and three Arroyo Stone Culverts along Placerita Canyon Road.

A known ranch operation historically associated with 20th Century Ranching on the Ranch is the Jauregui Ranch (1928–1996) that is said to have comprised the Ranch's western portion. Andy Jauregui leased land from Standard Oil Company near what is now State Route (SR-14) in 1928. Golden Oak Ranch Properties, the Disney company to which all other Ranch property had been transferred, purchased the Jauregui Ranch in 1996. Prior to that time, the remnants of the Jauregui Ranch included several barns and outbuildings as well as a rodeo arena, most of which had been dismantled before Disney purchased the property.

(5) Mid-20th Century Equestrian Use (1939–1955)

By the mid-20th century, large parcels of land that traditionally supported ranching and film production uses in Placerita Canyon were increasingly rare, in part due to the burgeoning Los Angeles metropolitan area that made the area's open lands increasingly attractive for new residential development.

There are two existing resources—a Barn and Stables (circa 1940)—on the Property that are associated with Mid-20th Century Equestrian Use. As with the other ranch operations on the Ranch, no documents or photographs were located that depicts either the plan of the Property or its individual buildings during the 1940s. Historical research

suggests the ranch owner most likely associated with the Mid-20th Century Equestrian Use on the property may have been W.C. Gaffers, who was listed on assessor maps as the owner of parcels within the Ranch circa 1939 until 1955.[9] Articles on horse racing from the 1930s and 1940s refer to a "Gaffers & Sattler" race horse breeding facility located either "near Newhall" or in Placerita Canyon, but do not provide any more specific information regarding its location.

It is not clear whether the breeding facility mentioned in the horse racing articles was located in the existing barn and stables on the Ranch. According to assessor's record research, it appears that Gaffers owned a parcel in the western portion of the Ranch. Nonetheless, there is no evidence in the published record to suggest the Gaffers & Sattler breeding and racing operations made a significant contribution to historical patterns or trends in animal husbandry or horse racing.

(6) Oil Exploration (1876–present)

Oil exploration is a notable aspect of the area's setting to the present day. The period of significance for oil exploration begins with the establishment of numerous oil exploration activities in the vicinity after the big strike in Mentryville in 1876 and continues until the present. The Santa Clarita Valley is rich in oil either as surface seeps or underground deposits. As early as 1850, the San Fernando Mission documented its use of "burning oil" obtained from their lands near Castaic. Oil exploration and recovery activities are a common sight today and one can spot numerous oil recovery operations on the hillsides along SR-14.

Historical assessor maps from 1902 to 1910 indicate oil companies owned parcels within the current Ranch boundary. These oil companies include the Standard Oil Company (listed from 1902 to 1957 on assessor maps), Banner Oil Company (listed from 1902 to 1946 on assessor maps), Freeman White Oil Company (listed from 1902 to 1926 on assessor maps), Republic Petroleum Company (listed from 1919 to 1932 on assessor maps), Placerita Mining, Milling, and Water Company (listed from 1902 to 1910 on assessor maps), Cascade Oil Company (listed from 1919 to 1926 assessor maps), General Petroleum Company (listed from 1926 to 1956 on assessor maps), York Oil (listed from 1952 to 1957 on assessor maps), and Socony Mobil Oil Corporation (listed on 1957 assessor maps).

---

[9] *"Looking Over the Barns at Santa Anita," Los Angeles Times (Dec. 28, 1940).*

No images definitively identifiable as the Ranch, including the Development Area and other Ranch areas of the Project site, were located that document this era; however, several images of early oil exploration activities were found. As with gold discovery activities, most structures within this context were likely intended for temporary uses and few permanent structures appear to have been constructed during the period of significance.

Oil exploration has a lengthy period of significance (1876–present) as a historic and contemporary use of the Ranch. While abundant in the surrounding area, it had a limited influence on the Ranch and no potentially eligible historic resources associated with this historic context were identified.

(7) Transportation (1953–1957)

The period of significance associated with Transportation on the Ranch is circa 1953–1957 when Los Angeles County improved Placerita Canyon Road between Sierra Highway and Sand Canyon Road.[10] Placerita Canyon Road is not visible on the 1950 historic aerial but appears on the 1960 historic aerial. As a result of the Placerita Canyon Road improvement, three Arroyo Stone Culverts (circa 1957) were constructed that provide access under Placerita Canyon Road. Portions of the Arroyo Stone Culverts were constructed from arroyo stones that are a predominant construction material found in other pieces of infrastructure around the Ranch.

(8) Film Production (1928–present)

The development of the film industry in nearby Los Angeles has had a lasting influence on the Ranch and the larger setting of the Santa Clarita Valley. In the early years of the 20th century, the popularity of the "western" film genre created a need for large sets to represent western towns and, particularly, western landscapes. As early as 1903, the streets of nearby Newhall played a supporting role as a backdrop for numerous silent films.[11] Placerita Canyon evokes distinctively western scenery, and the Ranch's views and valleys made it a natural choice for filming when representations of wide and open spaces were required.

---

[10] *"Property Bought for Road Project," Los Angeles Times (October 6, 1957), F18.*

[11] *Rock, Carol, "Big Screen, Big Valley: First Used for Filming in 1903, the Santa Clarita Valley Continues to Thrive as a Movie-Making Mecca," The Newhall Signal (February, 7, 1994).*

The period of significance for film production activities begins with the year that film production appears to have started on the Ranch, circa 1928, and continues to the present. During this era, the Ranch was in the midst of numerous film production activities, if not directly involved in them. Many local ranches participated in the emerging film industry by providing locations for filming while continuing their daily operations as working ranches. In 1928, the adjacent Walker Ranch to the east of the Ranch offered land for use in filming at the rate of $5/day. That same year, Placerita Canyon rancher, Andy Jauregui, leased property from Standard Oil which included the western portion of the Ranch. By 1929, the Jauregui Ranch was a sought-after film setting and, in 1931, a feature length production, "Freighters of Destiny," was filmed there. In the early 1930s, Monogram Pictures' Ernie Hickson established the Monogram Ranch on portions of the Ranch and constructed a Western town movie set. The Monogram Ranch became a top spot for numerous western films. When Monogram Pictures' lease expired, they moved their entire Western town set to a 10-acre site in Placerita Canyon, west of the Ranch. Between the 1930s and 1960s, the Western town set was the site for many important Western films. Along with the location shoots came the associated high-profile roster of stars, such as John Wayne, Gene Autry, Hopalong Cassidy, Mae West, Roy Rogers, and Glenn Ford. After Hickson's death in 1952, Gene Autry purchased the Monogram property and the surrounding 100 acres and renamed it Melody Ranch; however, a fire in 1962 destroyed over 17,000 acres of Placerita Canyon and hampered the use of Melody Ranch as a set location. Most of the original Western town set was destroyed.[12] As the Jauregui Ranch functioned as a "real" and "reel" ranch, the physical characteristics related to ranch activities were likely unchanged during the 1920s and 1930s. New elements introduced as a result of film production activities may have included storage and set construction sheds, sets, roads, and the use of undeveloped ranch lands for location shoots. Except for some of the elements of the Ranch related to its landscape setting, no physical evidence (buildings, structures, sets) associated with the early period of film production activities remains on the Jauregui Ranch portion of the Ranch.

Beginning in the mid-1950s, Walt Disney Productions leased land located within the boundaries of the Ranch for filming the 'Spin and Marty' segments that appeared on the Mickey Mouse Club. In March 1959, Walt Disney Productions purchased the property from Lloyd R. and Kathleen M. Earl.[13] From 1959 to 2007, the initial boundaries of the Disney property have expanded as the company purchased land both in Placerita Canyon and along the surrounding hillsides in order to preserve the property's scenic views and rural setting.

---

[12] *Ibid.*

[13] *"Make Believe Land is Ranch Near Newhall," Los Angeles Times (November 11, 1973).*

Today, the Ranch is distinguished by film production activities that were once commonplace in Placerita Canyon. It has served as the setting for numerous feature films and television shows, including "Lassie," "Mame," the "Apple Dumpling Gang," "Rhinestone," the "A-Team," and the "Dukes of Hazzard."[14] The Ranch's tradition of film production continues today as it presently accommodates a full roster of film production activity. There are numerous existing temporary sets and settings associated with these film production activities, although given the temporary and utilitarian nature of these elements, the existing sets do not convey significant associations with this historic theme. Furthermore, most of the Development Area is comprised of two large fill pads deposited during construction of SR-14 in the early 1970s. Given the existence of these fill pads and the transmission line corridor owned by the Los Angeles Department of Water and Power (LADWP) over which power lines were erected in 1981, running northwest to southeast along the western portion of the Ranch, most of the Development Area is not used as a filming backdrop.

Relative to the other Ranch portions of the Project site, the Water Tank Area and Trail Area, both located on hillsides south of Placerita Canyon Road, are sometimes used as a filming backdrop. The Conditional Parking Areas are located in the central portion of the Ranch and consist of an agricultural field (northern lot) and an unpaved parking area (southern lot) used as a parking and staging area for filming activities. The Potential Mobile Home Relocation Areas are situated in the eastern, developed portion of the Ranch where the Ranch office, a barn, and a workshop are located.

(9) Native American Context[15]

The Development Area lies in a territory in which three Native American groups claim ancestral lands: the Gabrielino, the Chumash, and the Tataviam. The Gabrielino, particularly speakers of the Fernandeño dialect were located near the southern border of Chumash territory. The Gabrielino were one of the most populous ethnic nationalities of native southern California. Gabrielino territory included the Los Angeles Basin, the coast of Aliso Creek in Orange County to the south, and Topanga Canyon in the north, the four southern Channel Islands, and watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers. Their name is derived from their association with Mission San Gabriel Archangel.

---

[14] *Famouslocations.com, "Golden Oak Ranch," www.famouslocations.com/content/L_Golden_Oak_Ranch (June 17, 2008).*

[15] *Phase I Archaeological and Paleontological Resources Assessment for Disney ABC Studios at the Ranch, prepared by PCR Services Corporation, August 2010.*

The Gabrielino were not the first inhabitants of the Los Angeles Basin, but arrived around 500 B.C. The language of the Gabrielino people has been identified as a Cupan language within the Takic family, which is part of the larger Uto-Aztecan language family. The Gabrielino were advanced in their culture, social organization, religious beliefs, and art and material production. Class differentiation, inherited chieftainship, and intervillage alliances were all components of Gabrielino society. At the time of European contact, the Gabrielino were actively involved in trade using shell and beads as currency. The Gabrielino were known for excellent artisanship in the form of pipes, ornaments, cooking implements, inlay work, and basketry. The Gabrielinos evolved an effective economic system which managed food reserves (storage and processing), exchanged goods, and distributed resources. Data collected and presented by Kroeber (1925) indicate that homes were made of tule mats on a framework of poles, but size and shape have not been recorded. Basketry and steatite vessels were used rather than ceramics; ceramics became common only toward the end of the mission period in the 19th century.

