DRAFT
ENVIRONMENTAL IMPACT REPORT
SCH NO. 2023050207

3577 Canyon Crest Road, Altadena
Minor Conditional Use Permit No. RMCP-201400014
Oak Tree Permit No. ROAK-201400035

Prepared by:
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August 31, 2026

TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	1-1
1.1	Introduction	1-1
1.2	Environmental Procedures	1-2
1.3	EIR Organization	1-3
1.4	Project Location	1-4
1.5	Project Summary	1-5
1.6	Summary of Project Alternatives	1-6
1.7	Issues to Be Resolved	1-8
1.8	Areas of Controversy	1-8
1.9	Summary of Environmental Impacts, Constraints and Level of Significance	1-24
2.	INTRODUCTION	2-1
2.1	Independent Tracks of CEQA Determination for the Project	2-1
2.2	Project-specific Environmental Impact Report	2-3
2.2.1	Lead Agency	2-5
2.2.2	Responsible Agencies	2-5
2.2.3	Trustee Agencies	2-6
2.2.4	Other Agencies	2-6
2.2.5	Notice of Preparation and Scope of Project-specific EIR	2-7
2.2.6	Decision to Create a Project-specific EIR	2-8
2.2.7	Framework of Significance Criteria and Impact Assessment	2-9
2.2.8	Authority	2-15
2.3	Citation and Incorporation by Reference	2-16
3.	PROJECT DESCRIPTION	3-1
3.1	Project Location	3-1
3.2	Project Objectives	3-6
3.3	Project Characteristics	3-7
3.3.1	Home	3-7
3.3.2	Sustainable Features	3-14
3.3.3	Landscaping	3-16
3.3.4	Fuel Modification and Fire Protection	3-18
3.3.5	Grading	3-18
3.3.6	Drainage	3-19
3.3.7	Access	3-19
3.3.8	Utilities	3-20
3.4	History and Evolution of the Project	3-21
3.5	Project Construction Scenario	3-23
4.	ENVIRONMENTAL SETTING	4-27
4.1	Introduction	4-27
4.2	Regional Environmental Setting	4-27
4.3	Local Environmental Setting	4-28
4.3.1	Aesthetics	4-31
4.3.2	Agriculture and Forestry Resources	4-31
4.3.3	Air Quality	4-31
4.3.4	Biological Resources	4-32

4.3.5 Cultural and Tribal Cultural Resources 4-33
4.3.6 Geology/Soils 4-33
4.3.7 Greenhouse Gas Emissions and Energy 4-33
4.3.8 Hazards and Hazardous Materials 4-33
4.3.9 Hydrology and Water Quality 4-34
4.3.10 Land Use and Planning 4-34
4.3.11 Mineral Resources 4-40
4.3.12 Noise 4-40
4.3.13 Population/Housing 4-40
4.3.14 Public Services 4-40
4.3.15 Recreation 4-41
4.3.16 Transportation 4-41
4.3.17 Utilities/Service Systems 4-41
4.3.18 Wildfire 4-42
4.4 Related Projects and Framework of Cumulative Impacts Assessment 4-42
4.4.1 Related Projects Method 4-45
4.4.2 Consistency with Plans Method 4-45
5. ENVIRONMENTAL ANALYSIS 5-47
5.1 Aesthetics 5-47
5.1.1 Introduction 5-47
5.1.2 Regulatory Framework 5-47
5.1.3 Existing Conditions 5-49
5.1.4 Significance Criteria 5-55
5.1.5 Impact Analysis 5-57
5.2 Agriculture and Forestry Resources 5-68
5.2.1 Introduction 5-68
5.2.2 Regulatory Framework 5-68
5.2.3 Existing Conditions 5-71
5.2.4 Significance Criteria 5-72
5.2.5 Impact Analysis 5-72
5.3 Air Quality 5-77
5.3.1 Introduction 5-77
5.3.2 Regulatory Framework 5-77
5.3.3 Existing Conditions 5-82
5.3.4 Significance Criteria 5-84
5.3.5 Impact Analysis 5-87
5.4 Biological Resources 5-96
5.4.1 Introduction 5-96
5.4.2 Regulatory Framework 5-96
5.4.3 Existing Conditions 5-108
5.4.4 Significance Criteria 5-141
5.4.5 Impact Analysis 5-147
5.5 Cultural and Tribal Cultural Resources 5-175
5.5.1 Introduction 5-175
5.5.2 Regulatory Framework 5-175
5.5.3 Existing Conditions 5-183

5.5.4 Significance Criteria 5-188
5.5.5 Impact Analysis 5-188
5.6 Geology and Soils 5-195
5.6.1 Introduction 5-195
5.6.2 Regulatory Framework 5-195
5.6.3 Existing Conditions 5-197
5.6.4 Significance Criteria 5-199
5.6.5 Impact Analysis 5-200
5.7 Greenhouse Gas Emissions and Energy 5-212
5.7.1 Introduction 5-212
5.7.2 Regulatory Framework 5-212
5.7.3 Existing Conditions 5-228
5.7.4 Significance Criteria 5-229
5.7.5 Impact Analysis 5-234
5.8 Hazards and Hazardous Materials 5-245
5.8.1 Introduction 5-245
5.8.2 Regulatory Framework 5-245
5.8.3 Existing Conditions 5-249
5.8.4 Significance Criteria 5-255
5.8.5 Impact Analysis 5-257
5.9 Hydrology and Water Quality 5-266
5.9.1 Introduction 5-266
5.9.2 Regulatory Framework 5-266
5.9.3 Existing Conditions 5-271
5.9.4 Significance Criteria 5-277
5.9.5 Impact Analysis 5-278
5.10 Land Use and Planning 5-287
5.10.1 Introduction 5-287
5.10.2 Regulatory Framework 5-287
5.10.3 Existing Conditions 5-293
5.10.4 Significance Criteria 5-293
5.10.5 Impact Analysis 5-294
5.11 Mineral Resources 5-368
5.11.1 Introduction 5-368
5.11.2 Regulatory Framework 5-368
5.11.3 Existing Conditions 5-370
5.11.4 Significance Criteria 5-370
5.11.5 Impact Analysis 5-371
5.12 Noise 5-374
5.12.1 Introduction 5-374
5.12.2 Regulatory Framework 5-377
5.12.3 Existing Conditions 5-382
5.12.4 Significance Criteria 5-385
5.12.5 Impact Analysis 5-387
5.13 Population and Housing 5-400
5.13.1 Introduction 5-400

5.13.2 Regulatory Framework 5-400
5.13.3 Existing Conditions 5-404
5.13.4 Significance Criteria 5-404
5.13.5 Impact Analysis 5-405
5.14 Public Services 5-408
5.14.1 Introduction 5-408
5.14.2 Regulatory Framework 5-408
5.14.3 Existing Conditions 5-409
5.14.4 Significance Criteria 5-410
5.14.5 Impact Analysis 5-410
5.15 Recreation 5-416
5.15.1 Introduction 5-416
5.15.2 Regulatory Framework 5-416
5.15.3 Existing Conditions 5-418
5.15.4 Significance Criteria 5-420
5.15.5 Impact Analysis 5-421
5.16 Transportation 5-424
5.16.1 Introduction 5-424
5.16.2 Regulatory Framework 5-424
5.16.3 Existing Conditions 5-428
5.16.4 Significance Criteria 5-440
5.16.5 Impact Analysis 5-441
5.17 Utilities and Service Systems 5-453
5.17.1 Introduction 5-453
5.17.2 Regulatory Framework 5-453
5.17.3 Existing Conditions 5-456
5.17.4 Significance Criteria 5-458
5.17.5 Impact Analysis 5-458
5.18 Wildfire 5-1
5.18.1 Introduction 5-1
5.18.2 Regulatory Framework 5-1
5.18.3 Existing Conditions 5-5
5.18.4 Significance Criteria 5-8
5.18.5 Impact Analysis 5-8
6. OTHER CEQA CONSIDERATIONS 6-1
6.1 Impacts Found Not to Be Significant 6-1
6.2 Significant Unavoidable Adverse Impacts 6-1
6.3 Irretrievable and Irreversible Commitment of Resources 6-1
6.4 Growth-inducing Impacts 6-2
7. PROJECT ALTERNATIVES 7-1
7.1 Introduction 7-1
7.2 Alternatives Rejected from Further Consideration 7-4
7.2.1 No Development 7-4
7.2.2 Alternative Site 7-7
7.3 Analysis of Alternatives 7-9
7.3.1 Two-Level Alternative Design 7-9

7.4 Environmentally Superior Alternative 7-16
8. PREPARERS OF THE ENVIRONMENTAL IMPACT REPORT 8-1
9. CITATIONS 9-1
10. ACRONYMS AND ABBREVIATIONS 10-1
11. APPENDICES 11-1
A. NOTICE OF PREPARATION 11-1
B. HILLSIDE MANAGEMENT AREA SENSITIVE DESIGN ASSESSMENT 11-2
C. CALCULATION DETAILS FOR CALEEMOD 11-3
D. BIOLOGICAL RESOURCES ASSESSMENT REPORT 11-4
E. ADDENDUM TO OAK TREE REPORT AND OAK TREE REPORT 11-5
F. AB52 TRIBAL CULTURAL RESOURCES COMPLIANCES CHECKLIST 11-6
G. ADDENDUM TO GEOTECHNICAL REPORT AND GEOTECHNICAL REPORT 11-7
H. ARMY CORPS OF ENGINEERS NO PERMIT REQUIRED DETERMINATION 11-8
I. STATE CEQA GUIDELINES SECTION 15168 CHECKLIST 11-9
J. STATE CEQA GUIDELINES SECTION 15183.3 CHECKLIST 11-10
K. STATE CEQA GUIDELINES SECTION 15183.3/APPENDIX N CHECKLIST 11-11
L. CATEGORICAL EXEMPTION CHECKLIST 11-12

List of Figures

Figure 3-1: Project Vicinity Map 3-2
Figure 3-2: Project Vicinity Aerial Photograph 3-3
Figure 3-3: Project Vicinity Topographic Map 3-4
Figure 3-4: Regional Map 3-5
Figure 3-5: Project Exterior Finish Materials 3-8
Figure 3-6: Proposed Project Site Plan 3-10
Figure 3-7: Project East Elevation 3-11
Figure 3-8: Project North Elevation 3-12
Figure 3-9: Project West Elevation 3-13
Figure 3-10: Project South Elevation 3-14
Figure 3-11: Project Landscaping Species 3-17
Figure 4-1: Project Site Photograph Locations 4-29
Figure 4-2: Project Site Photographs 4-30
Figure 4-3: Existing Zoning 4-35
Figure 4-4: Existing Land Use 4-36
Figure 4-5: Examples of Architectural Styles of Development Surrounding Project 4-38
Figure 4-6: Examples of Oak Tree Proximity of Development Surrounding Project 4-39
Figure 5-1: Visual Massing of a Portion of 3588 Canyon Crest Road 5-51
Figure 5-2: Visual Massing of a Portion of 3556 Canyon Crest Road 5-52
Figure 5-3: Visual Massing of a Portion of 3535 Canyon Ridge Drive 5-53
Figure 5-4: Visual Massing of Garage of 3617 Canyon Crest Road 5-54
Figure 5-5: Visual Massing of Garage of 3637 Canyon Crest Road 5-55
Figure 5-6: Before and After View of Project Site Driving North on Canyon Crest Road 5-61
Figure 5-7: Before and After View of Project Site Driving South on Canyon Crest Road 5-62

Figure 5-8: Visual Massing of Proposed Project 5-63
Figure 5-9: Wetlands and Riparian Habitat at “Sub-regional” Scale 5-130
Figure 5-10: Wetlands and Riparian Habitat at “Landscape” Scale 5-131
Figure 5-11: California Essential Habitat Connectivity Areas, Natural Landscape Blocks, Small Natural Areas and Potential Riparian Connections 5-133
Figure 5-12: South Coast Missing Linkages 5-134
Figure 5-13: Wildlife Permeability at “Landscape” Scale 5-136
Figure 5-14: Extent of Oak woodlands at “Landscape” Scale 5-140
Figure 5-15: Home Built on the Foundation of “Boulder Crest” 5-186
Figure 5-16: La Casa Roca 5-187
Figure 5-17: EnviroStor Hazardous Materials Sites Within One Mile of Project 5-251
Figure 5-18: GeoTracker Hazardous Materials Sites Within One Mile of Project 5-253
Figure 5-19: Signs of Past Utility Construction and Maintenance in Vicinity of Project 5-262
Figure 5-20: Proximity of Existing Single-Family Residences to Millard Canyon Bottom 5-273
Figure 5-21: Millard Canyon Watershed 5-274
Figure 5-22: Uniform Building Code Measurement of Height and Number of Stories in a Terraced Building 5-356
Figure 5-23: International Building Code Measurement of Height and Number of Stories in a Terraced Building 5-357
Figure 5-24: Assessment of Stories in Each of Project's Building Segments 5-357
Figure 5-25: Intersection of Cellar Volume with the Grade 5-358
Figure 5-26: Project Site Average Width 5-361
Figure 5-27: Existing Noise Contours Mapped by 2035 County General Plan 5-385
Figure 5-28: California Protected Open Space Areas in Vicinity of Project 5-420
Figure 5-29: Existing Driveway Visibility in Vicinity of Project 5-431
Figure 5-30: Visibility of Roadway from Driveway on Project Site 5-432
Figure 5-31: Regular Single Lane Closure Adjacent to Project Site 5-433
Figure 5-32: Observed Single-Lane Closures and Construction Vehicles Along Canyon Crest Road 5-434
Figure 5-33: Signs of Utility Work Resulting in Single-Lane Closures in Vicinity of Project Site on Canyon Crest Road 5-436
Figure 5-34: Roadways in Vicinity of Project 5-438
Figure 5-35: Mass Transit in Vicinity of Project 5-439
Figure 7-1: Two-Level Alternative Site Plan 7-12
Figure 7-2: Two-Level Alternative Elevations 7-12

List of Tables

Table 1-1: NOP Comment & Response Matrix 1-10
Table 1-2: Summary of Impacts, Constraints and Level of Significance After Consideration of Constraints 1-25
Table 2-1: 2035 County General Plan EIR Analysis Mapping 2-12
Table 3-1: Expected Construction Equipment and Trips 3-25
Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds 5-90
Table 5-2: Project Operation-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds 5-91

Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds .. 5-91
Table 5-4: Field Surveys of Project Parcel 5-110
Table 5-5: Criteria for Evaluating Potential Encounter of Designated Species..... 5-111
Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited..... 5-113
Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in Which the Project is Sited 5-117
Table 5-8: CNPS-Mapped Sensitive Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited 5-123
Table 5-9: Additional CNPS-Mapped Sensitive Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in which the Project is Sited 5-125
Table 5-10: Community Climate Action Plan Compliance Analysis..... 5-236
Table 5-11: County General Plan Policy Consistency Analysis..... 5-298
Table 5-12: Altadena Community Plan Policy Consistency Analysis..... 5-330
Table 5-13: Minor Conditional Use Permit Findings Analysis 5-340
Table 5-14: Oak Tree Permit Findings Analysis 5-343
Table 5-15: Oak Tree Permit Materials Analysis 5-344
Table 5-16: Hillside Management Area Findings Analysis..... 5-347
Table 5-17: Significant Ecological Area Findings Analysis..... 5-348
Table 5-18: Significant Ecological Area Design Guidelines Analysis..... 5-350
Table 5-19: Development Standards Tightened in Altadena Community Standards..... 5-351
Table 5-20: Comparison of Zoning Parameters of Residences Within 300 Feet of Project .. 5-362
Table 5-21: A-weighted Sound Levels of Typical Noise Sources and Noise Environments .. 5-376
Table 5-22: Threshold Exterior Noise Levels (dBA) at Nearby Residential Structures for Construction Activities 5-380
Table 5-23: Threshold Exterior Ambient Noise Levels for Residential Properties (dBA L_{max}).... 5-381
Table 5-24: Measured Total Ambient Noise Levels (dBA)..... 5-383
Table 5-25: Roadway Construction Noise Model Projected Construction Equipment Noise Levels..... 5-390
Table 5-26: Best Estimated Construction Equipment Noise Levels..... 5-391
Table 5-27: Guideline Vibration Annoyance Potential Criteria 5-395
Table 5-28: Existing Parks Within a Two-Mile Radius of the Project..... 5-418
Table 7-1: Summary of Attributes..... 7-16

1. EXECUTIVE SUMMARY

Pursuant to State California Environmental Quality Act ("CEQA") Guidelines Section 15123, this Executive Summary provides "a brief summary of the proposed action and its consequences"; "each significant effect with proposed mitigation measures"; "areas of controversy known to the Lead Agency including issues raised by agencies and the public"; and "issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects."

1.1 Introduction

This Draft Environmental Impact Report ("Draft EIR" or "EIR") was prepared by the County of Los Angeles ("County") to evaluate potential environmental impacts resulting from the development of a single-family home at 3577 Canyon Crest Road ("proposed project," "project," or "home"). The project is the construction and occupancy of one approximately 1,555-square-foot single-family home on a vacant, residentially zoned parcel located in an "urbanized area" as defined by State CEQA Guidelines Section 15387, in an existing residential neighborhood in Altadena, a census-designated place in the unincorporated area of the County. The lowest level of the proposed project, comprising approximately 400 square feet, is characterized as an Accessory Dwelling Unit conforming to the statewide ministerial criteria in Government Code Section 65852(e)(1)(a). CEQA analysis of the project encompasses all reasonably foreseeable direct and indirect impacts associated with project activities that are subject to discretionary approval. The project parcel consists of a single 1.02-acre residential lot owned by Stephen Kuhn (the "Applicant"), a private individual.

This EIR was prepared in accordance with the California Environmental Quality Act (Public Resources Code ("PRC") Sections 21000, *et seq*., "CEQA"), its associated regulations (14 California Code of Regulations ("CCR") Sections 15000, *et seq*., the "State CEQA Guidelines"), the County's Environmental Document Reporting Procedures and Guidelines ("County CEQA Guidelines"),[1] and CEQA case law. Together, these will be collectively referred to as "CEQA." The information in this document reflects the independent and expert judgement of Los Angeles County, as Lead Agency.

Analysis in this EIR is informed by adopted plans, policies, regulations, and associated environmental documentation; review of technical documentation, studies and literature; review of CEQA case law; field observations and measurements; photographic and other visual evidence; and project-specific modeling, as relevant. Pursuant to State CEQA Guidelines Section 15151, the standards for EIR adequacy require that "[a]n 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

[1] Source: County Department of Regional Planning: LA County CEQA Guidelines. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/LAC_CEQA_Guidelines.pdf.

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."

1.2 Environmental Procedures

An EIR is the most comprehensive form of environmental documentation identified by CEQA and provides information to assess the environmental consequences of a proposed project to the extent feasible. EIRs are intended to provide an objective, factually supported, fully disclosed analysis of the direct and indirect physical impacts of a proposed project.

The main objectives of this document are as follows:

1. Disclose to decision makers and the public the physical impacts of the proposed project.
2. Analyze the significance of impacts, as mediated by identified or proposed constraints.
3. Foster interagency coordination in the review of projects.
4. Enhance public participation in the planning process.

This Draft EIR is being circulated for public review for a period of 45 days. Interested agencies and members of the public are invited to provide written comments on the Draft EIR to the address below. Upon completion of the 45-day review period, the County will review all written comments received and written responses will be prepared for each comment. A Final EIR will then be prepared incorporating all of the comments received, responses to the comments, and any changes to the Draft EIR that result from the comments received. CEQA Section 21081.6 requires that agencies adopt a monitoring or reporting program for any project for which it has made findings pursuant to CEQA Section 21081. Though this EIR finds all project impacts to be less than significant, it nevertheless incorporates mitigation measures from the 2035 County General Plan EIR that apply to all subsequent activities approved with that EIR's analysis. The Final EIR will include a Mitigation Monitoring and Reporting Program ("MMRP") to formalize oversight of these mitigation measures as well as all project design features ("PDF") credited in this analysis.

The Final EIR will then be presented for consideration of approval of the project entitlements at a public hearing, as well as certification of this environmental document for the project. The County may elect to adopt the Final EIR, or to adopt any other track of CEQA determination described in this EIR, or to adopt a combination of tracks, at its discretion. All persons who commented on the Draft EIR will be notified of the availability of the Final EIR.

All comments received from agencies and individuals on the Draft EIR will be accepted during the 45-day public review period. All comments on the Draft EIR should be sent to:

Stacy Corea
Regional Planner
Los Angeles County
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320 W Temple Street,

13th Floor
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E-mail: scorea@planning.lacounty.gov

The Draft EIR will also be posted online on the County's website for the project: https://planning.lacounty.gov/environmental-review/public-notice/. Copies will be available at the Bob Lucas Memorial Library and Literacy Center at 2659 Lincoln Avenue, Altadena, CA 91001 and at Altadena One-Stop Office located 464 W Woodbury Road Suite #210, Altadena, CA 91001.

1.3 EIR Organization

This EIR has been organized as follows:

Section 1: The Executive Summary briefly describes the project and provides the format and scope of this EIR, project alternatives to be analyzed, issues to be resolved in the consideration of this EIR, and the potential physical impacts, standard conditions, regulatory compliance measures, project design features, and any mitigation measures identified.

Section 2: The Introduction describes the tracks for CEQA determination of the project, the purpose and scope of this EIR, the discretionary approvals required, the Notice of Preparation, the framework for significance assessment, the process of Final EIR certification, the authority with which this EIR was developed, and the use of incorporation by reference.

Section 3: The Project Description provides an account of the project's characteristics, its location and objectives, its administrative history and construction scenario.

Section 4: The Environmental Setting provides a description of the physical environmental conditions in the vicinity of the project as they existed at the time the Notice of Preparation was published. Baseline physical conditions are provided, from which marginal or relative physical impacts to the environment resulting from the project are determined. This existing condition encompasses past and other related projects and includes a description of the framework for cumulative impacts assessment.

Section 5: Environmental Analysis provides more detailed description of the existing conditions in each impact area of analysis; attribution of the thresholds used to determine if a significant impact would occur; derivation of these thresholds, where appropriate; regulatory framework potentially applicable to the project; methodology and evaluation of the potential physical changes of the project to the existing conditions; assessment of the significance of those impacts as mediated by standard conditions, regulatory compliance measures and project design features; description of the general mitigation prescribed by the 2035 County General Plan EIR and its effects on the project; assessment of the effects of that mitigation; and assessment of the potential significant and cumulatively considerable effects of the project when considering other related projects in the area, along with any secondary effects from the mitigation measures incorporated.

Section 6: Project Alternatives describe the impacts and relative merits of the alternatives to the project, including logical design permutations that each reduce some physical attribute or vector of impact, an alternative location, and the No Project/No Development alternative.

Section 7: General Impacts describe potentially irreversible environmental changes associated with the project; potentially irretrievable commitment of resources; and potential growth-inducing impacts that could produce increased development, employment or population resulting in new physical or environmental impacts.

Section 8: The Preparers of the Environmental Impact Report lists the people and organizations that contributed to preparation of this EIR.

Section 9: The Citations provides a list of the citations used in the EIR.

Section 10: The Acronymns and Abbreviations provides the full form of acronyms and abbreviations that are used in the EIR.

Section 11: The Appendices contain the following supporting documents:

Appendix A: Notice of Preparation
Appendix B: Hillside Management Area Sensitive Design Assessment
Appendix C: Calculation Details for CalEEMod
Appendix D: Biological Resources Assessment Report
Appendix E: Oak Tree Report Addendum and Oak Tree Report
Appendix F: AB52 Tribal Cultural Resources Compliance Checklist
Appendix G: Geotechnical Report Addendum and Geotechnical Report
Appendix H: Army Corps of Engineers No Permit Required Determination
Appendix I: State CEQA Guidelines Section 15168 Checklist
Appendix J: State CEQA Guidelines Section 15183 Checklist
Appendix K: State CEQA Guidelines Section 15183.3/Appendix N Checklist
Appendix L: State CEQA Guidelines Section 15300 Categorical Exemption Checklist

Appendices I, J, K and L document independent, sufficient tracks of CEQA approval for the entitlements required to implement the project. Inclusion of these tracks alongside the project level EIR was requested by the Applicant, and the County agreed to include an analysis of each track in support of the project application.