The Ventureño Chumash lived along the coast between the Fernandeño Gabrielino to the south and the Alliklik/Tataviam over the Santa Susana Mountains to the east. The area now known as Chumash territory has one of the longest occupation histories in North America. Occupation that is identifiably Chumash dates to circa 600 B.C. and possible antecedent social complexity has been identified as early as 6500 B.C. The original Chumash-speaking population prior to European contact has been estimated at approximately 18,000 to 22,000. Chumash culture at the time of contact is considered to be among the most complex observed among hunter-gatherers and was supported by a vast maritime economy. The Chumash lived in villages of around 150 to 250 people. The villages consisted of houses, ceremonial buildings, subterranean sweat houses, and places for storing goods. Their houses were made of willow frames covered with tule mats and were often located near sources of fresh water. Coastal communities appear to have been located in places that provided abundant marine resources and easy access for their ocean going boats. Semi-sedentary groups on the mainland moved from winter villages to temporary camps to gather resources. Marine resource procurement was important during seasonal periods when seals and sea lions gathered in coastal areas. Interior groups moved to the coast during the spring and summer to collect shellfish. Coastal groups returned to their villages in late summer and early fall to harvest large schooling fish such as tuna. Hunting also was important during the fall. Winter months were spent in villages, where residents relied on stored foodstuffs and occasional fresh fish.

Analysis of new marine core data from the Santa Barbara Channel region has identified the period A.D. 450–1300 as one of the most unstable intervals of the past 3,000 years. Analysis of archaeological data from across the Chumash region has identified major social changes within this interval, including development of fully sedentary villages after A.D. 650, intensification of fishing circa A.D. 950, intensification of exchange

between coast and islands A.D. 650 to 1300, an apparent decrease in violent injuries after A.D. 1300 (some conflict continued to time of Spanish), and distribution of Chumash dialects in horizontal transects extending from the Central Valley to the coast by circa A.D. 1000. Several Chumash scholars have proposed this development of social complexity was in response to changes in the distribution and availability of major resources.

The upper Santa Clara River Valley region was inhabited by a group known as the Tataviam. Although very little information was recorded about the Tataviam, they are generally accepted as members of the Takic language of the Uto-Aztecan family. Based on the existing documentation, the Tataviam are believed to have inhabited the upper Santa Clara River drainage, with their territory extending from Piru in Ventura County, east to just beyond Vasquez Rocks and Agua Dulce, and south to Newhall. Their territory to the north included the middle reaches of Piru Creek, the Liebre Mountains and the southwesternmost fringe of the Antelope Valley. It is likely that their northern boundary ran along the northern foothills of the Liebre Mountains (i.e., the southern edge of the Antelope Valley), and then crossed to the southern slopes of the Sawmill Mountains and the Sierra Pelona, extending as far east as Soledad Pass. The Tataviam do not appear to have controlled the Leona Valley or areas to the north and it is not certain if the Elizabeth Lake area was within their sphere of influence. To the south, their boundary is thought to have run along the crest of the western arm of the San Gabriel Mountains, north of San Fernando, and westward beyond Fremont and San Fernando Passes to the Santa Susana Mountains.

In several ways, the Tataviam were similar to their Fernandeño and Chumash neighbors. Like these groups to the south and west, the Tataviam were hunter-gatherers. While very little is known of Tataviam social and political organization, using analogies from ethnographic studies of surrounding groups, it can be assumed that they were organized in a series of *tribelets*. These social units are found to be characteristic of much of California aboriginal socio-political organization.

The Tataviam were one of the earliest groups contacted by Spanish missionaries when a number of their villages were visited and recorded by members of the Portolá expedition of 1769. By 1810, all Tataviam had been baptized and moved to Mission San Fernando where they were quickly absorbed by other groups through intermarriage. The last speaker of Tataviam died in 1916.

Information about historical Tataviam village locations is provided by a few word lists and mission records collected during the initial period of Spanish occupation. Known villages include: *piirukung* and *akavaya*, both near modern Piru; *tsavayung*, Rancho San Francisco; *etseng*, *kuvung* and *huyung*, on Piru Creek above Piru; *tochonanga*, near the

original Newhall town-site spring; and *kwarung*, Elizabeth Lake. A mixed Chumash-Tataviam population lived at *kamulus*, near modern Rancho Camulos.

c. Cultural Resources within the Project Site and Project Vicinity

(1) Previously Recorded Historical Resources in the Project Vicinity

The historical resources investigation included records searches and review of local histories to determine: (i) if known historical resources have been recorded previously within a 0.5-mile radius of the Project site; (ii) if the Project site has been systematically surveyed by historians prior to the initiation of the study; and/or (iii) whether there is other information that would indicate whether or not the area of the Project site is historically sensitive or may pose indirect impacts to adjacent historic resources. The National Register, California Register, California Historic Resources Inventory (HRI), California Points of Historical Interest (PHI), and the California Historical Landmarks (CHL) were reviewed to determine previously identified historical resources within a 0.5-mile radius of the Development Area and the Ranch.

There is one California State Historical Landmark within a 0.5-mile radius of the Ranch. The Oak of the Golden Dream, California State Historical Landmark Number 168, is located in the adjacent Placerita Canyon State and County Park. The landmark designates where Francisco López made California's first authenticated gold discovery on March 9, 1842. This Historical Landmark is more than a mile east of the Development Area and 0.5 mile east of the eastern Potential Mobile Home Relocation Area, and, accordingly, would not be impacted by Project activities within the Development Area, Water Tank Area, Trail Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, or the Off-Site Infrastructure Improvement Areas. There are no properties listed on the National Register, California Register, California Historic Resources Inventory, or California Points of Historical Interest within a 0.5-mile radius of the Development Area or the Ranch.

(2) Historic Resources and Evaluation of Historical Significance: On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas—and Off-Site Infrastructure Improvement Areas Impacts

A total of nine individual buildings, structures, building groups, and landscape settings were identified as a result of a reconnaissance survey of the Project site (site survey) and evaluated for potential historical significance based on National Register, California Register, and local County criteria. These features include a Ranch House (circa 1913), Ragwing Barn (circa 1920) and Barn and Stables (circa 1940), a second Ranch House (circa 1920), a series of Culverts (circa 1950s) constructed with stone masonry, a

mature oak tree, temporary sets and outdoor settings associated with film production, a Guest House (circa 1940), and the landscape of the Ranch. All the above mentioned locations are located on the Ranch.

No potential resources were identified in the Off-Site Infrastructure Improvement Areas.

(a) Main Ranch House (circa 1913)

The Arts and Crafts style ranch house is located in a clearing in the southeastern portion of the Ranch near the southern Conditional Parking Area and the Potential Mobile Home Relocation Areas, approximately 0.25 mile east of the Development Area. Character-defining features include the wood frame construction, low-pitched roof, and deeply recessed front porch, which are typical of Arts and Crafts style residences from the early 20th century. Due to several modifications and lean-to additions over the years, this building does not retain sufficient integrity to be eligible as a good example of an early 20th century ranch dwelling. Specifically, the dwelling has been substantially altered and does not convey its historic associations as one of the primary buildings among many that would have comprised the ranch operations during the 20th Century Ranching period of significance, circa 1902 to 1996. The ranch house exists as a remnant of the 20th Century Ranching and the dwelling itself is an altered example of an early 20th century ranch house which does not retain sufficient integrity to be considered potentially eligible as a historic resource. Given the low integrity of both the ranch house and setting associated with the 20th Century Ranch era, the ranch house is not potentially eligible as a historic resource.

(b) Ranch House (circa 1920)

This ranch house is located within the Development Area. The rectangular wood-frame, single-story building has board-and-batten siding and is covered by a low-pitched side gable roof with asphalt shingles and overhanging eaves. Character-defining features include the wood-frame construction, board-and-batten siding, gable roof, chimney, and sash windows. The dwelling is uninhabited and in poor condition but retains sufficient integrity to be identifiable as an early-20th-century ranch dwelling in terms of location, design, setting, materials, and workmanship. However, it lacks integrity of setting, feeling, and association. Due to substantial alterations to its former ranch setting, the dwelling does not convey its historic context as a primary building in a residential and agricultural complex that would have comprised the ranch operations during the 20th Century Ranching period of significance of circa 1902 to 1996. Thus, this ranch house is not potentially eligible as a historic resource.

(c) Ragwing Barn (circa 1920)

The Ragwing barn is located in the southeast portion of the Ranch and is of vernacular wood-board and batten construction with a central door and front gable roof. The barn was originally an open cattle feed barn with a central hay storage aisle with feed manger that paralleled under the barn's eaves. The barn was enclosed as a set circa 1983. The Ragwing Barn is located over 0.25 mile from the Development Area and northeast of the Potential Mobile Home Relocation Areas and would not be impacted by the Project.

The Ragwing Barn appears to be in good condition but retains little integrity with regard to its design, materials, and workmanship. The Ragwing barn is extensively altered. The barn is a common and undistinguished example of early 20th-century agricultural architecture and is not potentially eligible as a historic resource.

(d) Barn and Associated Stables (circa 1940)

The barn and stables, situated near the Main Ranch House and Potential Mobile Home Relocation Areas, are of wood frame construction with vertical wood board-and-batten siding. The barn has a steeply pitched front gable roof, and shed roofs cover the attached stables. Windows are rustic in style and have simple cut openings.

The barn and associated stables appear to be in good condition and retain integrity with regard to their location, design, materials, and workmanship. They are still in use as a barn and stables. However, despite its integrity as a mid-20th-century barn and stables complex, the building group is a remnant of a once larger operation. As it exists today, this building group alone lacks a sufficient contextual setting to convey its association with horse breeders as one of numerous buildings that would have comprised the ranch and breeding operations during the 20th century. Given the barn and stables are common and undistinguished examples of mid-20th-century agricultural architecture and the lack of other extant features associated with the mid-20th-century period of ownership, the barn and stables complex is not potentially eligible as a historic resource.