1.4 Project Location

The project parcel is a 44,390 square-foot (approximately 1.02-acre) vacant residential lot at 3577 Canyon Crest Road (latitude: 34.204858°N longitude: 118.162713°W) in the lower Canyon Crest residential neighborhood of the unincorporated community of Altadena in the West San Gabriel Valley Planning Area of the County of Los Angeles, near the San Gabriel Mountains in southern California. The project parcel is located approximately 50 feet north of the northern border of the City of Pasadena. The Assessor's Parcel Number (APN) for the project parcel is 5830-003-016. The proposed residence is located on the eastern portion of the project parcel

adjacent to existing residential development along Canyon Crest Road. (*See* Section 3.1 for maps of the vicinity, Figure 3-6: Proposed Project Site Plan for the project parcel plan, and Section 4.3 for a more detailed description of the project parcel and surroundings).

The proposed project site conforms to CEQA's definition of an "urbanized area." Pursuant to State CEQA Guidelines Section 15387, an "urbanized area" is "a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. A lead agency shall determine whether a particular area meets the criteria in this section either by examining the area or by referring to a map prepared by the U.S. Bureau of the Census which designates the area as urbanized." The unincorporated census-designated place of Altadena is located adjacent to the city of Pasadena, with a population of more than 137,000 as of the 2020 census.[2] Altadena has a population density of 5,060 people per square mile as of the 2020 census.[3] The project site is located within the designated urbanized area of the relevant maps prepared by the U.S. Bureau of the Census.[4]

1.5 Project Summary

The proposed project is an approximately 1,555 square-foot, single-family home with an approximately 397 square-foot attached garage on a vacant residential parcel of 1.02 acres in Altadena, a census-designated place and urbanized area in the unincorporated area of the County of Los Angeles ("County"). The lowest level of the proposed project, comprising approximately 400 square feet, is characterized as an Accessory Dwelling Unit conforming to the statewide ministerial criteria in Government Code Section 65852(e)(1)(a). The project parcel is located approximately 1,000 feet south of the Angeles National Forest and approximately 14 miles northeast of the County civic center, in the West San Gabriel Valley Planning Area. The project would be sited on the eastern portion of the project parcel, in an existing residential neighborhood adjacent to other residences in and adjacent to Millard Canyon. The proposed development footprint would be located more than 150 feet from the nearest delineated waters, an intermittent, seasonal feature tributary to the Arroyo Seco in the bottom of Millard Canyon. In association with this feature, and like other residential parcels in the vicinity, a portion of the project parcel outside the footprint of development is designated by the County as a Significant Ecological Area as of December 2019.

The proposed design of the home complies with all applicable land use regulations in effect as of the date of the Notice of Preparation. The proposed design is terraced to complement the natural topography, in accordance with the County's Hillside Management Area Sensitive Design Guidelines, and is one or two stories above grade in each building segment. The proposed design places most of its volume below the level of Canyon Crest Road, from which the home would be

[2] Source: City of Pasadena: Pasadena Census and Population. Available at: https://www.cityofpasadena.net/planning/planning-division/community-planning/pasadena-census-and-population/.
[3] Source: United States Census Bureau: QuickFacts, Altadena CDP, California. Available at: https://www.census.gov/quickfacts/altadenacdpcalifornia.
[4] Source: United States Census Bureau: Bureau of the Census 2020 Census Urban Area Reference Map – Los Angeles-Long Beach-Anaheim, CA. Available at: https://cacensus.maps.arcgis.com/apps/webappviewer/index.html?id=67f7e4aa0bc6450e8a052176a12d86b9.

accessed with a driveway comprised of an open-celled tree root protection system. The total development footprint, comprised of the driveway and building footprint at grade, is approximately 2,000 square feet. The project would incorporate no other hardscape.

A single-family residence is permitted with a Site Plan Review in the County's R-1-10000 (Single-Family Residence, 10,000 Square Feet Minimum Required Lot Area) Zone. However, a Minor Conditional Use Permit ("MCUP") is required in the Altadena Community Standards District in order to construct on a slope greater than 25%. In addition, an Oak Tree Permit ("OTP") is required for the removal of one non-heritage oak tree and encroachment into the protected zones of 10 non-heritage oak trees on and adjacent to the project parcel, which form a part of a degraded oak woodland that extends through the developed residential area in all directions. Consistent with the standard requirements of the County Oak Tree Ordinance, the project would incorporate replacement plantings for the single removed oak tree; oak-compatible landscaping comprising a native understory; and Best Management Practices and design features before, during, and after construction to promote the health of the oak trees on the project parcel. The project would also rehabilitate some of the existing impacts from the surrounding residential development that have degraded the oak trees affected by the project. The EIR has been prepared to evaluate potential environmental impacts associated with the following discretionary approvals required by the County in order to implement the project:

1. MCUP No. RMCP-201400014
2. OTP No. ROAK-201400035

1.6 Summary of Project Alternatives

Section 7 sets forth potential alternatives to the project and evaluates their ability to reduce impacts associated with implementation of the project while meeting the objectives of the project.

As a preliminary matter, pursuant to State CEQA Guidelines Section 15126.6(c), CEQA excludes from any requirement those alternatives with attributes that include one or more of: "(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." Where a project has no significant environmental impacts, any alternatives to it that are "[unable] to avoid significant environmental impacts" may therefore be rejected out of hand without any requirement to further examine them or weigh their relative impacts. While this EIR has analyzed alternatives, the choice among alternatives does not possess the meaning intended for projects with significant impacts that might be prevented by an alternative.

The alternatives considered are:

1. Alternative Site

This alternative considers the potential for another project parcel to be used to implement the project while considering the resulting reasonable potential dispositions of the project parcel.

2. No Project/No Development

This alternative considers the potential for the discontinuation of the project while considering the resulting reasonable potential dispositions of the project parcel.

3. Alternative Design (Two Level, Reduced Height)

This alternative assumes that the project would be substantially altered to contain only two levels.

The "no development" alternative analyzed in Section 7.2.1 is required by CEQA and would, at least temporarily, eliminate all specific proposed project impacts on the proposed project parcel. For the reasons attributed in Section 7.2.1, this alternative was removed from further consideration.

Pursuant to State CEQA Guidelines Section 15126.6(e)(2), "[i]f the environmentally superior alternative is the "no project" alternative," an EIR must "identify an environmentally superior alternative among the other alternatives." Because all alternatives would be expected to have less than significant impacts, and because the "no project" alternative has been identified as nonviable, there is no substantial metric of superiority in evaluating between them and the project as proposed.

The alternative site analyzed in Section 7.2.2, while not required by CEQA, was also rejected from consideration for economic infeasibility and/or inability to implement objectives of the project.

As such, Section 7.3.1 analyzes the comparative merits of one "Alternative Design" modification to the project design, adopting the stepped two-level form of some other single-family residences in the vicinity that did not destructively grade flat building pads. Such a limitation was generally suggested, albeit without accompanying detail, by members of the public during earlier administrative proceedings for the home and encompasses a sufficiently substantial perturbation to the project design that impact differences might resolve.

While numerous design possibilities exist for any single-family home, CEQA does not require distinct sampling of permutations that may be abstracted. Both the project and the Alternative Design alternative already occupy a reasonably minimal residential profile of three bedrooms, two bathrooms, living area, and a two-car garage in approximately 1,500 square feet, such that a "reduced size" alternative could only be very modestly reduced, resulting in an indistinct perturbation. Both the project and the Alternative Design alternative are hemmed in by setbacks, oak trees and policies that encourage minimization of development within the SEA, such that reasonable alternative locations on the parcel would result in an indistinct perturbation. The Alternative Design alternative establishes that reducing the amount of grading and lowering height within the footprint of development trades off with increased disturbance area and correspondingly greater impacts to existing trees. The project as proposed sustains its impacts to public sight lines across the parcel frontage and to the larger scaffold of the single oak tree to see

substantial pruning in the first ten feet of the structure's volume above street level, such that variations in height within the proposed project footprint would result in an indistinct perturbation.

Based on the comparative analysis of these alternatives, the project as proposed is superior or equivalent to the Alternative Design alternative in its potential environmental impacts..

1.7 Issues to Be Resolved

Pursuant to State CEQA Guidelines Section 15123(b)(3), the summary of an EIR must include "[i]ssues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects."

As such, the issues to be resolved by the Lead Agency in its consideration of approval of the proposed project include:

1. Does this EIR sufficiently describe the reasonably foreseeable physical impacts of the proposed project?
2. Are proposed constraints sufficient to address their intended purpose(s), or should any discretionary constraints be modified because of a deficit of substantial evidence?
3. Are there any additional discretionary constraints that would satisfy all of the following:
    a. The constraint would be warranted in reducing the impact of a physical effect below an identified threshold of significance.
    b. The constraint would be feasible, taking into account economic, environmental, legal, social, and technological factors, including legal limitations of a public jurisdiction in the imposition of mitigation measures on private projects.
4. Are there any substantially different alternatives to the project that would lessen below a level of significance any proposed project impacts identified as significant, while still feasibly achieving project objectives, which ought therefore to be selected in lieu of the project as proposed?

1.8 Areas of Controversy

Pursuant to State CEQA Guidelines Section 15123(b)(2), the summary of an EIR must include "[a]reas of controversy known to the Lead Agency including issues raised by agencies and the public."

No issues of controversy have been raised by any governmental agency concerning the project. Agency NOP comments requested disclosures contained in the DEIR and addressed the form of mitigation should the proposed project's impacts be analyzed as significant. The following issues summarize substantive controversies pertinent to CEQA that were communicated by members of the public, including private residents immediately neighboring the proposed project parcel, during prior administrative proceedings:

1. What is a substantial threshold of significance for impacts to individual oak trees, oak woodlands, and associated biota? Would the project's impacts constitute a significant effect on the environment?
2. Would the project's impacts to the visual character or quality of publicly accessible areas in visual proximity constitute a significant effect on the environment?
3. Would the project's impacts to transportation on Canyon Crest Road constitute a significant effect on the environment?
4. Would the project's impacts to wildfire constitute a significant effect on the environment?
5. Would the project conflict with any provision of the County Code or County General Plan adopted for the purpose of avoiding or mitigating a significant environmental effect?

Comments responsive to the Notice of Preparation ("NOP") are described in Table 1-1: NOP Comment & Response Matrix.

Table 1-1: NOP Comment & Response Matrix

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
STATE AGENCY			
California Department of Fish and Wildlife (June 5, 2023)			
1	CNDDB documents Crotch's Bumble Bee observed in the vicinity of the project site in 2023, with a predicted range of associated potential that includes the project site. Recommend a pre-construction survey, disclosure in the DEIR, and suitable avoidance and minimization measures.	Section 5.4, Biological Resources	The DEIR discloses that Crotch's Bumble Bee has reported occurrence(s) in the Pasadena quadrangle according to the CNDDB. The DEIR discloses that consistent with the 2035 County General Plan EIR, should this EIR or any track of CEQA compliance subordinated to the General Plan EIR be operative when the project is implemented, a pre-construction sweep by a qualified biologist within one week of the start of construction shall be performed, with appropriate consultation according to Regulatory Compliance Measure should any sensitive or special status species be encountered.
2	CNDDB documents special status reptiles observed in the vicinity of the project site in 2023, with a predicted range of associated potential that includes the project site. Recommend a pre-construction survey, disclosure in the DEIR, and suitable avoidance and minimization measures.	Section 5.4, Biological Resources	The DEIR discloses that special status reptiles have reported occurrence(s) in the Pasadena quadrangle according to the CNDDB. The DEIR discloses that consistent with the 2035 County General Plan EIR, should this EIR or any track of CEQA compliance subordinated to the General Plan EIR be operative when the project is implemented, a pre-construction sweep by a qualified biologist within one week of the start of construction shall be performed, with appropriate consultation according to Regulatory Compliance Measure should any sensitive or special status species be encountered.
3	Impacts to oak trees and oak woodlands should be analyzed and disclosed,	Section 5.4, Biological Resources	The DEIR discloses that the coast live oak woodlands plant community is assigned a rarity rank of S4 by the

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
	including the sensitivity level of communities and associations impacted.		CDFW, which is not considered sensitive, and its association with the California sagebrush scrub plant community of rarity rank S5 is also not considered sensitive. The DEIR discloses that the proposed project is sited in an existing residential neighborhood and that the oak woodlands is degraded by associated impacts. The DEIR discloses that corrective actions for pre-existing impacts are a project design feature. The DEIR discloses the proposed project's expected impacts on oak woodlands and the expectation of a less than significant impact.
4	CNDDB documents special status nesting birds observed in the vicinity of the project site in 2023, with a predicted range of associated potential that includes the project site. Recommend a pre-construction survey, disclosure in the DEIR, and suitable avoidance and minimization measures.	Section 5.4, Biological Resources	The DEIR discloses that special status nesting birds have reported occurrence(s) in the Pasadena quadrangle according to the CNDDB. The DEIR discloses that consistent with the 2035 County General Plan EIR, should this EIR or any track of CEQA compliance subordinated to the General Plan EIR be operative when the project is implemented, a pre-construction sweep by a qualified biologist within one week of the start of construction shall be performed, with appropriate consultation according to Regulatory Compliance Measure should any sensitive or special status species be encountered.
5	Significant Ecological Area exists on a portion of the project parcel. Recommend analysis of project impacts within the SEA and a condition to avoid development in the SEA.	Section 5.4, Biological Resources	The NOP and DEIR disclose the existence of a Significant Ecological Area outside the footprint of development and intended use of the SEA for replacement oak tree plantings, as well as pre-existing requirements for fuel modification within the SEA. While the proposed project does not entail any structures, hardscape or grading within the SEA, the

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			SEA designation is not intended to preclude such impacts, but rather to impose constraints that are described by the County's SEA Ordinance and associated permit process. The proposed project is not expected to require any SEA permit, and no SEA-related condition extraneous to the SEA permit process would be warranted.
6	The EIR should provide an appropriate biological baseline assessment.	Section 5.4, Biological Resources	The DEIR discloses the sensitive and special status plant and animal species occurrences reported in the USGS quadrangle containing the project and in surrounding quadrangles. As throughout the unincorporated community of Altadena, some potential for encounter is analyzed to exist, and so a reconnaissance level survey was performed, disclosed as Appendix D of the DEIR.
7	A Scientific Collecting Permit is required for any relocation of sensitive or special status species.	Section 5.4, Biological Resources	The DEIR discloses that a Scientific Collecting Permit is required as a Regulatory Compliance Measure, should any sensitive or special status species be ecountered for which relocation is required.
8	Permanent preservation is preferable to translocation or salvage of sensitive or special status plant species.	Section 5.4, Biological Resources	The DEIR discloses that no sensitive or special status plant species or communities were observed in the reconnaissance level survey for the project. Should any sensitive or special status plant species be encountered, appropriate consultation with the CDFW would be initiated pursuant to Regulatory Compliance Measure.
9	The EIR should adequately disclose environmental impacts of the project.	Section 5.4, Biological Resources	The DEIR adequately discloses environmental impacts of the proposed project.
10	The EIR should propose mitigation measures for significant project impacts.	Section 5.4, Biological Resources	The DEIR discloses that all proposed project impacts are analyzed to be less than significant. The DEIR

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			discloses that consistent with the 2035 County General Plan EIR, should this EIR or any track of CEQA compliance subordinated to the General Plan EIR be operative when the project is implemented, generally applicable biological avoidance and minimization measures will be adopted.
11	Report any sensitive or special status species or communities encountered during any survey associated with the project.	Section 5.4, Biological Resources	The DEIR discloses that no sensitive or special status species or communities were observed in the reconnaissance level survey for the project. The DEIR discloses that consistent with the 2035 County General Plan EIR, should this DEIR or any track of CEQA compliance subordinated to it be adopted, a pre-construction sweep by a qualified biologist within one week of the start of construction shall be performed, and any such encountered species would be duly reported by the biologist.
12	Direct, indirect, and cumulative impacts should be discussed.	Section 5.4, Biological Resources	The DEIR discusses direct, indirect and cumulative considerability of proposed project impacts.
13	The EIR should propose compensatory mitigation measures for significant project impacts, emphasizing avoidance and minimization.	Section 5.4, Biological Resources	The DEIR discloses that all proposed project impacts are analyzed to be less than significant. The DEIR discloses that consistent with the 2035 County General Plan EIR, should this EIR or any track of CEQA compliance subordinated to the General Plan EIR be operative when the project is implemented, generally applicable biological avoidance and minimization measures will be adopted.
14	If any restoration or preservation lands are included as mitigation in the EIR, measures should exist to protect the lands in perpetuity.	Section 5.4, Biological Resources	No restoration or preservation lands internal or external to the project parcel are included as mitigation in the EIR. The Significant Ecological Area on a portion of the proposed project parcel remains

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			governed by the constraints of the County Significant Ecological Area Ordinance and permitting process.
15	A qualified wetlands delineation should be performed. A Lake or Streambed Alteration Agreement and hydrological study would be required for any wetlands altered by the proposed project.	Section 5.4, Biological Resources	The NOP and DEIR disclose that the only delineated wetlands on the proposed project parcel is the intermmitent feature in the bottom of Millard Canyon, which would remain unaffected by the proposed project, 150 feet and more distant from the footprint of development. No Lake or Streambed Alteration Agreement or hydrological study would be warranted.
Caltrans (June 5, 2023)			
1	Caltrans concurs that local processes to mediate public roadway lane closures are required pursuant to the California Manual on Uniform Traffic Control Devices.	Section 5.16, Transportation	None
2	Any transportation of heavy construction equipment and/or materials requiring use of oversized-transport vehicles on State highways will need a Caltrans transportation permit.	Section 5.16, Transportation	No such equipment transportation is associated with the proposed project.
Native American Heritage Commission (May 12, 2023)			
1	Contact the appropriate regional California Historical Research Information System (CHRIS) Center for an archaeological records search, and perform a qualified archaeological survey if records are found.	Section 5.5, Cultural and Tribal Cultural Resources	The DEIR discloses that the CHRIS Center at California State University Fullerton reported no records, and no archaeological survey is warranted.
2	Contact the NAHC for a Sacred Lands File search and Native American Tribal Consultation List	Section 5.5, Cultural and Tribal Cultural Resources	The DEIR discloses that the NAHC reported no Sacred Lands records. The DEIR discloses in

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			Appendix F the consultation process pursuant to AB 52.
3	Should a Mitigation Monitoring Program be adopted, Lead Agencies should include provisions for the reporting, identification and disposition of any artifact that is inadvertently discovered.	Section 5.5, Cultural and Tribal Cultural Resources	The DEIR discloses that consistent with the 2035 County General Plan EIR, should this EIR or any track of CEQA compliance subordinated to the General Plan EIR be operative, generally applicable provisions for the reporting, identification and disposition of any artifact will be required.
LOCAL AGENCY			
Los Angeles County Sanitation Districts (June 14, 2023)			
1	The Districts' 12-inch diameter trunk sewer serving the project has a capacity of 1.6 million gallons per day (mgd) and conveyed a peak flow of 0.3 mgd when last measured in 2015.	Section 5.17, Utilties & Service Systems	None
2	The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP), which has a capacity of 100 mgd and currently processes an average recycled flow of 62.7 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to and treated at the Joint Water Pollution Control Plant in the City of Carson.	Section 5.17, Utilties & Service Systems	None
3	The expected average wastewater flow from the project, described in the NOP as a single-family home, is 260 gallons per day.	Section 5.17, Utilties & Service Systems	None

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
4	The Districts are empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is used by the Districts for its capital facilities. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System.	Section 5.17, Utilties & Service Systems	None
5	In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG), and project inconsistent with these forecasts may not be permitted to discharge to the Districts' Sewerage System if sufficient capacity does not exist.	Section 5.17, Utilties & Service Systems	The proposed project is consistent with SCAG growth forecasts, and all local wastewater facilities have been sized in anticipation of a single-family residence on the project parcel.
OTHERS			
Randall Baer (undated)			
1	DRP should not continue processing the proposed project application due to limitations on building permit expiration following issuance.	Section 5.10, Land Use & Planning	Commenter confuses the entitlement and building permit processes, citing to regulations that apply to County Department of Public Works building permit issuance. The Applicant would obtain a building

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			permit from Public Works after all entitlements are approved, and thereafter be subject to these building permit requirements during construction. The DEIR discloses the suitability of continued application processing pursuant to the County Code.
2	The Altadena Community Standards prohibit building on a slope greater than 25 percent, and so a Minor Conditional Use Permit "to construct on a slope greater than 25 percent disregards both the letter and intent of the Altadena Community Standards District Ordinance."	Section 5.10, Land Use & Planning; Section 7.3, Analysis of Alternatives	The Altadena Community Standards District Ordinance and the sections of the County Code it created define tightened quantitative standards that reasonably fulfill attributed objectives, and trigger the Conditional Use Permit process when project-specific conditions may be warranted. The DEIR discloses compliance of the proposed project with all applicable provisions of the Altadena Community Standards and with the required burdens of proof to grant a Minor Conditional Use Permit. The DEIR discloses the state and federal regulatory constraints that prohibit the County Code from precluding improvement of residential parcels.
3	There is no "guaranteed" mitigation process for avoiding damage from construction activity in the protected zone of oak trees.	Section 5.4, Biological Resources; Appendix E, Oak Tree Report and Addendum	The arboricultural community recommends standard and typical approaches to avoid and minimize impacts from construction activities, the form and efficacy of which are attributed in the Oak Tree Report Appendix E of the DEIR, and citations there. The DEIR discloses the compliance of the proposed project with avoidance and minimization approaches that are indicated where coast live oak trees are to be encroached. The DEIR discloses that rehabilitation through deep root aeration and selective fill removal, in conjunction with an open-cell tree root protection system, is likely to improve upon the pre-existing

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			condition on the proposed project parcel outside the footprint of the structure of the proposed project.
4	Replacement plantings for removal of oak trees “defeats the intent of mature oak tree protections contained within county regulations.”	Section 5.10, Land Use & Planning	The Oak Tree Ordinance permits removal of coast live oak trees, where its required burdens of proof are satisfied. The DEIR discloses compliance of the proposed project with all required burdens of proof to grant an Oak Tree Permit. The DEIR discloses CEQA text and precedents that establish the suitability of replacement resources to mitigate below the level of significance impacts to biological resources that are determined to be significant. However, the DEIR discloses that consistent with expert authorities and thresholds in use in other jurisdictions, the proposed project impacts to oak woodlands are expected to be less than significant.
5	Boulders exist in the footprint of the structure of the proposed project, and “disruption” of any boulder “could cause it to tumble down into Millard Canyon Creek and create severe disruption to this SEA watershed. “	Section 3.5, Project Construction Scenario	As the Applicant addressed during previous administrative proceedings, no substantial boulder visible at grade intersects in its current location the pile and grade beam foundation of the proposed project. Objects that can be retained as fill beneath the envelope of the structure would be reasonably expected to be less likely over time to become dislodged due to erosive or seismic effects. The DEIR discloses a construction scenario describing the lack of interaction of any construction equipment or other vector of substantial force during grading, before all fill is stably entrained within the reinforced concrete floors and walls that define the interaction of the structure with the grade.

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
6	The NOP's description of the prior Initial Study "is misleading if not entirely false" because objections were voiced during the administrative proceedings.	N/A	The NOP accurately states that no state or local governmental entitity and no member of the public commented during the statutory state and public review period for the draft Initial Study and Negative Declaration pursuant to State CEQA Guidelines 15073, which occurred from 12/28/15 to 01/26/16 (https://ceqanet.opr.ca.gov/2015121100). The DEIR discloses the areas of controversy voiced by members of the public during prior administrative proceedings.
7	The project should be revised to a "single-story garage, with a 12–14-foot roofline, would be much more compatible in height with neighboring homes" in order to preserve views from residences across the street.	Section 5.10, Land Use & Planning; Section 7.3, Analysis of Alternatives	The Applicant is entitled to determine the form of the proposed project, within the constraints established by the County Code and any applicable Conditional Use Permit or variance process. Nevertheless, though CEQA does not require that any design alternative to the proposed project be considered, a design alternative consistent with this suggestion has been evaluated. The DEIR analyzes that there is no permissible basis under CEQA for the County to select this alternative for approval, in lieu of the the proposed project. The DEIR discloses visual-spatial consistency of the proposed project with structures on the east and west of Canyon Crest Road in the vicinity, though compliance with the Altadena Community Standards provisions reasonably establish this consistency. The DEIR discloses analysis that includes comparison to the structure of Mr. Baer's own home at 3588 Canyon Crest Road immediately adjacent to the northeast of the project parcel, which, as attributed in Appendix B of the DEIR, varies in height along its more than 60 feet of frontage from

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			approximately 27 to 29 feet above the street grade plane, at a similar offset from Canyon Crest Road as the proposed project. The proposed project varies in height between approximately 13 and 25 feet above the street grade plane across its approximately 30 feet of frontage.
8	The County should make the Applicant liable for a replacement bond for a mature oak tree, identified as #1 in the proposed project oak tree report.	Section 5.4, Biological Resources; Appendix E, Oak Tree Report & Addendum	The DEIR and its Appendix E disclose the arboricultural consensus against attempting to transplant mature coast live oak trees. The protected zone of oak tree #1 overlaps the proposed project parcel in <20% of its protected zone and is subject to far greater impacts by the adjacent residence at 3589 Canyon Crest Road, and by Canyon Crest Road. The DEIR discloses that monitoring would require additional replacement plantings for encroached trees that unexpectedly decline or die after construction for reasons determined to be attributable to the proposed project. The DEIR discloses that rehabilitation through deep root aeration and selective fill removal, in conjunction with an open-cell tree root protection system, is likely to improve upon the pre-existing condition on the proposed project parcel outside the footprint of the structure of the proposed project, which includes the entirety of the protected zone of Oak Tree #1 that exists on the project parcel.
William Trousdale (June 22, 2023)			
1	The proposed project is not compliant with the County Code.	Section 5.10, Land Use & Planning	The DEIR discloses the factually accurate attributes of the proposed project, along with the compliance of these attributes with the County Code.