(e) Mature Oak Tree

The short duration of gold mining activities in Placerita Canyon and the temporary nature of the structures once associated with these activities account for the lack of existing physical features associated with gold discovery. There is a single period of significance that defines the gold discovery era of the Project site—Gold Discovery (1842–1848)—and no potentially eligible historic resources associated with this historic context were identified as a result of the site survey. Given the "Oak of the Golden Dream" located nearby at the Placerita Canyon Nature Center is already officially recognized as a State Historic

Landmark, the oak tree on the Ranch reputedly linked to the gold discovery does not have a sufficient level of authenticity or significance to qualify as a potentially eligible historical resource. In any event, this oak is over 0.5 mile from the Development Area and northeast of the Potential Mobile Home Relocation Areas and would not be impacted by the Project.

(f) Film Production Sets and Settings (1928–present)

The existing outdoor sets and settings that are associated with the film production context are distinct physical landscape settings, and their associated features include temporary buildings and outbuildings and landscape elements, such as bridges, fields, and water features. While some of the sets have existed on the Ranch for some time, most were conceived of as ephemeral creations and were considered temporary. As such, they were constructed for a specific use or effect and in many cases dismantled or altered and reused for another purpose soon thereafter. Given the constructed sets are temporary by design, the physical characteristics of the landscape settings associated with the temporary sets are the most enduring elements of the film production uses of the Ranch. These landscape settings are comprised of character-defining features that include roads, views, groupings of vegetation, and other natural and man-made elements that are simultaneously key aspects of the various set locations and also help to distinguish them from the larger "natural" setting.

Despite the unique association with numerous film production activities, the individual sets, including their associated temporary structures and surrounding landscapes, are temporary creations and do not have sufficient historical significance or architectural merit to meet the threshold of significance for potential eligibility as historical resources.

(g) Guest House (circa 1940)

The rectangular cottage is a single-story, wood-frame dwelling with board-and-batten siding. It has a board-formed concrete foundation and is covered by a front gable roof with asphalt shingles and overhanging eaves. Its character-defining features include the board-formed foundation, wood-frame structure, board-and-batten siding, gable roof, and fenestration. The Guest House is located over 0.25 mile from the Development Area and northeast of the Potential Mobile Home Relocation Areas and would not be impacted by the Project.

The Guest House retains integrity with regard to its location, design, materials, and workmanship. Architecturally, the Guest House is an example of a common and undistinguished, circa 1940, wood-frame cottage. Despite its use as an ancillary building that has supported filming activities, the Guest House does not have sufficient historical importance or architectural merit to meet the threshold of significance for potential eligibility

as a historical resource. The Guest House is not itself potentially eligible as a historic resource. As a part of the extensive, long-term film production activities on the Ranch, the Guest House would only be eligible as a contributing building associated with the history of film production.

Substantial changes to the Ranch have occurred over the years during which it has been used for film production activities. The integrity of the sets and settings, of which the Guest House is a part, has been compromised due to the extensive long-term use of the area for filming. While the Guest House retains integrity, the sets and settings as a whole do not appear to embody or represent any specific period or creation that was particularly influential or that reflected an important development in set design or film production. As a result, the Ranch as a whole is not eligible as a historic film production studio or facility.

(h) Arroyo Stone Culverts (circa 1957)

Portions of the three culverts are constructed of arroyo stone masonry taken from the creek bed on the Ranch. The interiors are lined with corrugated metal. The culverts, located along the edge of Placerita Canyon, provide access under Placerita Canyon Road at three places. They are large enough for cattle to pass through and were designed with arched openings for that purpose. The incorporation of arroyo stone masonry within the design of the culverts is typical of other structures located on the Ranch.

The culverts appear to date from circa 1957 and retain integrity with regard to their location, design, setting, materials, and workmanship. They appear intact and unchanged from their original construction and continue to function as drainage canals, although they no longer function as a livestock passage. Despite their integrity, the culverts do not convey their historic context, either individually or as a group, as one of numerous landscape features, buildings, and structures that would have comprised the ranch operations. As a result, the culverts exist today as a remnant and, as discussed below, the Ranch setting as a whole does not retain sufficient integrity to be considered potentially eligible in association with Mid-20th Century Equestrian Use or Transportation.

(i) Golden Oak Ranch Landscape

With its past ranching, mining, oil production, and film production activities, the Ranch as a whole was analyzed to determine its potential eligibility as a “rural historic landscape.” The National Park Service (NPS) has developed a bulletin to aid in identifying character-defining features and a set of evaluation criteria specifically for this type of property.

The NPS has defined the term “rural historic landscape” as follows:

A geographical area that has been historically used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage or continuity of areas of land use, vegetation, buildings, and structures, roads and waterways and natural features.

In addition, the NPS has developed 11 landscape characteristics, or character-defining features, which are organized into processes and components that are typical of rural historic landscapes. Properties that are identified as rural historic landscapes must meet these landscape characteristics at a minimum level. *Processes* include: (1) evidence of historic land uses (such as farming, ranching, and industry) that have left an imprint on the landscape; (2) patterns of spatial organization (e.g., road systems, field patterns, etc.); (3) responses to the natural environment (such as the use of locally available materials); and (4) cultural traditions that influenced subsequent development. C*omponents* include: (1) circulation networks (e.g., roads, trails, waterways, etc.); (2) boundary demarcations (e.g., fences, walls, hedgerows); (3) vegetation related to land use (e.g., crops, indigenous and/or introduced species); (4) buildings, structures or objects related to the rural use; (5) clustered groupings (e.g., a combination of buildings and fences that denote a farmstead); (6) archaeological sites; and (7) small-scale elements, such as abandoned machinery, road traces, or fence posts.

A rural historic landscape is assessed in its entirety as a historic district if multiple properties are included, or as an individual historic property that retains the integrity of its historic ranch or farm boundaries. A district or ranch property may include contributing and non-contributing buildings, structures, sites or objects located within its boundaries. Given the integral relationship between individual features and the whole property, individual features, such as a barn or an orchard, are considered contributing elements to the property as a whole if they individually convey character-defining aspects of the property as a component of the larger rural historic landscape. In addition to retaining the majority of its character-defining features at a minimum level, a historic property must also exhibit historic integrity.

Film production and agricultural uses are the Ranch's predominant past and contemporary functions. The Ranch was assembled by its current owner only relatively recently; over the last century, the parcels that now make up the Ranch have been owned by a variety of individuals. The primary use of the Ranch today is as an outdoor set location for filming motion picture, television, and commercial productions that take advantage of the panoramic views from the Ranch that are ideal for location shoots. Present agricultural uses include a tree farm and agricultural fields. In prior periods, the Ranch also has supported horse breeding and cattle ranching activities.

Existing documentation of the various activities at the Ranch over the past 50 years suggests elements associated with the Ranch's past have been significantly altered prior to and during the period of ownership by Walt Disney Company affiliates. Table V.G-1 on page V.G-26 documents these alterations to ranching elements located on the Ranch.

Regarding the Ranch's other major activity—film production—there are other material changes associated with this activity that have altered the physical setting but may not be considered detrimental as they occurred within the associated period. Ongoing filming activities in these areas include support for location shoots, such as plantings, earthworks, temporary improvements and new construction, and regular maintenance of the Ranch. Other ongoing activities on the Ranch related to regular operation and maintenance include grading due to floods and fires, construction of equipment storage facilities, addition of firefighting infrastructure, and miscellaneous activities related to agriculture and livestock.

Documented construction activities that have occurred within the period of film production (circa 1928–present) on the Ranch include:[16]

- Prior to 1960: Construction of swimming hole.
- 1960: Constructed pond. Toby Tyler bridge constructed over Heil Creek.
- 1962: Constructed bridge over pond.
- 1964: Pond bridge covered.
- 1960s: Road construction for filming purposes. Constructed barnyard.
- Late 1960s to early 1970s: Outlaw Shack constructed.
- 1970s: Permanent irrigation installed.
- Early 1970s: Construction of SR-14 and fill pads placed on western portion of Ranch.
- 1978: Western Town construction and subsequent modifications.
- 1995: Nursery and hayshed constructed.

[16] *Communication, Steve Sligh, Ranch Manager, Golden Oak Ranch, 2008.*

Table V.G-1
Alterations to Ranch Resources

Period of Significance	Adverse Changes
Mission Era	No buildings or structures associated with the Mission era exist on the Ranch.
Rancho Era (1834–1862)	Subsequent historical activities have substantially altered the historic appearance of the Ranch associated with this period of significance.
20th Century Ranching (1902–1996)	The following changes have altered the Ranch setting associated with the 20th Century Ranching Era and have substantially altered or removed specific buildings, as well as constructed new buildings. This list is not inclusive, as the point in time when the changes of various attributed features occurred is unknown (e.g., removal of property demarcations) as well as the precise spatial layout of the Ranch during the period. • 1983: Ragwing Barn (circa 1920) was enclosed and converted for use as a set, thus substantially altering a building. • 1985: Porch enclosed on main ranch house (circa 1913). • 1992: Interior of main ranch house remodeled into three bedrooms instead of two (circa 1913). • 1999: Significant interior alteration of guest house (circa 1940) • 2000s: Removal of two sets of five-stall foal barns. Removal of wooden stalls in barn. Installation of concrete pad and sheet metal on barn. Shops re-roofed with ceramic tile. New corrals constructed. Added new stock pen with chute.
Mid- 20th Century Equestrian Use (1939–1955); Transportation (1953–1957)	The following changes, both within and outside the period of significance have altered the Ranch setting associated with the Jauregui Ranch, disturbed preexisting circulation patterns and have substantially altered or removed specific buildings and landscape elements as well as constructed new elements. This list is not inclusive, as the point in time when the changes of various attributed features is unknown (e.g., removal of pasture fencing, removal of rodeo arena) as well as the precise spatial layout of the Ranch during the period. • 1953: County of Los Angeles constructs Placerita Canyon Road, which disturbs the setting and location of the original ranch road that traversed the Ranch. Placerita Canyon Road also divides a portion of the Ranch, thus altering the Ranch's prior spatial relationships. • 1971: Caltrans constructs Antelope Valley Freeway (State Route 14). Two flat tops (together comprising more than 23 acres) were created on the western portion of the Ranch. Placerita Creek was diverted through a culvert constructed under the freeway. • 1981: Department of Water and Power installed power lines that

Table V.G-1 (Continued)
Alterations to Ranching Resources

Period of Significance	Adverse Changes
	run northwest to southeast along the western portion of the Ranch. • Mid-1980s: Prior owners removed several barns and outbuildings on their property. • Circa 1996: Razed most of the buildings on the Jauregui ranch property. The current owner regraded the Jauregui ranch property and used the area for dirt stockpiling. New storage containers placed on property. New foreman's house sited. Addition of septic tank, fruit trees, non-native pines, fencing, gravel, cactus, and foundation. • 1998: Bottom Road constructed. • 2007: Bottom Road moved several yards north. • Circa 2008: The current owner widens Placerita Canyon Road and constructs new Ranch entrance. Relocates dwelling from flood plain to canyon uplands.