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
2	The proposed project will significantly affect fire safety in the vicinity and traffic on Canyon Crest Road.	Section 5.16, Transportation; Section 5.18, Wildfire	The DEIR discloses the significance of the proposed project's impacts on wildfire safety and the transportation system according to applicable significance criteria.
Jane Szabo (June 18, 2023)			
1	The proposed project is not compatible in height or scale with surrounding development and violates the Altadena Community Standards District Ordinance regulations governing height and scale.	Section 5.10, Land Use & Planning	The DEIR discloses visual-spatial consistency of the proposed project with structures on the east and west of Canyon Crest Road in the vicinity. The DEIR discloses the attributes of the proposed project, along with the compliance of these attributes with the County Code, including those portions of the County Code added by the Altadena Community Standards District Ordinance to reasonably establish consistency of height and scale.
2	Removing and endangering mature oak trees is in violation of the Altadena Community Standards Ordinance.	Section 5.10, Land Use & Planning	The Altadena Community Standards Ordinance does not address removal or encroachment of oak trees. The County's Oak Tree Ordinance governs the removal and encroachment of oak trees. The DEIR discloses compliance of the proposed project with all required burdens of proof to grant an Oak Tree Permit.
3	Construction of the proposed project cannot possibly be accommodated without extended blockages along Canyon Crest Road, the single point of access for hundreds of residences farther along Canyon Crest Road.	Section 3.5, Project Construction Scenario	The DEIR discloses a construction scenario for which the largest of required construction vehicles is able to park on the proposed project parcel, in an area of more than 1000 square feet that is approximately 40 feet deep and approximately 30 feet wide, with an additional approximately 600 square feet of space becoming available as the garage floor is cast early in the construction process, and two additional roadside parking spaces on the parcel apart from these areas.

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			These attributes are consistent with or exceed many of the homes that were constructed in the vicinity, or elsewhere in the County, including those constructed on lots of 5,000 square feet or less. The DEIR discloses that a standard process governs unavoidable temporary single-lane closures for utility connections. The DEIR discloses the regulatory framework that forbids non-transient obstructions of the roadway without a valid encroachment permit.
4	The NOP did not disclose project controversies.	N/A	CEQA does not require that a Notice of Preparation address project controversies, as a Notice of Preparation typically pre-dates administrative proceedings. The NOP disclosed that a substantively equivalent previous form of the project was litigated and provided citations to the Superior Court and Appellate Court cases, the records for which contain the claims of project opponents.
5	If the County feels they must allow construction of a home to proceed, no exemptions to the Altadena Community Standards should be allowed.	Section 5.10, Land Use & Planning	Waiver from development standards in the County Code is called a "variance," with a different process and burdens of proof than those required for a Minor Conditional Use Permit, as described in County Code Section 12.27. The DEIR discloses that the proposed project complies with all development standards of the County Code, including those portions of the County Code added by the Altadena Community Standards District Ordinance, and so requires no variance. The DEIR discloses that the proposed project meets all required burdens of proof to grant a Minor Conditional Use Permit for constructing on a slope greater than 25%, as the native topography for

No.	Comment Summary	Draft EIR Section(s) Addressing Comment	Response
			many homes in the vicinity and throughout the County required. The DEIR discloses the state and federal regulatory constraints that prohibit the County Code from precluding improvement of residential parcels.

1.9 Summary of Environmental Impacts, Constraints and Level of Significance

Pursuant to State CEQA Guidelines Section 15123(b)(1), the summary of an EIR must include "each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect."

Though the project as analyzed in this EIR would not be expected to result in any significant effect, impacts in each area of analysis are discussed even where they are less than significant, along with brief qualification where no impacts of any kind are present. Also included, though not required by CEQA, are summaries of the rationale for the significance determination that will follow in Section 5 of this EIR, which are appropriately brief, with any citations to supporting references located only in the later impact analysis. The analysis reasonably foresees that the project would be designed, constructed, and operated following all applicable laws, regulations, ordinances and formally adopted standards, whether local, state or federal. Where supportive of the analysis, these constraints are credited as regulatory compliance measures or standard conditions, as appropriate, though these are not intended to be an exhaustive list of such constraints. This attribution also relates the analysis of this EIR to that of the 2035 County General Plan EIR, where it concluded that compliance with the existing regulatory framework was sufficient to constrain a project below the level of reasonably potential significance. Pursuant to CEQA Section 21167.2, the analysis of the successfully certified 2035 County General Plan EIR must be assumed to be correct as a matter of law and may not be challenged only belatedly. *River Valley Preservation Project v. Metropolitan Transit Development Board* (1995) 37 Cal.App.4th 154, 178. This principle applies regardless of whether any procedure to rely upon that analysis was formalized in any subordinate project. *Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 228.

Mitigation measures generally applicable to all projects subordinated to the analysis of the 2035 County General Plan EIR are imposed on the project for the reasons attributed in Section 2.2.7, even where unnecessary to support a determination of less than significance. This EIR concludes that the whole of the project, including its compliance with standard conditions and regulatory compliance measures, would not be expected to create a significant effect. Adherence to all regulatory compliance measures, standard conditions, project design features and additional mitigation measures would be compulsory, reasonably foreseeable, independently confirmed as a part of the Monitoring and Reporting Program and on a complaint basis, and enforceable by County agencies duly empowered with mechanisms of enforcement.

Table 1-2: Summary of Impacts, Constraints and Level of Significance After Consideration of Constraints

Environmental Impacts	Constraints	Expected Impact Level of Significance
Aesthetics		
The project would alter the visual environment from certain public vantages on Canyon Crest Road by placing a structure and fencing where none existed, by removing one oak tree, and by pruning approximately 25% of the canopy of one other oak tree. The visual impacts of one conforming single-family residence are typical of the class of categorically exempt small structures and have been anticipated in the residential zoning of the project parcel.	RCM-AES-1: The project shall comply with the County Code Section 22.140.580(D) residential development standard prohibiting any shiny roofing and cladding.	Less than significant impact. The home would: not be visible from any designated scenic resource; be screened to a significant extent by vegetation; be clad in colors that blend with the natural environment; conform to the building and development standards prescribed in the County Code and the R-1 Altadena Community Standards District; and exhibit the success criteria of the County's Hillside Management Area Sensitive Design Guidelines, which "ensure[s] that development preserves…scenic values[.]"
Agriculture and Forestry Resources		
There is no designated agricultural land on or near the project parcel, and the project parcel is not zoned to permit the harvest of forestry resources.		No impact.
Air Quality		
During the period of occupancy, the project would generate emissions affecting air quality. These long-term emission sources would be expected to include vehicular exhaust from daily transportation associated with occupant usage, emissions		Less than significant impact. The home's long-term emissions would not be expected to exceed SCAQMD regional or local significance thresholds.

Environmental Impacts	Constraints	Expected Impact Level of Significance
associated with the generation of energy used by the project, site and landscape maintenance, and incidental emissions from typical residential products and equipment. These long-term emissions are typical of the class of categorically exempt small structures and have been anticipated in the residential zoning of the project parcel.		
During construction, the project would generate emissions affecting air quality. These short-term emission sources would be expected to include exhaust from combustion equipment and vehicles used for material and personnel transport, dust generation from soil disturbance areas, and the application of architectural coatings. These short-term emissions are typical of the class of categorically exempt small structures and have been anticipated in the residential zoning of the project parcel.	RCM-AQ-1: It is mandatory for all construction projects in this air basin to comply with SCAQMD Rule 403 for fugitive dust. Applicable Rule 403 control requirements include mechanical stabilization of soil and backfill, maintenance of effective cover over exposed areas, application of water in sufficient quantities to prevent the generation of visible dust plumes, and reestablishing ground cover as quickly as possible. Construction personnel would comply with Rule 403 to avoid impacts to regional $PM_{2.5}$ and PM_{10}. Additionally, construction personnel will properly maintain all construction equipment and stop work if there are high winds greater than 15mph for clearing, earth moving, and excavation or greater than 25mph for grading. RCM-AQ-2: It is mandatory for all construction projects in California to comply	Less than significant impact. The home's short-term construction emissions would not be expected to exceed SCAQMD regional or local significance thresholds.

Environmental Impacts	Constraints	Expected Impact Level of Significance
	with CARB Rule 2485 limiting the idling of any diesel truck to five minutes. RCM-AQ-3: It is mandatory for all construction projects in this air basin to comply with SCAQMD Rule 1113 limiting the permitted VOC concentration of architectural coatings. RCM-AQ-4: It is mandatory for all construction projects in this air basin to comply with SCAQMD Rule 402 prohibiting the emission of contaminants that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public.	
Biological Resources		
The project would remove one coast live oak tree in the development footprint; establish replacement plantings for the removal; and encroach upon portions of the protected zones of 10 additional oak trees on or adjacent to the project site, comprising a portion of a stand of degraded oak woodlands.	SC-BIO-1: The project shall comply with the standard permit conditions issued by the Fire Department Forestry Division as a part of the County's application of its Oak Tree Ordinance. RCM-BIO-2: The project's landscaping shall comply with the County's Drought Tolerant Landscaping Ordinance. PDF-BIO-1: The Applicant proposes that expanded oak resources on the project parcel be permanently protected in-kind by	Less than significant impact. The removal of one non-designated, non-heritage oak tree in connection with a single-family residence is not considered significant at any spatial scale of assessment, irrespective of compensatory replacement. Of the 10 encroached trees to remain, marginal negative project impacts, as mediated by required Best Mangagement Practices, were analyzed to be either negligible or sustainable by an arborist certified in Tree Risk Assessment, consistent with cited conservative industry guideposts

Environmental Impacts	Constraints	Expected Impact Level of Significance
	exercising the discretion afforded by County Code Section 22.174.070(A)(6)(a) with a replacement ratio of 4:1. PDF-BIO-2: The Applicant proposes that in order to help rehabilitate the severely degraded existing condition of the oak woodlands at the eastern portion of the project parcel, and pursuant to the recommendation of the project consulting arborist, after construction completes, the existing compacted area of the project parcel near street grade (1342' above msl or greater) will be deep root aerated using one of the recommended methods discussed in the project Oak Tree Report. Oak-compatible plantings, rock, or other oak-compatible landscaping features, as determined by the project consulting arborist, will be placed to preclude vehicular passage in any critical root zone (extending out to five trunk diameters) on the project parcel accessible from Canyon Crest Road. PDF-BIO-3: The Applicant proposes that in order to help rehabilitate the severely degraded existing condition of the oak woodlands at the eastern portion of the project parcel, and pursuant to the recommendation of the project's consulting arborist, the layer of fill dumped by previous owners in the protected zones of all encroached trees will be	for encroachment sustainability metrics. The project would incorporate design features to remediate some of the existing degradation and both increase the density and expand the spatial extent of oak woodlands on the project parcel.