Source: Steve Sligh, Ranch Manager, Golden Oak Ranch, 2008.

- 1990s: Natalie's Cabin constructed.
- 1996: Ranch office added. Peach orchard added.
- 1998: Planted approximately 20 coastal live oaks.
- 1999: Guest House (circa 1940) altered.
- 2000: Old Prison Set constructed. Parking lot constructed. Relocated road to avoid oaks.
- 2001: One-acre Pine Lake constructed. Planted non-native poplars and pines.
- 2002: Golden Oak Hall constructed. Planted non-native Eldarica pines.
- 2004–2005: Olivia's House constructed. Replanted trees for filming. Continued to plant 500 pine trees, non-native pepper trees, Blue Gum eucalyptus, and vineyard. Added Eucalyptus jungle.
- 2008: Poplar trees planted for screening, oaks removed for new Property entrance. Added new irrigation system and entrance gate. Construction of three-acre parking area.

Many of the physical changes outlined above and in Table V.G-1 have directly impacted the Ranch's overall integrity and sense of place. As a result, the integrity of the Ranch as rural historic landscape is low. As discussed above, the National Park Service provides guidance on activities that tend to negatively impact the historic fabric of a rural landscape. These activities include substantial additions and alterations to buildings over 45 years of age and landscape elements, such as circulation patterns, fields, pastures, streams, paths, spatial divisions, boundary demarcations, vegetation, and areas of land use. These changes detract substantially from the Ranch's ability to convey the necessary significant associations that would qualify it as eligible for listing in the National Register, California Register, or for local designation.

The Ranch was evaluated for its potential eligibility as a rural historic landscape in accordance with the National Register guidelines for this resource category. There are several periods of significance associated with the agricultural and ranching uses of the Ranch:

- Mission San Fernando, Estancia de San Francisco Xavier (1804–1833);
- Rancho Era (1834–1862);
- 20th Century Ranches (1902–1996): Gaffers (circa 1939–1955); Jauregui (circa 1928–1996); Isaac Gibbs (1902–1926); Edwin Sutton (1902–1960) Elizabeth Leihly (1911–1939); Frank T. Enright (1926–1963); Charles T. Heil (1932–1939); Gertrude Lackie (1932–1964); Degen (1939–1959); and Lloyd Earl (1945–1959).

While the Ranch appears to have retained connectivity with its agricultural past, the overall integrity has been severely compromised. In many cases, tangible physical evidence from the identified periods of significance, as exemplified in existing buildings and landscape elements, has been significantly altered. These adverse physical changes negatively impact the Ranch's level of integrity and qualities of significance.

Adverse changes generally include major additions and alterations to existing agricultural and ranching buildings. In other cases, numerous buildings have been demolished, such as has occurred on the Jauregui Ranch portion of the Ranch, which reduces the connection with the historical period. The Ranch's landscape has also been dramatically reshaped by new major roads and large infrastructure improvements.

In addition, since the integrity of the Ranch has been compromised to such an extent over time, it does not possess sufficient integrity to be eligible as a potential historic ranch district. In turn, the significance of the individual resources that are located within the Ranch also has been adversely impacted.

Due to the temporary nature of buildings and landscape features constructed for agricultural and ranching uses, few of them continue to exist on the Ranch. Only remnants of the ranches remain, which includes a disconnected collection of ranch houses, barns and stables, associated outbuildings, circulation networks, orchards, groupings of vegetation, water sources, fences and other demarcations, roads, and passages for humans and livestock. The majority of a ranch's contributing features from the associated period(s) of significance must be extant and retain integrity for the ranch as a whole to be considered eligible as a potential historical resource. In this case, the critical majority of building and landscape elements required to convey any period(s) of significance is lacking. Therefore, the Ranch as a whole is ineligible as a potential historic ranching or agricultural landscape district.

Given the few existing character-defining features and overall low integrity as an agricultural and ranching landscape, the Ranch, when considered as a whole, is not eligible as a potential historic district and/or ranch landscape. The necessary majority of the physical elements associated with the various historic ranches that once existed on the Ranch are absent.

(3) Cultural Resources Records Search

With respect to the Ranch portions of the Project site (i.e., the Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas), the results of a cultural resources records search through the California Historical Resources Information System–South Central Coastal Information Center (CHRIS-SCCIC) revealed 24 studies have been conducted within a one-mile radius of the Development Area. One prehistoric or Native American resource (CA-LAN-446) has been recorded previously within one mile of the Development Area. This resource is described as a possible fire hearth eroding out of an exposed bank along Placerita Creek with a complete pestle and small amount of charcoal and red-oxidized patches of soil associated with it. Seven historic-period archaeological resources are located within a one-mile radius of the Development Area. These resources include the two abandoned segments of the previous alignment of the Sierra Highway (P-19-002898), Placerita Canyon Road cobble and mortar culverts (P-19-186881), the Los Angeles Aqueduct (CA-LAN-2105H), the Los Angeles Aqueduct Transmission Lines (CA-LAN-2132H), Pacific Coast Oil Road (CA-LAN-2150H), two cabins known as the Walker Cabins (P-19-003133), and some historic oil machinery and tools (P-19-003134). One isolated resource was also identified within one mile of the Development Area; however, no records were collected from the CHRIS-SCCIC regarding its contents and condition. None of these resources, however, would be impacted by Project activities within the Ranch as they are located outside of the Ranch and over 0.25 mile from the Development Area. Additionally, the boundary of one of the former studies encompasses a limited area (less than 5 percent) of the northern portion of the Development Area, adjacent to SR-14. This study included an archaeological

pedestrian survey of a Caltrans drainage improvement project that yielded negative results. Further, a records search was conducted in 2004 as part of the approval of a Conditional Use Permit for outdoor filming on the Ranch, which revealed that no known cultural resources were recorded within the Development Area.

With respect to the Off-Site Infrastructure Improvement Areas, the results of a cultural resources records search through the CHRIS-SCCIC indicate 79 studies have been conducted within a one-mile radius of the Off-Site Infrastructure Improvement Areas. Three historic-period archaeological resources have been identified within the immediate vicinity of the Off-Site Infrastructure Improvement Areas. Also identified above, these resources include the Los Angeles Aqueduct Transmission Lines (CA-LAN-2132H), the Los Angeles Aqueduct (CA-LAN-2105H), and two abandoned segments of the previous alignment of Sierra Highway (P-19-002898). CA-LAN-2105H and CA-LAN-2132H would not be impacted by the Project as these resources would be avoided (e.g., the proposed Oak Orchard Alignment sewer line would be constructed above ground and encased where it crosses the aqueduct). P-19-002898 is not considered significant pursuant to CEQA nor is it eligible for listing in the National Register given its lack of structural integrity. In addition, P-19-002898 is not associated with an important event or significant person and further investigation is not likely to yield important information beyond its recordation. No resources listed in the CPHI, CHL, California Register, National Register, LAHCM, or the HRI were identified within the Off-Site Infrastructure Improvement Areas.

(4) Paleontological Resources Records Search[17]

The results of the paleontological resources records search through the Natural History Museum of Los Angeles County (LACM) files and review of geologic maps indicate that most of the Project site, including the majority of the Development Area, both Conditional Parking Areas, and much of the Off-Site Infrastructure Improvement Areas (lower lying portions) are situated upon surface deposits of younger Quaternary Alluvium, derived primarily as fluvial deposits from Placerita Creek which flows through the middle of the Ranch and Development Area and traverses a portion of the Off-Site Infrastructure Improvement Areas. The younger Quaternary Alluvium typically does not contain significant vertebrate fossils, at least in the uppermost layers, and there are no vertebrate fossil localities from these deposits near the Project site. However, the younger Quaternary deposits are likely underlain by older Quaternary or Tertiary deposits at a relatively shallow depth, which are known to have highly significant vertebrate fossils.

[17] *Phase I Archaeological and Paleontological Resources Assessment for Disney ABC Studios at the Ranch, prepared by PCR Services Corporation, August 2010; and Supplement to the Phase I Archaeological and Paleontological Resources Assessment prepared by Statistical Research, Inc., June 2011.*

According to the LACM and geologic maps of the area, the more elevated terrain in the northern portion of the Development Area, as well as the Water Tank Area, Trail Area, part of the Potential Mobile Home Relocation Areas, and portions of the Off-Site Infrastructure Improvement Areas both north and south of the Ranch contain exposures of the Pliocene Saugus Formation that may be overlain in part by older Quaternary high terrace deposits.

Based on the records search, the nearest vertebrate fossil localities in the older Quaternary deposits are located approximately 5 miles south of the Ranch around the Van Norman Reservoir. These localities included LACM 1733 that produced specimens of fossil horse (*Equus*), LACM 3397 that produced fossil specimens of bison (*Bison*), LACM 5745 that produced fossil specimens of mastodon (*Mammut*) and horse (*Equus*), and LACM 7152 that produced fossil specimens of mammoth (*Mammuthus*) and bison (*Bison*). The next closest vertebrate fossil localities in the Saugus Formation are LACM 6803-6804 and 6871, approximately 6 miles northwest of the Development Area around Saugus and Castaic Creeks. LACM 6803-6804 produced fossil specimens of camel (*Camelidae*) and horse (*Equus*) and LACM 6871 produced fossil specimens of dog (*Canidae*) horse (*Equus*), and camel (*Camelidae*). Farther northwest, near Val Verde, are fossil localities LACM 6062-6063 that produced fossil specimens of alligator lizard (*Gerrhonotus*), rabbit (*Leporidae*), pocket mouse (*Perognathus*), pocket gopher (*Thomomys*), and horse (*Equus*). South-southwest of the Development Area north of California Highway 118 and west of the Van Norman Reservoir, locality LACM 6601 produced specimens of fossil deer (*Cervidae*) and a rare specimen of fossil tapir (*Tapirus merriami*). Since the fossiliferous Saugus Formation currently underlies the undisturbed northern portion of the Development Area, the Water Tank Area, Trail Area, part of the Potential Mobile Home Relocation Areas, and portions of the Off-Site Infrastructure Improvement Areas, the paleontological sensitivity of these areas are considered to be moderate to high.