Environmental Impacts	Constraints	Expected Impact Level of Significance
	removed by hand after construction completes, unless and until oak tree roots are encountered. Where an existing concrete drainage device impinges on any collar, the concrete will be carefully chiseled and extricated. Should any wound result, it will be chiseled clean to promote healing.	
Grading and vegetation disturbance or removal during construction of the project would convert a small amount of common habitat in which designated species may be present, as throughout the neighborhood and residential community of Altadena. However, no sensitive, candidate or special status plant or animal species or sensitive natural communities were observed during surveys of the project footprint of development or surroundings. The removal of similar amounts of non-sensitive habitat is typical of the class of categorically exempt small structures and has been anticipated in the residential zoning of the project parcel.	RCM-BIO-1: The project shall comply with state and federal laws protecting nesting and roosting birds and mammals, including but not limited to California Fish and Game Code Sections 1600-1603, 3503 and 3503.5, 3511, 4700, 5050, 5515, 4150 and 4152, the Migratory Bird Treaty Act, Section 10 of the FESA, Article 3 of the CESA, and any associated standard consultation and permitting requirements. MM-BIO-1: The project shall adhere to the avoidance and minimization measures in the project's Biological Resources Assessment Report dated February 2019.	Less than significant impact. Compliance with state and federal laws would be expected to limit impacts to designated species. The designated species analyzed to have some possibility of occurrence due to fluidity of movement and low detectability are associated with riparian habitat more than 150 feet distant from the project footprint of development. A pre-construction sweep would further minimize the potential for impacts to any designated species.
The project would continue to control plant species beyond the structure and remove dead vegetation consistently with the	RCM-H-1: Pursuant to County Code Title 32 Section 4908.1, the project shall implement landscaping to create and maintain a defensible space for effective fire safety	Less than significant impact. The existing fuel modification requirements for adjacent residences already overlap with nearly all of the home's fuel modification zones and

Environmental Impacts	Constraints	Expected Impact Level of Significance
pre-existing condition, in implementing standard fuel modification plan establishing defensible space consistent with fuel modification requirements for structures located in Very High Fire Hazard Severity Zones. The removal of similar amounts of non-sensitive vegetation is typical of the class of categorically exempt small structures and has been anticipated in the residential zoning of the project parcel.	through fuel modification consistent with the requirements of County Code Title 32, Sections 325.2.1, 325.2.2, 325.10, and 503.2, the County Fire Department's fuel modification guidelines, and California Code of Regulations, Title 14, Division 1.5, Chapter 7, subchapter 2.	nearly all of the project parcel, such that the project would not appreciably alter required maintenance activities. Most of the existing native and non-native, drought-tolerant trees, shrubs and groundcover present on the project parcel are compatible with these requirements and may remain, thereafter to be replaced as the existing vegetation sensesces, with compatible species planted or recruited naturally.
Cultural and Tribal Cultural Resources		
No historic resources, as described in State CEQA Guidelines Section 15064.5, are identified on the project parcel, and the project would not be expected to impact any resource that may conform to criteria for historic value.		No impact.
During construction, excavation in preserved volumes could disturb artifacts of archaeological or paleontological value, as throughout the Los Angeles region. The amount of excavation required is typical of the class of categorically exempt small structures and has been anticipated in the residential zoning of the project parcel.	RCM-CUL-1: If human remains are encountered during excavation activities, all work is required to halt in the immediate vicinity of the discovery and the County Coroner must be notified pursuant to California Public Resources Code Section 5097.98. The Coroner is required to determine whether the remains are of forensic interest. If the Coroner, with the aid of an Archaeologist, determines that the remains are prehistoric, s/he is required to contact the	Less than significant impact. The excavation for the project is very limited in scope; would occur almost entirely in igneous geology or fill with no potential for encounter of cultural resources; and would not entail substantial disturbance of intact, older alluvial terrace with some low potential to contain archaeological resources. Mitigation prescribed by the 2035 County General Plan EIR for all subsequent activities would ensure that in this highly

Environmental Impacts	Constraints	Expected Impact Level of Significance
	Native American Heritage Commission ("NAHC"). The NAHC is responsible for designating the most likely descendant ("MLD"), who is responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD is required to make his/her recommendation within 48 hours of being granted access to the site. The MLD's recommendation is required to be followed if feasible and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials, pursuant to California Health and Safety Code Section 7050.5. If the landowner rejects the MLD's recommendations, the landowner is required to rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance, pursuant to California Public Resources Code Section 5097.98. MM-CUL-1: The contractor shall be instructed that if artifacts of potential cultural significance, including bone, ground or chipped stone, pottery shards, fossilized material or any other materials apart from fill and naturally deposited rocks in a soil matrix are encountered during hand excavation, all work shall be halted. Work shall not recommence until a qualified archaeologist or	unlikely event, means for identification and proper management would be enforced.

Environmental Impacts	Constraints	Expected Impact Level of Significance
	paleontologist, depending on the nature of the find, who meets the Secretary of the Interior's Standards for professional archaeologist or paleontologist can ascertain and record the extent of the resource and its cultural significance under CEQA. If archaeological in nature, the professional shall consult in writing with the Native American tribes that requested contact pursuant to AB 52 and with the County. If determined to have significance, the qualified archaeologist or paleontologist shall formulate, the County shall approve, and these parties together with the Applicant shall implement a plan that accords with the particular circumstances of the find to preserve intact those artifacts with cultural significance. The resource, supporting documentation and an itemized catalogue shall be offered on a first refusal basis into the collections of a suitable repository, as determined by the Native American tribes that requested contact pursuant to AB 52 (if of tribal cultural significance), the County, or their designees in turn. The Applicant shall be responsible for all associated costs, including any curation costs to accession the resource. If refused by all repositories, the plan shall provide for alternative means of preservation intact, which may include, but are not limited to, building envelope translation within available height and setback limitations, burial	

Environmental Impacts	Constraints	Expected Impact Level of Significance
	elsewhere on the project parcel, or relocation elsewhere within the County.	
Geology and Soils		
During construction, pile augering would interact with the geological formations underlying the footprint of the structure. Deep foundations are typical of the class of categorically exempt hillside structures, and has been anticipated in the residential zoning of the project parcel.	RCM-GEO-2: The project shall comply with the California Building Code, all Department of Public Works design, construction and maintenance requirements, and all applicable recommendations contained in the geotechnical report and addendum from Irvine Geotechnical dated April 17, 2014 and March 7, 2016, respectively.	Less than significant impact. The entirety of the west-facing slope of the project parcel was determined to be stable using appropriate static and dynamic factors of safety as analyzed by a qualified geotechnical engineer. The underlying geology is monolithic, without fracture planes. There is no geomorphic or geologic evidence that would indicate faulting in the project parcel or ground rupture hazard.
During construction, grading would result in temporary soil disturbance areas adjacent to a slope with the potential for erosion and siltation. Soil disturbances are typical of the class of categorically exempt small structures, and have been anticipated in the residential zoning of the project parcel.	RCM-GEO-1: The project shall comply with Chapter 12.80 of the County Code, prohibiting the discharge or accumulation of pollutants, as defined in County Code Section 12.80.240, and requiring as a condition of building permit approval the implementation of common and typical stormwater and runoff pollution Best Management Practices ("BMPs").	Less than significant impact. The project would be expected to adhere to standard and typical BMPs formulated to manage these common and typical potential impacts, including coverings for disturbance areas and bag berms and/or silt fences designed to minimize erosion and siltation. The volume of project grading is small, at 40 cubic yards of cut, two orders of magnitude below the threshold for a use permit in Altadena, and three orders of magnitude below the threshold for a use permit under the County's Hillside Management Area Ordinance.
Greenhouse Gas Emissions and Energy		
During construction and the period of occupancy, the project would generate greenhouse gas emissions and use energy. Greenhouse gas emissions are typical of the class	RCM-LU-2: The project shall comply with the provisions of the California Green Building Code and County Code Title 31 – the Green Building Program – which includes Green Building Standards, Low-Impact	Less than significant impact. The proposed home is modest in size, designed for net-zero operation, and must adhere to modern standards of energy efficiency. The proposed project fulfills all applicable policies of the

Environmental Impacts	Constraints	Expected Impact Level of Significance
of categorically exempt small structures, and have been anticipated in the residential zoning of the project parcel.	Development standards, and Drought Tolerant Landscaping requirements.	County's Community Climate Action Plan, consistency with which ensures that the County is able to meet its share of greenhouse gas reduction goals.
Hazards and Hazardous Materials		
The constituent databases of the Cortese List indicate that no known contamination exists on the project parcel that might adversely affect the project.		No impact.
During construction and the period of occupancy, the project would place a structure and constituent building materials, some of which would be combustible, in a Very High Fire Hazard Severity Zone ("VHFHSZ"). Use of combustible building materials is typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.	RCM-H-1: Pursuant to County Code Title 32 Section 4908.1, the project shall implement landscaping to create and maintain a defensible space for effective fire safety through fuel modification consistent with the requirements of County Code Title 32, Sections 325.2.1, 325.2.2, 325.10, and 503.2, the County Fire Department's fuel modification guidelines, and California Code of Regulations, Title 14, Division 1.5, Chapter 7, subchapter 2. RCM-LU-1: All attributes of the construction and occupancy of the project must comply with all applicable provisions of the California Building Code, Uniform Fire Code, County Code, and other applicable codes and ordinances.	Less than significant impact. The project would: comply with the building safety requirements for homes constructed in VHFHSZs; be expected to adhere to any applicable safety Best Management Practices and manufacturer instructions for any spark or flame-generating equipment or device; be located within the County's maximum response distance from an engine company; and be expected to comply with applicable fuel modification requirements, which are designed to reasonably defend structures from wildfire risk and limit the speed and probability of flame spread.
During construction and the period of occupancy, the project would		Less than significant impact. Common hazardous materials would not be expected

Environmental Impacts	Constraints	Expected Impact Level of Significance
make limited use of substances that could be hazardous if misused. Use of common hazardous materials (e.g. cleaning agents, volatile architectural coatings, vehicle and equipment fuel, etc.) is typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.		to create hazards in the environment in the course of normal operation in accordance with manufacturer instructions and all applicable regulations.
Hydrology and Water Quality		
During construction and the period of occupancy, the project would alter the flow of stormwater within the footprint of development. Substances that can exist in solute or suspension with water could, if exposed to stormwater, degrade to some extent the quality of that stormwater. Impervious, stormwater-diverting surfaces are typical of the class of categorically exempt small structures, and have been anticipated in the residential zoning of the project parcel.	RCM-GEO-1: The project shall adhere to all conditions and/or Best Management Practices required by the grading and drainage plan check review process. SC-WQ-1: The project shall comply with County Low Impact Development Standards.	Less than significant impact. The project would comply with standard and typical Best Management Practices as part of the grading and drainage plan check review process that are formulated to manage these common and typical construction impacts. The project's stormwater runoff would be routed into the same swale that presently collects sheet runoff, through rain gardens that filter contaminants and buffer runoff, pursuant to Low Impact Development standards. The existing pattern of drainage will therefore be retained.
Land Use and Planning		
The project would comply with all applicable development standards pursuant to RCM-LU-1 and would be consistent with the Land Use Element of the County General	RCM-LU-1: All attributes of the construction and occupancy of the project must comply with all applicable provisions of the California Building Code, Uniform Fire Code,	No impact.