(5) Sacred Lands File Search and Native American Consultation

Results of the Sacred Lands File Search (SLF) through the NAHC did not indicate any known Native American cultural resources within the Project site. Pursuant to NAHC suggested procedures, follow-up letters were sent to Native American individuals and organizations identified by the NAHC as being affiliated with the Project vicinity to request any additional information or concerns they may have about Native American cultural resources that may be affected by the Project. Follow-up letters were also sent regarding the Off-Site Infrastructure Improvement Areas. As of August 2010, one letter response from Mr. William Gonzales of the Fernandeño Tataviam Band of Mission Indians was received. The letter from Mr. Gonzales states: “The area of the proposed Development Area is considered highly sensitive for Native American cultural resources, as numerous archaeological sites have been documented in the surrounding areas. These areas were used for habitation, hunting, occupation, religious worship, and burials.” Mr. Gonzales also requested that a tribal Native American monitor be present during ground-disturbing

activities. In addition, in follow-up phone conversations, Mr. Gonzales stated the Project area is highly sensitive for Native American resources and Native American burials have been identified nearby. Mr. Gonzales also recommended that all earthmoving activities be closely monitored, including grading that would take place in fill soils.

Pursuant to California Government Code section 65352.3 (Senate Bill 18), the County has invited representatives of local Native American tribes identified by the NAHC as having traditional lands or cultural places located within the Project vicinity to engage in formal government-to-government consultation with the County on the Project. On March 8, 2010, the Fernandeño Tataviam Band of Mission Indians accepted the County's invitation to formally consult and requested a site visit. The Project Applicant has attempted to schedule the site visit, but it has not yet occurred. This cooperative process between the County and the Native America groups is ongoing.

(6) Pedestrian Surveys[18]

Pedestrian surveys were completed for the Project site, including the Development Area, Water Tank Area, Conditional Parking Areas, Potential Mobile Home Relocation Areas, and the Off-Site Infrastructure Improvement Areas. As discussed in detail in Appendix G.2 and Appendix G.3, no prehistoric resources or paleontological resources were identified during the surveys. Although no cultural material was identified during the surveys, the floodplain area along Placerita Creek, which includes portions of the Development Area and Conditional Parking Areas, has some potential for buried site deposits due to the presence of native soils. However, as indicated above, exposures of the fossiliferous Saugus Formation were identified in the northern portion of the Development Area, the Water Tank Area, the Trail Area, part of the Potential Mobile Home Relocation Areas, and portions of the Off-Site Infrastructure Improvement Areas.

d. Project Site Surface Conditions

The Development Area includes two graded fill pads known as the northern fill pad and the southern fill pad, which are separated by Placerita Creek. These fill pads were placed by Caltrans during the construction of SR-14 in the early 1970s and are derived from local cut areas. More specifically, the majority of the fill pads consist of fill soils generated by excavations into the surrounding hills during construction of SR-14. Combined, the two fill pads comprise approximately 23.6 acres of the 58-acre Development Area. The northern fill pad is approximately 12 acres in size, approximately 34 feet to

[18] *Ibid.*

greater than 61.5 feet in depth, and located approximately 10 to 20 feet below the elevated SR-14 to the northwest. The southern fill pad is approximately 11.6 acres in size, approximately 21 feet to greater than 53 feet deep, and at its southern point is at approximately the same grade as Placerita Canyon Road.

As previously mentioned, the Water Tank Area and Trail Area are located on the hillsides south of Placerita Canyon Road. This area is undeveloped but previously disturbed, with an existing access road that leads to several existing oil wells. The Conditional Parking Areas are located in the central portion of the Ranch and consist of an agricultural field (northern lot) and an unpaved parking area (southern lot). The Potential Mobile Home Relocation Areas are situated in the eastern, developed portion of the Ranch where several existing Ranch facilities are located. The Off-Site Infrastructure Improvement Areas are primarily located within existing road rights-of-way where conditions are either developed or disturbed by paved streets and/or existing residential, commercial or industrial development.

3. ENVIRONMENTAL IMPACTS

a. Methodology

In order to identify and evaluate potential historic resources located within the Project site, a multi-step methodology was utilized. Record searches to identify previously documented historic resources were conducted and previous evaluations were reviewed. Site inspections were made to document existing conditions, identify any character-defining features of those properties evaluated as significant, and define the historic resources study area. A reconnaissance survey of the Project site, including photography and background research, was then made. Additional background and site-specific research was conducted in order to evaluate historic resources within their historic context. The National Register, the California Register, and the local County criteria were used to assess the significance of the properties.

To address potential impacts associated with archaeological and paleontological resources, records searches were conducted. In addition, pedestrian surveys were also completed. These record searches and pedestrian surveys, together with an evaluation of previous disturbances within the site, a review of the geology of the Project site, and anticipated depths of grading were used to determine the potential for uncovering of such resources.

b. Significance Thresholds

The potential for the Project to result in impacts associated with cultural resources is based on the CEQA significance thresholds specified by the Los Angeles County

Department of Regional Planning. These significance thresholds are based in part on Appendix G of the State CEQA Guidelines and are as follows:

Threshold G-1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?

Threshold G-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Threshold G-3: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?

Threshold G-4: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Threshold G-5: Does the project site contain known historic structures or sites?

Threshold G-6: Is the project site in or near an area containing known archaeological resources or containing features (drainage course, spring, knoll, rock outcroppings, or oak trees) that indicate potential archaeological sensitivity?

c. Project Design Elements

No specific Project Design Features are proposed relevant to cultural resources. However, the following information regarding Project construction activities is included herein to provide context for the analysis below.

As discussed further in Section V.A, Geotechnical Hazards, the Project would involve grading of the two fill pads in the Development Area, with excavation depths of up to 30 feet, as well as the placement of fill in the area immediately east of the southern fill pad. In addition, in non-bedrock areas within the Development Area, up to 5 feet of soil (including existing native and artificial fill soils) would be removed and replaced with engineered fill. Limited surface grading would be necessary for the access road within the Water Tank Area, the Trail Area, one of the two Potential Mobile Home Relocation Areas, and the Conditional Parking Areas, if developed. The Project would also involve excavations of trenches (for the pipeline) and grading of pads (for the associated facilities) for the Off-site Infrastructure Improvement Area. Specifically, the trenches would measure approximately 4 feet wide and 6 feet deep for the water lines and approximately 4 feet wide and 4 to 14 feet deep for the sewer lines. While the design specifications have not yet been determined for all of the supporting utility facilities, the pad for the proposed water tank is anticipated to be less than 5 feet deep (i.e., requiring excavation of up to 5 feet in

depth and the use of engineered/recompacted fill soils to create a development pad capable of supporting the water tank).

d. Impact Analysis

Threshold G-1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines § 15064.5?

Threshold G-5: Does the project site contain known historic structures or sites?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

There are no historic resources within or adjacent to the Development Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, Trail Area, or the Water Tank Area. The following buildings, structures and features within the Ranch were identified, evaluated, and found ineligible: the 1913 Ranch House; 1920 Ranch House; Ragwing Barn; Barn and Stables; the Arroyo Stone Culverts; a Mature Oak Tree; the Guest House; the temporary sets and outdoor settings associated with film production; and the Golden Oak Ranch landscape. Of these, the only two that would be affected by the Project are the 1920 Ranch House located within the Development Area, which would be removed, and the Ranch landscape; however, neither is considered to be a historic resource. Therefore, the Project would result in no impact to historical resources, and no mitigation measures are required.

(2) Off-Site Infrastructure Improvement Areas Impacts

There are no historic resources within the Off-Site Infrastructure Improvement Areas. Therefore, the Project would result in no impact to historical resources associated with off-site utility improvements, and no mitigation measures are required.

Threshold G-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Threshold G-6: Is the project site in or near an area containing known archaeological resources or containing features (drainage course, spring, knoll, rock outcroppings, or oak trees) that indicate potential archaeological sensitivity?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The results of the cultural resources records search through the CHRIS-SCCIC indicate that one prehistoric or Native American resource (CA-LAN-446) has been previously recorded within one mile of the Development Area and seven historic-period archaeological resources are located within a one-mile radius of the Development Area. Although the current content and condition of these resources is unknown, their identification confirms the presence of human occupation and subsistence activities in the region as early as the prehistoric period. However, these resources would not be impacted by the Project because they are located at least 0.25 mile from the Development Area.

No archaeological resources were identified during the pedestrian surveys of the Development Area, Water Tank Area, Conditional Parking Areas, and the Potential Mobile Home Relocation Areas. As previously described, the Project would involve grading into the two fill pads in the Development Area with excavation depths of up to 30 feet, over-excavation of up to 5 feet in non-bedrock areas, and the placement of fill in the area east of the southern fill pad. The Project would also excavate up to 5 feet for the proposed water tank's development pad, with only limited surface grading for the water tank access road, the proposed trail, one of the Potential Mobile Home Relocation Areas, and the Conditional Parking Areas, if developed. Given the composition of the fill pads, the negative results of the surveys, and the disturbance from previous development that likely would have displaced any resources, the potential to encounter buried archaeological resources within the fill pad areas of the Development Area is considered low, and no archaeological monitoring is recommended in these areas during implementation of the Project. Archaeological monitoring during grading is recommended, however, within native soils along the Placerita Creek floodplain within the Development Area, at the selected of the two Potential Mobile Home Relocation Areas, and within the two Conditional Parking Areas, if developed, as provided for in Mitigation Measure (MM) G-1 through MM G-3. Additionally, given the known prehistoric and historic occupation of the area around the Ranch and based on recent correspondence with local Native American tribes, the potential to find archaeological resources in previously imported fill still exists, and, therefore, appropriate mitigation is recommended. With implementation of MM G-1 through MM G-5, below, potential impacts on archaeological resources would be reduced to a less than significant level.

(2) Off-Site Infrastructure Improvement Areas Impacts

Three historic-period archaeological resources have been identified within the immediate vicinity of the Off-Site Infrastructure Improvement Areas. However, these resources would not be impacted by the Project as they would be avoided (e.g., the proposed Oak Orchard Alignment sewer line would be constructed above ground and

encased where it crosses the aqueduct). Further, no archaeological resources were identified during the pedestrian survey of the Off-Site Infrastructure Improvement Areas. Despite the need for trenching for utility lines, given the negative results of the survey and the disturbance from previous development that likely would have displaced any resources, the potential to encounter buried archaeological resources is considered low, and no archaeological monitoring is recommended during trenching for the Project's off-site infrastructure improvements. However, given the known prehistoric and historic occupation of the Off-Site Infrastructure Improvement Areas and based on recent correspondence with local Native American tribes, the potential to find archaeological resources still exists, and, therefore, mitigation measures are recommended. With implementation of MM G-4 and MM G-5, below, potential impacts on archaeological resources would be reduced to a less than significant level.

Threshold G-3: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

No paleontological resources were identified on the surface during the pedestrian survey of the Project site. The nearest vertebrate fossil localities in the older Quaternary deposits are located five miles south of the Development Area, and the next closest vertebrate fossil localities in the Saugus Formation are located six miles northwest of the Development Area around Saugus and Castaic Creeks.

In addition, the results of the paleontological resources records search through the LACM files indicate that most of the Development Area and the Conditional Parking Areas are situated upon surface deposits of younger Quaternary Alluvium, derived primarily as fluvial deposits from Placerita Creek that flows through the middle of the Ranch and Development Area. The younger Quaternary Alluvium typically does not contain significant vertebrate fossils, at least in the uppermost layers. However, the younger Quaternary deposits are most likely underlain by older Quaternary or Tertiary deposits at a relatively shallow depth, which are known to contain highly significant vertebrate fossils. According to the LACM and upon review of geologic maps, in the more elevated terrain in the northern portion of the proposed Development Area there are exposures of the Pliocene Saugus Formation that may be overlain in part by older Quaternary high terrace deposits. Exposure of the fossiliferous Saugus Formation was also identified within the Water Tank Area, Trail Area, and part of the Potential Mobile Home Relocation Areas on the Ranch.

The heavy disturbance from prior development in most of the Development Area and other areas of the Ranch may have obstructed paleontological resources. Based on extensive prior disturbance, the potential to encounter buried paleontological resources is considered low in the fill pad areas of the Development Area, as well as the Potential Mobile Home Relocation Areas and Conditional Parking Areas. However, grading activities are planned for the undisturbed northern portion of the Development Area, the Water Tank Area, and the Trail Area, which are underlain with the fossiliferous older Quaternary deposits and the Saugus Formation. As a result, the Project has the potential to result in significant impacts associated with buried intact paleontological resources in these areas and mitigation measures are recommended. With implementation of MM G-6 through MM G-12, below, these potential impacts would be reduced to less than significant levels.

(2) Off-Site Infrastructure Improvement Areas Impacts

As described above, no paleontological resources were identified on the surface during the pedestrian survey of the Off-Site Infrastructure Improvement Areas. Based on extensive prior disturbance, the potential to encounter buried paleontological resources is considered low in the Off-Site Infrastructure Improvement Areas. However, trenching activities are planned throughout the Off-Site Infrastructure Improvement Areas, portions of which are underlain with the fossiliferous older Quaternary deposits and the Saugus Formation. As a result, the Project has the potential to result in significant impacts associated with buried intact paleontological resources in these areas and mitigation measures are recommended. With implementation of MM G-6 through MM G-12, below, potential impacts would be reduced to less than significant levels.

Threshold G-4: Would the project disturb any human remains, including those interred outside of formal cemeteries?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The results of the SLF search through the NAHC did not indicate any known Native American cultural resources within the Project site. However, based on correspondence from the Fernandeño Tataviam Band of Mission Indians, the area surrounding the Ranch is considered highly sensitive for Native American cultural resources and Native American burials have been identified nearby. Therefore, the potential to encounter buried human remains exists, and the Project has the potential to result in significant impacts associated with buried human remains. However, with implementation of MM G-5, detailed below, potential impacts would be reduced to less than significant levels.

As also discussed above, pursuant to California Government Code section 65352.3 (Senate Bill 18), the County has invited representatives of local Native American groups to

engage in formal government-to-government consultation with the County regarding the Project. In March 2010, the Fernandeño Tataviam Band of Mission Indians accepted the County's invitation to formally consult and requested a site visit. The Project Applicant has attempted to schedule the site visit, but it has not yet occurred. This cooperative process between the County and the Native America groups is ongoing.

(2) Off-Site Infrastructure Improvement Areas Impacts

The results of the SLF search also did not indicate any known Native American cultural resources within the Off-Site Infrastructure Improvement Areas. However, as indicated above, the potential to encounter buried human remains exists within the general Project vicinity. As such, the Project has the potential to result in significant impacts associated with buried human remains. With implementation of MM G-5, potential impacts would be reduced to less than significant levels.

4. CUMULATIVE IMPACTS

The analysis of cumulative impacts to historic resources is based on whether impacts of the Project and Related Projects, when taken as a whole, substantially diminish the number of historic resources within the same or similar context or property type. As discussed above, the Project would not significantly impact any historic resources. Thus, the Project would not contribute to cumulative impacts to historic resources.

The Project in combination with cumulative development could contribute to the loss of undeveloped land, which could potentially contain archaeological or paleontological resources. Determinations regarding the significance of impacts of the Related Projects on archaeological or paleontological resources would be made on a case-by-case basis and, if necessary, the applicants of the Related Projects would be required to implement appropriate mitigation measures. Furthermore, the Project's potential impacts to archaeological and paleontological resources would be less than significant with the implementation of the recommended Mitigation Measures. Therefore, the Project would not contribute to any potential cumulative impacts on archaeological or paleontological resources, and cumulative impacts to cultural resources would be less than significant.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

No specific Project Design Features are proposed with respect to cultural resources.

b. Mitigation Measures

The following Mitigation Measures are proposed to reduce impacts to archaeological and paleontological resources:

MM G-1: A qualified archaeologist shall monitor all stripping and other earthmoving activities within native soils along the Placerita Creek floodplain within the Development Area. If an archaeological site is discovered during monitoring, construction activity in that part of the Development Area shall cease until the site can be studied by a qualified archaeologist.

MM G-2: A qualified archaeologist shall monitor the grading and excavations for light poles and electrical conduits at the two Conditional Parking Areas, if developed.

MM G-3: A qualified archaeologist shall monitor the grading and septic tank excavation at the selected of the two Potential Mobile Home Relocation Areas.

MM G-4: In the event archaeological resources are encountered during Project construction, all ground-disturbing activities within the vicinity of the find shall cease and a qualified archaeologist shall be notified of the find. The archaeologist shall record all recovered archaeological resources on the appropriate California Department of Parks and Recreation Site Forms to be filed with the California Historical Resources Information System–South Central Coastal Information Center, evaluate the significance of the find, and if significant, determine and implement the appropriate mitigation in accordance with the U.S. Secretary of the Interior and California Office of Historic Preservation guidelines, including but not limited to a Phase III data recovery and associated documentation. The archaeologist shall prepare a final report about the find to be filed with the Applicant, the County of Los Angeles Department of Regional Planning, and the California Historical Resources Information System–South Central Coastal Information Center, as required by the California Office of Historic Preservation. The report shall include documentation of the resources recovered, a full evaluation of the eligibility with respect to the California Register of Historical Resources, and treatment of the resources recovered. In the event of a find, archaeological and Native American monitoring shall be provided thereafter for any ground-disturbing activities in the area of the find.

MM G-5: In the event human remains are encountered during construction activities, all ground-disturbing activities within the area of the human remains shall cease and the County coroner shall be notified. In the event the remains are determined to be of Native American descent, the coroner shall notify the California Native American Heritage

Commission within 24 hours. The Native American Heritage Commission shall identify the person(s) thought to be the Most Likely Descendant of the deceased Native American, who shall have 48 hours from notification by the Native American Heritage Commission to inspect the site of the discovery of Native American remains and to recommend to the Applicant or landowner means for the treatment and disposition of the human remains and any associated grave goods. The Applicant or landowner shall reinter the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance. In the event Native American remains are found, Native American monitoring shall be provided thereafter for any ground-disturbing activities in the area of the remains.

MM G-6: A qualified paleontologist shall be retained by the Applicant prior to the implementation of the Project to develop and execute a paleontological monitoring plan for the grading activities planned for the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation. The qualified paleontologist shall meet the qualifications established by the Society of Vertebrate Paleontologists.

MM G-7: The paleontologist shall attend a pre-grade meeting in order to become familiar with the proposed depths and patterns of grading for grading activities planned for the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation to provide a basis to the development of a monitoring program.

MM G-8: The paleontologist shall establish a curation agreement with an accredited facility prior to the initiation of ground-disturbing activities.

MM G-9: A paleontological monitor, supervised by the paleontologist, shall monitor all ground-disturbing activities associated with grading activities in the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation. If fossils are found during ground-disturbing activities, the paleontological monitor shall be authorized to halt the ground-disturbing activities within 25 feet of the find in order to allow evaluation of the find and determination of appropriate treatment in accordance with Society of Vertebrate Paleontology guidelines for identification, evaluation, disclosure, avoidance or recovery, and curation, as appropriate.

MM G-10: The paleontological monitor and/or the paleontologist shall collect all significant fossils encountered. All significant fossils shall be stabilized and prepared to a point of identification and permanent preservation.

MM G-11: Some fossils from the Saugus Formation are very small specimens that can typically be missed in monitoring for large construction projects. Therefore, the paleontological monitor shall collect sediment samples and process them to determine the potential for small fossils in these deposits obtained during grading activities in the undisturbed northern portion of the Development Area, the Water Tank Area, the Trail Area, and those portions of the Potential Mobile Home Relocation Areas and the Off-Site Infrastructure Improvement Areas within the Saugus Formation.

MM G-12: The paleontologist shall prepare a final report on the monitoring. If fossils are identified, the report shall contain an appropriate description of the fossils, treatment, and curation. A copy of the report shall be filed with the Applicant, County of Los Angeles Department of Regional Planning, and the Natural History Museum of Los Angeles, and shall accompany any curated fossils.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the Mitigation Measures provided above, potential impacts on cultural resources would be less than significant.

V. Environmental Impact Analysis

H. Agricultural and Forestry Resources

V. ENVIRONMENTAL IMPACT ANALYSIS

H. AGRICULTURAL AND FORESTRY RESOURCES

1. INTRODUCTION

This section of the Draft EIR analyzes the Project's potential impacts on agricultural and forestry resources. As part of the analysis, a description of existing agricultural resources and the respective State and County farmland classifications for the Ranch, including the Development Area, are provided. This section focuses on applicable State, regional, and local policies regarding agricultural resources and the conversion of farmland to non-agricultural uses, as well as issues related to the conversion of forest lands to non-forest uses.