Environmental Impacts	Constraints	Expected Impact Level of Significance
Plan and with the Altadena Community Plan. The project would be compatible with the existing residential usage in the area.	County Code, and other applicable codes and ordinances.	
Mineral Resources		
There are no designated mineral resources of statewide or regional significance on or adjacent to the project parcel, and the project parcel is not zoned to permit extraction of mineral resources.		No impact.
Noise		
During the period of occupancy, noise levels at nearby sensitive receptors would increase from the addition of a residence where none previously existed, including typical residential activities, equipment, and associated vehicular traffic. These types and levels of noise are typical of the class of categorically exempt small structures, and have been anticipated in the residential zoning of the project parcel.	RCM-NOI-1: The project shall comply with all of the applicable provisions of County Code Section 12.08.	Less than significant impact. The home would be expected to be similar in noise-generating potential to other residences in the vicinity, and the addition of fewer than 10 trips/day to the existing level of service would result in an imperceptible increase in the ambient Community Noise Equivalent Level on the project parcel and elsewhere. If future residents of the project would make loud noise that exceed the levels permitted in County Code Section 12.08, the County is empowered to take actions to abate that activity.
During construction, noise levels would increase at nearby sensitive receptors from construction activities and the use of construction equipment. These types and levels of noise are	RCM-NOI-1: The project shall comply with all of the applicable provisions of County Code Section 12.08. PDF-LU-1: Prior to beginning construction, the Applicant proposes to provide a courtesy	Less than significant impact. The earthmoving and grading equipment that typically have the highest noise impacts are not required or permitted. Construction hours are constrained by the County Code, and exposure to these increased noise levels

Environmental Impacts	Constraints	Expected Impact Level of Significance
typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.	notification letter to all residential structures located within 200 feet of the project footprint of development. The notification shall include a start date for construction; the types of activities that will be occurring during construction; a simple, non-technical summary of the constraints that govern the project; and contact information for the Applicant and for the County point(s) of contact to which residents may address questions or concerns relating to the constraints for the project. MM-NOI-1: If reasonable noise complaints are received and not apparently rectified to the satisfaction of the County health officer within 24 hours, the County health officer shall at their discretion collect and/or validate exterior noise measurements taken using a device that conforms to the definition in County Code Section 12.08.340, configured pursuant to County Code Section 12.08.420. If these noise level measurements indicate a persistent violation of the County Noise Control Ordinance due to noise attributable to the project, one or more of the following modifications shall be required to reduce project noise impacts until compliance with the County Noise Control Ordinance is maintained: • The offending equipment shall be substituted.	would be intermittent, short-lived, readily perceptible at only a small number of surrounding sensitive receptors, and not expected to violate any significance threshold. If noise would exceed the levels permitted in County Code Section 12.08, the County is empowered to take actions to abate that activity. In addition, mechanisms of compliance have been formalized as mitigation generally applicable under the 2035 County General Plan EIR to all subsequent activities.

Environmental Impacts	Constraints	Expected Impact Level of Significance
	• The operational settings of the offending equipment shall be modified. • The location of use and/or orientation of the offending equipment shall be modified. • The offending equipment shall be used for a reduced fraction of each work hour. • At the direction of the County, additional noise-reducing treatments shall be required, which may include, but are not limited to, installation of acoustical barrier partitions or installation of acoustical absorption enclosures around the offending equipment.	
Population and Housing		
The project would add one single-family residence to the housing supply in the County. This impact is typical of the class of categorically exempt residential structures, and has been anticipated in the residential zoning of the project parcel.		Less than significant impact. The project would be consistent with the adopted land use designation and applicable zoning. Development of the site with one single-family residence in accordance with the adopted long-range plans for the project parcel would not result in significant growth, as the project is located in an area that is virtually built out, with only six vacant lots within 500 feet, most of which are effectively annexed to existing residences. As infill development, construction of the project would not necessitate the implementation of significant new infrastructure such as major roadway improvements and/or the extension of infrastructure with the potential to induce unanticipated growth and development. All of the infrastructure, including adequate

Environmental Impacts	Constraints	Expected Impact Level of Significance
		utilities and roadway access, exist in the immediate vicinity of the project parcel and have adequate capacity to serve the project.
Public Services		
Development of the project parcel with one single-family home would not require an expansion to local fire protection resources or result in any environmental impacts involving construction of new fire protection facilities.		No impact.
Development of the project parcel with one single-family home would not require an expansion to local law enforcement resources or result in any environmental impacts involving construction of new law enforcement facilities.		No impact.
The project would not generate a substantial number of new students in the school district. New or expanded school facilities would not be required to provide classroom and support space for these low numbers of additional school age children.	RCM-PS-1: Pursuant to Section 65995 of the California Government Code, the Applicant must pay a school developer fee in order to offset the incremental cost impact of expanding school resources to accommodate the increased student enrollment associated with one new residence.	Less than significant impact. The Applicant must pay an applicable school fee pursuant to Section 65995 of the California Government Code, in order to offset the incremental cost impact of expanding school resources to accommodate the increased student enrollment associated with one new residence.
Recreation		
During the period of occupancy, residents of the project would be expected to visit local and regional parks. This impact is typical of the class of categorically exempt		Less than significant impact. Use of those public facilities by future residents would not represent a substantial change in the intensity of usage, and the impact would not be expected to result in substantial physical

Environmental Impacts	Constraints	Expected Impact Level of Significance
residential structures, and has been anticipated in the residential zoning of the project parcel.		deterioration of the parks. Development of the site with one single-family residence would not require the construction of new facilities or the expansion of existing facilities.
Transportation		
During the period of occupancy, vehicles carrying future occupants would add to existing usage of the transportation system. 10 or fewer additional trips per day are typically associated with the operation of one new single-family home. These transportation system impacts are typical of the class of categorically exempt residential structures, and have been anticipated in the residential zoning of the project parcel.		Less than significant impact. The expected number of trips would not change or degrade the Level of Service of any roadway or intersection in the vicinity from the un-degraded existing condition. The project's driveway area has already been used for parking for many decades and would accommodate three point turns that permit residents of the project to exit into the flow of traffic with visibility in the forward direction. The project would be located in an area with a high ratio of jobs to housing and would improve this balance consistent with the goals and objectives of the County 2035 General Plan and the Southern California Association of Governments' 2016 Regional Transportation Plan/Sustainable Communities Strategy.
During construction, vehicles carrying workers to and from the project parcel and delivering construction materials would add to existing usage of the transportation system. 7 or fewer additional trips per day are associated with the construction of		Less than significant impact. The expected number of trips would not change or degrade the Level of Service of any roadway or intersection in the vicinity from the un-degraded existing condition. In addition, the project parcel currently accommodates entrance and exit of vehicles, and sufficient visibility exists for more than 150 feet in

Environmental Impacts	Constraints	Expected Impact Level of Significance
one new single-family home. These transportation system impacts are typical of the class of categorically exempt residential structures, and have been anticipated in the residential zoning of the project parcel.		either direction along Canyon Crest Road of the project parking and staging areas. Larger truck trips would be expected to be intermittent and low-intensity (no more than a few round trips in a given day, and no more than a few dozens of trips across the construction of the project). The Department of Public Works has approved a conceptual construction traffic control plan to confirm that compliance with its requirements would be feasible in the project as proposed.
The project's connection to the public sewer main would require the temporary closure of a portion of one lane of traffic on Canyon Crest Road during portions of several days. The traffic impacts of construction of utility connections for one conforming single-family residence are typical of the class of categorically exempt residential structures, and have been anticipated in the residential zoning of the project parcel.	SC-TRANS-1: Pursuant to the County Graybook, prior to any non-transient encroachment of the public road right-of-way, the Applicant shall obtain an encroachment permit from the Department of Public Works,[5] which will permit materials, equipment or vehicles in the public road right-of-way only for the necessary purpose of constructing a utility connection in the public road right-of-way. As required to obtain a permit, the Applicant shall submit to and receive approval from the Department of Public Works of a construction traffic control plan identifying construction vehicle routes, entrance/exit and construction vehicle parking locations; duration and location of lane closures; and the use of traffic control devices. All encroachment throughout the construction of the project shall comply with	Less than significant impact. The immediate vicinity currently supports regular single-lane closures, and extended lane closures have occurred on Canyon Crest Road for resurfacing and utility maintenance and repair without reported incident. The project must comply with the conditions of the encroachment permit, which outlines standard procedures for signage, hours of work (avoiding typical commute hours), and compliance with the MUTCD. The Department of Public Works has reviewed a conceptual construction traffic control plan and analyzed that compliance with the MUTCD may be maintained at all times during this activity. Both lanes of traffic would be restored outside of work hours, and materials to do so would be kept on hand for

[5] See Los Angeles County Road Permit Standard Provisions. Available at: https://dpw.lacounty.gov/general/forms/download/694.pdf.

Environmental Impacts	Constraints	Expected Impact Level of Significance
	the approved construction traffic control plan to the satisfaction of the Department of Public Works. Pursuant to the Graybook, the construction traffic control plan shall adhere to the California Manual on Uniform Traffic Control Devices ("MUTCD"), which specifies traffic control devices, buffer distances, and required lane widths for safe single-lane closure on a two-lane roadway. Encroachment shall be permitted only Monday through Friday, 7:00 a.m.-3.30 p.m., excepting federal holidays. Outside of permitted construction hours or in the event of emergency, any excavation in progress in the public road right-of-way shall be covered with approved steel road plate complying with Department of Public Works Standard Plan 6008-1, pursuant to the Graybook. RCM-TRANS-1: Pursuant to County Code Sections 15.64.180, 15.64.210 and 15.08.080 and California Vehicle Code Section 22500.1, stopping, parking or leaving a vehicle is prohibited on every way set apart for public travel except when necessary to avoid conflict with other traffic or in compliance with a traffic sign or signal or direction of a police officer. RCM-TRANS-2: Any non-transient staging of materials or vehicles on the pavement in the right of way of Canyon Crest Road is	quick restoration of both lanes in the event of an emergency during work hours.

Environmental Impacts	Constraints	Expected Impact Level of Significance
	prohibited pursuant to RCM-TRANS-1 except where expressly authorized by a valid encroachment permit for utility connections issued by the County Department of Public Works, pursuant to SC-TRANS-1. PDF-TRANS-1: The Applicant proposes that any work requiring an encroachment permit be performed only from January 1 to April 31, outside of California's fire season, and that the encroachment permit not be used during the effective period of any National Weather Service storm watch or warning that includes Altadena or the Angeles National Forest adjacent to Altadena. The Applicant further proposes that the encroachment permit be used only between 9:00 a.m. and 3:30 p.m., Monday through Friday, excepting federal holidays.	
Utilities and Service Systems		
During construction and the period of occupancy, the project would increase local water demand. Water use is typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.		Less than significant impact. All of the project's potable and non-potable water needs would be met through an existing connection to the local water purveyor that has anticipated and can accommodate ambient growth in its projections. The project landscapes a limited area with drought-tolerant native plants. All water-consuming fixtures are required to adhere to modern standards of efficiency.

Environmental Impacts	Constraints	Expected Impact Level of Significance
During construction and the period of occupancy, the project would generate wastewater. Wastewater generation is typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.		Less than significant impact. Wastewater generation would not increase significantly as a result of the development of one home on the project parcel, and its requirements have been anticipated by the County in its long-range plans and in the sizing of utility services. Wastewater would be transferred to a wastewater treatment plant from the existing sewer main adjacent to the southeast corner of the project parcel.
During construction and the period of occupancy, the project would consume electricity and limited quantities of transportation fuel. This resource usage is typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.		Less than significant impact. The project would not be expected to require significant additional amounts of electricity. Electricity would be provided from existing above ground service lines along the project frontage. The project would also make use of a roof-mounted solar photovoltaic system that would be expected to render the home net-zero energy. Fuel for vehicles would be provided by existing infrastructure responsive to fluctuations in demand that dwarf use by project residents.
During construction and the period of occupancy, the project would generate solid waste. Solid waste generation is typical of the class of categorically exempt small structures, and has been anticipated in the residential zoning of the project parcel.	SC-USS-1: The project shall comply with the County Construction and Demolition Recycling and Reuse Program requirements to minimize the amount of construction refuse generated and corresponding impacts to landfill resources.	Less than significant impact. The quantities of solid waste associated with a single-family residence are small, and construction waste would be recycled pursuant to the requirements of the County's Construction and Demolition Recycling and Reuse Plan. Existing landfills would be expected to have adequate capacity to service the site and use.
Wildfire		

Environmental Impacts	Constraints	Expected Impact Level of Significance
During construction and the period of occupancy, the project would introduce typical residential uses and activities, including electricity connections and equipment like grills, with some potential for flame initiation. Such vectors for flame initiation are typical of the class of categorically exempt small structures, and have been anticipated in the residential zoning of the project parcel.		Less than significant impact. The amount of project activity and new facilities with a low potential to generate flame start is insubstantial in relation to the existing residential and utility facilities and activity in the surrounding urban-wildland interface. The project would be expected to adhere to all regulations and manufacturer recommendations for typical residential vectors of flame start.

2. INTRODUCTION

2.1 Independent Tracks of CEQA Determination for the Project

Five valid, independent tracks of CEQA determination have been identified for the proposed project at this time, any one which may be used by the County alone or in conjunction with any others to approve the project in compliance with CEQA. The project-specific EIR is addressed in further detail in subsequent subsections of this Introduction. Each of the four other tracks, which include two exemptions, one provisional exemption, and a project continuation track, are addressed in Appendix Checklists, as referenced below.