2. ENVIRONMENTAL SETTING

a. Regulatory Framework

(1) State Regulations

The California Department of Conservation (DOC) is a state agency that administers a variety of programs vital to public safety, the environment, and the economy. These conservation programs endeavor to balance orderly growth and the preservation of agricultural resources in the State. The DOC engages in land conservation planning, administration of conservation easement grants (i.e., tax incentives to retain land as agricultural or open space), and farmland mapping and monitoring. The DOC also administers the California Land Conservation Act (Williamson Act) Program, discussed below.

(a) State Farmland Designations

The goal of the DOC's Farmland Mapping and Monitoring Program (FMMP) is to provide consistent, timely, and accurate data, including maps and statistical data, in order to assist decision-makers in making informed decisions regarding the use of California farmland.

Using data from the Natural Resources Conservation Service [formerly known as the Soil Conservation Service, an agency of the U.S. Department of Agriculture (USDA)], the FMMP produces maps and statistical data used to analyze impacts on California's

agricultural resources. The maps, called Important Farmland Maps, are updated every two years with the use of aerial photo interpretation, a computer mapping system, field reconnaissance, and public review. The FMMP identifies seven categories of farmland: Prime Farmland; Farmland of Statewide Importance; Unique Farmland; Farmland of Local Importance; Grazing Land; Urban and Built-Up Land; and Other Land. The Natural Resources Conservation Service developed definitions for these agricultural land categories using nationwide Land Inventory and Monitoring criteria. The definitions have been modified for use in California; most significantly, in California, Prime Farmland and Farmland of Statewide Importance must be irrigated land. The mapping of Grazing Land as part of the Important Farmland Maps is also unique in California. The minimum mapping unit is 10 acres, unless otherwise specified. Units of land smaller than 10 acres are incorporated into the surrounding map classifications. Each category of farmland is summarized below, based on *A Guide to the Farmland Mapping and Monitoring Program* (2004), prepared by the DOC.

- **Prime Farmland (P).** Defined as farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Farmland of Statewide Importance (S).** Farmland similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Unique Farmland (U).** Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- **Farmland of Local Importance (L).** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. Los Angeles County has determined that farmlands of local importance are lands that would meet the standard criteria for prime farmland or farmland of statewide importance, but are not irrigated.

- **Grazing Land (G).** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

- **Urban and Built-Up Land (D).** Land occupied by structures with a building density of at least one unit to every 1.5 acres, or approximately six structures to a 10-acre parcel. This land can be used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- **Other Land (X).** Land not included in any other mapping category. Common examples include: low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

(b) Williamson Act Contracts

Agricultural uses in California can be protected through a variety of legislative means, including the California Land Conservation Act, better known as the Williamson Act (see Government Code, § 51200, *et seq.*). The Williamson Act was adopted in 1965 to enable local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural/open space uses. In return, landowners receive property tax assessments that are much lower than normal because they are based on farming and open space uses as opposed to full market value. As part of the contract, the landowner guarantees that the land will remain under agricultural use for a rolling term 10-year contract (i.e., the contract is automatically renewed annually for an additional year unless either party files a notice of nonrenewal).

Eligibility for entrance into a Williamson Act contract and the various types of contracts available (i.e., either a contract for preservation of open space, agricultural use, or recreation) depends on the local jurisdiction's rules as well as the actual language contained in the Williamson Act legislation. A large part of eligibility for particular lands is soil type. Soil types are defined by the State and are mapped statewide. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance by the FMMP.

Not all local jurisdictions participate in the Williamson Act program. Los Angeles County does not participate in the Williamson Act program in the Project area.

(c) Agricultural Conservation Easements

The California Farmland Conservancy Program is a statewide grant funding program that supports efforts to establish agricultural conservation easements and planning projects for the purpose of preserving important agricultural land resources. The program provides

grants to local governments and qualified nonprofit organizations such as land trusts. The grant funds are used to compensate a local government or nonprofit organization that voluntarily elects to impose an agricultural conservation easement on designated agricultural lands. This program is typically used by entities that have the conservation of farmland among their stated purposes. The purchase of agricultural conservation easements is best accomplished in the context of a countywide strategic plan of farmland protection. Los Angeles County does not presently participate in the California Farmland Conservancy Program.

(2) Local Regulations

(a) Los Angeles County General Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the General Plan policies that pertain to agricultural resources. As discussed in the General Plan policy consistency analysis provided therein, the Project would be consistent with the applicable General Plan polices related to agricultural resources.

(b) Santa Clarita Valley Area Plan

Refer to Section V.N, Land Use, of this Draft EIR for a listing of the Santa Clarita Valley Area Plan policies that pertain to agricultural resources. As discussed in the policy consistency analysis provided therein, the Project would be consistent with the applicable Area Plan polices related to agricultural resources.

b. Existing Conditions

(1) Regional Setting

As mentioned above, Important Farmland Maps are compiled by the DOC's FMMP and represent an inventory of agricultural resources within the State, including Los Angeles County. The maps depict currently urbanized lands and a qualitative sequence of agricultural designations. Mapping of County farmland categories is conducted every two years. According to the Los Angeles Important Farmland Map, as of 2010, Los Angeles County contained over 30,000 acres of Prime Farmland.[1] Prime locations of agricultural land in California are determined by soil quality and irrigation status, which make particular locations attractive for agricultural operations.

---

[1] *Los Angeles Important Farmland Map, 2010. Farmland Mapping and Monitoring Program, Division of Land Resource Protection, California Department of Conservation.*

The general Project vicinity is located in an area of the County that has traditionally contained land used for grazing, field and row crops, and orchards. Per the 2010 FMMP, this area of the County is comprised of land designated as Grazing Land, Urban and Built-Up Land, and Other Land (e.g., low density rural development, brush, timber, wetlands, riparian areas, and vacant land).

(2) Local Setting

Portions of the Ranch have been cultivated with row crops and dry land crops, both by the Applicant and previous owners. More specifically, certain areas of the Ranch have been used over the past decades for intermittent agricultural production of grain hays and alfalfa, horse breeding, and cattle ranching, primarily for the Applicant's own use. Within the Development Area, there are approximately 10.5 acres of previously farmed agricultural fields located primarily in the southeastern corner. While some of this area is used periodically for the production of grain hays and alfalfa, it also is used frequently for the construction of filming sets and outdoor filming pursuant to the Ranch's current Conditional Use Permit (CUP) No. 04-089-(5). The farmed areas of the Ranch do not meet the definition of Prime Farmland, and the entire Ranch, including the Development Area, are designated as Grazing Land and Other Land per the 2010 FMMP.

Approximately 20.5 acres within the Ranch, including the 10.5 acres of former agricultural fields within the Development Area, were previously designated as Prime Farmland per the 2008 FMMP, but were subsequently flagged as fallow by the DOC. Flagging is the process by which the DOC determines whether land is out of production due to a rotational cycle as opposed to being idled on a more permanent basis. Once an area has been flagged as out of production for three consecutive cycles, it is downgraded to a non-irrigated use, typically Grazing Land. Since the areas within the Ranch previously designated as Prime Farmland were used for non-agricultural purposes, including set construction and outdoor filming, for several consecutive years, these areas were downgraded to Grazing Land in the 2010 FMMP mapping update.[2]

Given the former Prime Farmland designation within the Ranch, several of the General Plan land use maps depict portions of the Ranch and Development Area as Prime Farmland. However, as part of the General Plan Update (discussed in Section V.N, Land Use), the County is revising its land use maps to reflect the Ranch's current land use

[2] *Email correspondence with Molly Penberth, Farmland Mapping and Monitoring Program Manager, California Department of Conservation, February 2010 and April 2011.*

designations of Grazing Land and Other Land, which do not fall under the State's threshold of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[3]

In addition to the designations discussed above, the Ranch, including the Development Area, Potential Mobile Home Relocation Areas, Conditional Parking Areas, Water Tank Area, and Trail Area, is designated for Rural land uses in the current County General Plan and is zoned for Heavy Agriculture (A-2-1 and A-2-2). These designations allow for a variety of uses, including agricultural and limited residential uses, oil wells, and conditionally permitted motion picture sets. Existing CUP No. 04-089-(5), approved by the County in 2006, allows the Ranch to be used for motion picture and television filming, film set construction, and agricultural activities consistent with the operation of a working filming ranch, including existing living space for on-site workers, all of which was originally authorized under CUP No. 1494, approved in 1979. Under the Santa Clarita Valley Area Plan, the Ranch also includes the following land use designations: Hillside Management (HM), Open Space/National Forest (O-NF), Non-Urban (N1), and Floodway/Floodplain (W). Specifically, the Development Area is designated as HM and W, the Water Tank Area and Trail Area are designated as HM, the Potential Mobile Home Relocation Areas are designated as O-NF, and the Conditional Parking Areas are designated as W (northern lot) and O-NF (southern lot). The existing uses on-site, which include limited oil production, are consistent with these designations. The O-NF-designated areas are private in-holdings within Angeles National Forest.

The majority of the Off-Site Infrastructure Improvement Areas is located within the City of Santa Clarita. Per the 2010 FMMP, the Off-Site Infrastructure Improvement Areas are designated as Other Land and Urban and Built-Up Land. While the proposed utility lines, roadway improvements, and replacement power poles would be located primarily in existing paved roadways or along adjacent unpaved rights-of-way, depending on the alignments ultimately selected, the improvements would pass through or adjacent to land designated and zoned as various Residential, including Very Low (RVL), Low (RL), Suburban (RS), and Moderate (RM), Community Commercial (CC), Business Park (BP), and Private Education (PE). Portions of the designated residential areas are also designated as a Mineral Oil Conservation Area (MOCA), and some of the CC areas are zoned as a Planned Development (PD).

---

[3] *Email correspondence from Dan Hoffman, Los Angeles County Department of Regional Planning, GIS Section, April 8, 2010.*

3. ENVIRONMENTAL IMPACTS

a. Methodology

The evaluation of the Project's potential impacts on agricultural resources is based on review of the DOC's Important Farmland Maps and in particular the farmland designation(s) of a portion of the Ranch, the Los Angeles County General Plan, and field review of the Development Area and the remainder of the Ranch. Information, regulations, and policies provided by the DOC, Natural Resources Conservation Service and the County were also reviewed and evaluated relative to the Ranch. The Ranch is not under a Williamson Act contract.

b. Significance Thresholds

The potential for the Project to result in impacts associated with agricultural and forestry resources is based on the CEQA significance thresholds specified by the Los Angeles County Department of Regional Planning. These significance thresholds are based in part on Appendix G of the State CEQA Guidelines and are as follows:

Threshold H-1: 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?[4]

Threshold H-2: Would the project conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?

Threshold H-3: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?

Threshold H-4: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Threshold H-5: 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?

---

[4] *The Department of Conservation falls within the California Natural Resources Agency.*

c. Project Design Elements

No specific Project components or Project Design Features (PDFs) are proposed relevant to agricultural resources.

d. Impact Analysis

Potential Project impacts on agricultural lands can be both short-term, during the construction of a project, and long-term, under post-construction operations and routine activities associated with the future land uses. All of these conditions are discussed below.

Threshold H-1: 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?

Threshold H-4: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Threshold H-5: 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?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

(a) Construction

Project construction would not have an impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance since no such lands are designated within the Project site. Construction may, however, cause indirect impacts to agricultural uses elsewhere within the Ranch due to the generation of fugitive dust emissions associated with ground disturbance and grading activities. Further, emissions from the operation of construction equipment could indirectly impact nearby agricultural resources or uses. However, the mitigation measures to control fugitive dust emissions provided in Section V.E.1, Air Quality, of this Draft EIR, would minimize any potential impact to nearby agricultural resources or uses. As such, construction impacts are considered to be less than significant.

Similarly, Project construction activities would occur within designated forest land. As previously indicated, the Ranch includes private in-holdings within Angeles National Forest, within which both of the Potential Mobile Home Relocation Areas and the southern Conditional Parking Area are located. None of the other Ranch portions of the Project site

are located within National Forest. The private in-holdings on the Ranch floor have been used for filming, set construction, barns and stables, and intermittent agricultural uses for over 50 years. Forest uses do not occur in the Potential Mobile Home Relocation Areas or the southern Conditional Parking Area. Specifically, the Potential Mobile Home Relocation Areas are situated near an existing, developed portion of the Ranch where the Ranch office, a barn, and a workshop are located. The southern Conditional Parking Area is located within an existing, unimproved parking area that is used as needed for Ranch and filming operations. As such, although Project construction would result in the continued use of designated forest land for non-forest uses, it would not convert land used for forest uses to a non-forest use and would have a negligible effect on any forest activities in Angeles National Forest. Therefore, construction impacts are considered to be less than significant.

(b) Operation

Given that the Project site does not include any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, Project operations would not have an impact on such lands, including conversion to non-agricultural use. The intermittent agricultural uses occurring elsewhere within the Ranch would continue as under existing conditions and would not be directly or indirectly impacted by the Project's operational activities. Similarly, any neighboring agricultural uses located outside the Ranch would not be impacted as the Development Area is situated a substantial distance away from adjacent properties, buffered by the remainder of the Ranch and SR-14. In addition, the Project would not involve other changes in the existing environment which, due to their location or nature, would result in the conversion of farmland to non-agricultural use.

As part of the Project, a local plan amendment would be sought to change the land use designation set forth in the current Santa Clarita Valley Area Plan for the proposed 44.28-acre tract map area from HM (Hillside Management) to C (Commercial) for approximately 20 acres, and from W (Floodway/Flood Plain) to C (Commercial) for approximately 24.28 acres. The remaining portion of the 58-acre Development Area, most of which is owned by the LADWP, would remain designated as HM and W. Additionally, no change in land use designation would be sought for any of the Open Space/National Forest (O-NF) areas. As previously discussed, although Project implementation would result in the continued use of designated forest land for non-forest uses, it would not convert land used for forest uses to a non-forest use and would have a negligible effect on any forest activities. The Potential Mobile Home Relocation Areas and the southern Conditional Parking Area would continue to be designated O-NF. Impacts would therefore be less than significant.

(2) Off-Site Infrastructure Improvement Areas Impacts

(a) Construction

Construction of the Off-Site Infrastructure Improvement Areas would not have a direct impact on agricultural land or forest land since construction activities would not occur on land designated as Farmland or forest land. However, construction would involve ground disturbance and grading activities, which would generate fugitive dust emissions that may cause indirect impacts to agricultural uses in the vicinity of the Off-Site Infrastructure Improvement Areas. Further, emissions from the operation of construction equipment could indirectly impact nearby agricultural resources or uses. Mitigation Measures to control fugitive dust emissions are provided in Section V.E.1, Air Quality, of this Draft EIR, and would minimize any potential impact to nearby agricultural resources or uses associated with off-site improvements undertaken by the Project Applicant. It is also expected that the City of Santa Clarita would implement comparable mitigation measures during construction of the off-site sewer line improvements. As such, construction impacts are considered to be less than significant.

(b) Operation

The Off-Site Infrastructure Improvement Areas are located within areas designated as Other Land and Urban and Built-Up Land, as shown on the maps prepared pursuant to the FMMP. Therefore, operation of the new off-site utilities would not result in the conversion of Farmland to non-agricultural uses or the conversion of forest land to non-forest use, and no impacts would result.

Threshold H-2: Would the project conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

With respect to zoning, the Project would involve a zone change from A-2-1 (Heavy Agricultural—One Acre Minimum Required Area) to C-M-DP (Commercial Manufacturing, Development Program) within the tract map area. The remaining portion of the 58-acre Development Area, most of which is owned by LADWP, would remain zoned A-2-1. The Project would not involve rezoning of any other areas of the Ranch, including the Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas. Additionally, the Project would include design guidelines to provide specific development standards for the proposed facilities, which would ensure that the re-zoned portion of the Development Area is developed in harmony with the remaining areas of the Ranch and the surrounding area. As part of the proposed design guidelines, all buildings

would be designed to reflect the existing agrarian and rustic character of the Ranch. The proposed zone change as well as the plan amendment, discussed above, would allow the development of indoor studios on the westernmost portion of the Ranch, a natural extension of the outdoor filming uses that have occurred at the Ranch since at least the 1950s and that are currently permitted by Conditional Use Permit No. 04-089-(5). With approval of these discretionary actions (discussed in greater detail in Section V.N, Land Use), the Project would be entirely consistent with the zoning designations of the tract map area, the Development Area, and the remainder of the Ranch, and no conflicts with zoning for agricultural uses would occur. As such, on-site agricultural impacts related to zoning conflicts would be less than significant.

The Project would not conflict with Williamson Act contracted land since there are no existing Williamson Act contracts covering the Ranch. Thus, no impact to Williamson Act contracts would occur on-site.

(2) Off-Site Infrastructure Improvements Impacts

The Off-Site Infrastructure Improvement Areas are not zoned for agricultural use. Furthermore, the proposed off-site improvements would be located primarily in existing paved roadways and would not conflict with any agricultural zoning in the surrounding vicinity. Therefore, no off-site impacts to areas zoned for agriculture would result.

Additionally, development of the off-site improvements would not conflict with Williamson Act contracted land since there are no existing Williamson Act contracts covering the Off-Site Infrastructure Improvement Areas or adjacent lands. Thus, no impact to Williamson Act contracts would occur off-site.

Threshold H-3: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?

(1) On-Site Impacts—Development Area, Water Tank Area, Trail Area, Potential Mobile Home Relocation Areas, and Conditional Parking Areas

The eastern portions of the Ranch that fall within Angeles National Forest, including the Potential Mobile Home Relocation Areas and the southern Conditional Parking Area, are zoned A-2-2 (Heavy Agricultural—Two Acres Minimum Required Area). Such areas would remain zoned A-2-2, and the uses proposed within those areas would be consistent with that designation. None of the forest land within the Ranch is zoned as forest land, and

no timberland exists on-site. Therefore, the Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, and no impact would occur.

(2) Off-Site Infrastructure Improvements Impacts

The Off-Site Infrastructure Improvement Areas are not zoned as forest land or timberland. Therefore, the Project would not conflict with existing zoning for forest land or timberland, and no off-site impacts to such zones would occur.

4. CUMULATIVE IMPACTS

The geographic context for the cumulative impact analysis for agricultural resources is the Santa Clarita Valley. Future growth through 2020 (i.e., the Project buildout year) associated with identified Related Projects in the area and general ambient growth would have the potential to alter the existing land use patterns, potentially including the conversion of agricultural lands to non-agricultural uses or forest and timberlands to non-forest uses. As indicated in Table III-1 and mapped in Figure III-1 within Section III, Environmental Setting, of this Draft EIR, there are 14 Related Projects in the Project vicinity. The Related Projects consist of several commercial and mixed-use infill and redevelopment projects, as well as a few new residential subdivisions. However, no designated Important Farmland falls within the general area covered by the Related Projects.[5] Further, only Related Project No. 14, which involves the development of four single-family homes, is located within designated forest land.

Since other future growth through 2020 could occur in undetermined locations that may include Important Farmland, forest land, or timberland, development associated with such growth could have the potential to involve the conversion of farmland, forest land, or timberland, the cumulative effect of which could be potentially significant. Given that there are over 30,000 acres of Prime Farmland in Los Angeles County, with nearly 2,000 acres of all categories of Important Farmland located within the Santa Clarita Valley, and nearly 152,000 acres of forest land within Angeles and Los Padres National Forests in the Santa Clarita Valley, any conversion of such lands would be expected to be limited. As previously discussed, the Project would neither convert designated Farmland to a non-agricultural use nor convert land used for forest uses to a non-forest use and would have a negligible effect on any forest activities. Therefore, the Project's contribution to cumulative agricultural, forest land, and timberland impacts would not be cumulatively considerable.

---

[5] *Los Angeles Important Farmland Map, 2010. Farmland Mapping and Monitoring Program, Division of Land Resource Protection, California Department of Conservation.*

Further, implementation of the Project, or any other project located in Los Angeles County, would not directly or indirectly conflict with or interfere with a Williamson Act contract. Such impacts would be less than significant.

5. PROJECT DESIGN FEATURES AND MITIGATION MEASURES

a. Project Design Features

No specific Project Design Features are proposed relevant to agricultural resources.

b. Mitigation Measures

The Project would not cause the conversion of Farmland to non-agricultural use and mitigation measures would not be required. Similarly, the Project would not convert any forest land used for forest uses to a non-forest use, and mitigation measures would not be required.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would result in less than significant impacts to agricultural and forestry resources.