A Lead Agency is not estopped nor does it waive its prerogative to assert the applicability of exemptions from CEQA as a matter of law, even where choosing to adopt alternative tracks of CEQA determination. This section affords any project opponent sufficient notice of their burden to develop an opposing record and timely file any challenge to a Notice of Exemption, as does CEQA. "[A]n agency decision to proceed with some level of CEQA review does not bar the agency from asserting in litigation that the action is exempt. *Rominger v County of Colusa* (2014) 229 Cal.App.4th 690, 700; *Del Cerro Mobile Estates v City of Placentia* (2011) 197 Cal.App.4th 173; *Santa Barbara County Flower & Nursery Growers Association v County of Santa Barbara* (2004) 121 Cal.App.4th 864. Under these cases, if an agency prepares an EIR or other CEQA document for an exempt project, the exemption is not waived. The agency can defend a challenge to the adequacy of the document on the basis that the action was exempt and thus the CEQA review was not required to begin with." (Kostka & Zischke, Practice Under the California Environmental Quality Act (2d ed Cal CEB) § 5.124, p. 5-111). This principle has been upheld not only for statutory exemptions but for exemptions requiring some analytical categorization as well. *Muzzy Ranch Co. v. Solano County Airport Land Use Commission* (2007) 41 Cal.4th 372, 382 ("commonsense" exemption applied even where the Lead Agency did not rely on it when approving the project and in fact erroneously determined that there was no project); *see also Robinson v. City and County of San Francisco* (2012) 208 Cal.App.4th 950, 955-56 (conformance of a categorically exempt project – and by extension any other non-statutory exemption – to the class is a matter of law, examined for substantial evidence in the administrative record whenever the Lead Agency makes findings of fact sufficient to determine that the project conforms to the class and is not possessed of exceptions).

Factual findings as to conformance of the project to its classes of exemption and the non-existence of exceptions (where any are applicable) are made in the individual Checklists. These Checklists contain data to sufficiently bridge any analytic gap needed to support the conclusion that the exemption applies as a matter of law. However, CEQA does not prohibit further environmental review of a categorically exempt project.

The five tracks are as follows:

1. Project-specific Environmental Impact Report

The project's impacts are examined against each threshold of significance in all impact areas of analysis.

2. Class 3 and/or 4 Categorical Exemptions from CEQA

The project's discretionary MCUP and OTP permit approvals conform as a matter of law to the criteria of a class 3 categorical exemption from CEQA. The OTP conforms as a matter of law to the criteria of a class 4 categorical exemption from CEQA. Substantial evidence supports the conclusion that the project is not characterized by any exceptions pursuant to State CEQA Guidelines Section 15300.2. Therefore, CEQA does not apply to the project.

See Appendix L Checklist for an in-depth discussion and analysis.

3. Subsequent Activity or Continuation of the 2035 County General Plan Already Analyzed in Its Program EIR, Pursuant to State CEQA Guidelines Section 15168

Buildout of this vacant residential parcel is a subsequent activity or continuation of the project analyzed in the 2035 County General Plan EIR, which was the complete buildout of the County according to land use maps reflecting zoning and occupancy. The 2035 County General Plan EIR used the land use designation of the Altadena Community Plan,[6] which portray the project parcel as a low-density residential parcel of one unit per acre, consistent with the proposed project. The 2035 County General Plan EIR analyzed all impacts; considered whether feasible mitigation measures were warranted in each impact area of analysis for all of the subsequent activities comprising the complete buildout of the County; considered cumulative impacts and alternatives; and adopted statements of overriding considerations. Therefore, the 2035 County General Plan EIR sufficiently analyzed the conforming residential unit proposed herein, and no new analysis is required by CEQA.

See Appendix I Checklist for an in-depth discussion and analysis.

4. Exemption from Further Analysis of Project Effects Conforming with Provisions of State CEQA Guidelines Section 15183 and CEQA Section 21083.3

Effects that are not peculiar to the project or which were already analyzed in the 2035 County General Plan EIR need not be considered for this residential unit because it would be consistent with the density assumed in the analysis of the 2035 County General Plan EIR. This track cites the analysis of the 2035 County General Plan EIR for each threshold of significance and attributes the conformity of the project to that general analysis.

See Appendix J Checklist for an in-depth discussion and analysis.

5. "Complete Exemption" Pursuant to State CEQA Guidelines Section 15183.3 Streamlining for Infill Projects

[6] Source: County Department of Regional Planning: 2035 County General Plan EIR, Appendix C "Land Use and Zoning," page 55. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir-appendixC.pdf.

Qualifying infill projects may be streamlined to the point of a "complete exemption" where the analysis of an existing planning level EIR is sufficient or where uniformly adopted development standards or policies apply that are sufficient to ensure the project will not have a significant effect. Substantial evidence supports that one or both of these conditions hold for all project impacts. Substantial evidence supports that the project is a qualifying infill project because it is sited in an "urbanized area" as defined by State CEQA Guidelines Section 15387, has been previously developed for a qualifying use by construction of a sub-surface utility across the parcel, and is sufficiently surrounded by residential parcels that have been previously developed for a qualifying use.

See Appendix K Checklist for an in-depth discussion and analysis.

In summation, unless new information not already present in the administrative record is forthcoming, the County expects that it would grant proposed project entitlement approvals with a CEQA determination of: a.) as many as three, but at least one, Notice(s) of Exemption, and b.) a 2035 County General Plan "continuation" Notice of Determination. The County may or may not choose to adopt this project-specific EIR or post a Notice of Determination associated with it. The County maintains discretion to withdraw any track of CEQA compliance described herein prior to final approval, or to advance any other track(s) it identifies to be valid, in accordance with the requirements of CEQA for that track. Should a Notice of Exemption for categorical exemption pursuant to State CEQA Guidelines Section 15300.2 be adopted undisturbed, the project may be implemented "without any CEQA compliance whatsoever" (*Association for Protection etc. Values v. City of Ukiah* (1991) 2 Ca1.App.4th 720, 726). Such compliance would include any CEQA process attached to any concurrently adopted CEQA track, including any Mitigation Monitoring and Reporting Program. Project conditions attached to entitlement approvals pursuant to use permit authority that is independent of CEQA, including all standard Oak Tree Permit conditions, would remain in effect regardless of which CEQA determination is operative.

2.2 Project-specific Environmental Impact Report

Pursuant to State CEQA Guidelines Section 15124(d), an EIR must include "[a] statement briefly describing the intended uses of the EIR."

Pursuant to State CEQA Guidelines Sections 15003 and 15121, the statutory purpose of an EIR is to serve as an "informational document" to:

- "inform other governmental agencies and the public generally of the environmental impact of a proposed project," "identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project";
- "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action";
- provide sufficient analysis to "mak[e] findings under Section 15091," wherever a significant effect is found to be present;

- "constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court."

A project-specific EIR is one possible form of documentation a Lead Agency may use to consider whether the criteria for discretionary approval of a project have been satisfied. Prior to approving a proposed project under this track, the Lead Agency must consider the information contained in the EIR, determine whether the EIR was prepared in accordance with CEQA, determine that it reflects the independent judgment of the Lead Agency, and adopt findings concerning the project's physical impacts and alternatives. Pursuant to State CEQA Guidelines Section 15124(d)(1)(A) and (B), an EIR must include a "list of the agencies that would be expected to use the EIR in their decision making" and a "list of permits and other approvals required to implement the project."

This document may be used by the following public entities in reviewing the project:

1. Regional Planning Commission of the County of Los Angeles;
2. Board of Supervisors of the County of Los Angeles;
3. Departments of the County of Los Angeles that must approve implementation activities undertaken in accordance with the MCUP and OTP.
4. Responsible agencies, if any, that may need to issue appurtenant permits following land use approval by the lead agency.

Discretionary approval of a use that is consistent with zoning and designation is an action taken by a government agency that calls for the exercise of judgment in deciding how to carry out the project. For this project, the government agency is the County of Los Angeles. To approve the project along this track, the following discretionary approvals by the County would be required:

1. certification of the EIR (Draft EIR together with the Final EIR responsive of comments);
2. adoption of the CEQA Findings of Fact;
3. adoption of the Monitoring and Reporting Program;
4. approval of a Minor Conditional Use Permit (MCUP No. RMCP-201400014) to authorize construction of one single-family residence on a residentially zoned parcel on a slope in excess of 25%;
5. approval of an Oak Tree Permit (OTP No. ROAK-201400035) to authorize removal of one oak tree and encroachment into the protected zones of 10 oak trees.

In addition, the following ministerial approvals would be required to implement the project:

1. approval of building plans, building permits and an occupancy permit from the County Department of Public Works;
2. approval of encroachment permits for utility work in the public road right-of-way;
3. approval of building plans and a fuel modification plan from the County Fire Department.

Pursuant to State CEQA Guidelines 15124(d)(1)(C), an EIR must also include a "list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies."

2.2.1 Lead Agency

Pursuant to State CEQA Guidelines Section 15367, the County of Los Angeles "has the principal responsibility…for approving [the] project" and is therefore the Lead Agency. As Lead Agency, the County is responsible for the preparation and distribution of this EIR. The Lead Agency also has the responsibility for the processing of various ministerial actions, including, but not limited to, issuance of building permits, occupancy permits and encroachment permits, as well as notification of other consulting agencies. This oversight is expected to include, but is not limited to, the following County agencies:

- Los Angeles County Department of Public Works ("LACDPW")

The LACDPW provides all engineering oversight in the approval of all building permits for the project. This oversight includes review by the following divisions:

- Land Development Division
- Building and Safety Division
- Geotechnical and Materials Engineering Division
- Watershed Management Division ("NPDES")
- Traffic and Lighting Division
- Environmental Programs Division
- Waterworks Division
- Sewer Maintenance Division

- Los Angeles County Fire Department ("LACFD")

The LACFD Forestry Department provides oversight and standard conditions for all oak tree permits, including monitoring of oak trees approved for encroachment and replacement trees. The LACFD also reviews project plans to ensure compliance with Very High Fire Hazard Severity Zone building code requirements. This oversight includes review by the following divisions:

- Forestry Division
- Environmental Review Unit
- Fuel Modification Unit
- Fire Prevention Division
- Land Development Unit

2.2.2 Responsible Agencies

Pursuant to State CEQA Guidelines Section 15381, responsible agencies are "public agencies other than the Lead Agency which have discretionary approval power over the project." The following agencies were identified as potentially responsible agencies and are consulted for non-

exempt projects in the County to ascertain whether they believe the project conforms to any criteria that would require their discretionary approval:

- Regional Water Quality Control Board ("RWQCB"), Los Angeles Region

The RWQCB would review any plans and permits related to On-site Wastewater Treatment Systems (OWTS), the issuance of a National Pollutant Discharge Elimination System (NPDES) permit, and Clean Water Act Section 401 Water Quality Certification.

- United States Army Corps of Engineers ("USACE")

The USACE maintains jurisdiction over "waters of the United States" and the issuance of Clean Water Act Section 404 permits.

- South Coast Air Quality Management District ("SCAQMD")

The SCAQMD is responsible for attaining state and federal air quality standards in the South Coast Air Basin.

No responsible agency consulted asserted a belief that the project as described in the Notice of Preparation conformed to any criteria that would require their discretionary approval.

2.2.3 Trustee Agencies

Pursuant to State CEQA Guidelines Section 15386, a Trustee agency is "a state agency having jurisdiction by law over natural resources affected by a project." The following agencies were identified as potential trustee agencies and were consulted to ascertain whether they believed the project conformed to any criteria that would require their discretionary approval:

- California Department of Fish and Wildlife (CDFW)

The CDFW maintains jurisdiction over sensitive, candidate, and special status species and sensitive natural communities.

No trustee agency consulted asserted a belief that the project as described in the Notice of Preparation conformed to any criteria that would require their discretionary approval. The CDFW in their response to the Notice of Preparation enumerated the circumstances under which their discretionary approval would be required, none of which apply to the proposed project.

2.2.4 Other Agencies

Pursuant to State CEQA Guidelines Section 15086(a)(3), in addition to the responsible and Trustee agencies, the Lead Agency is required to consult with "other state, federal and local agencies which have jurisdiction by law with respect to the project or which exercise authority over resources which may be affected by the project." No other agencies apart from the County's own have been identified with jurisdiction or authority over the project.

Pursuant to State CEQA Guidelines 15086(a)(4), the Lead Agency is required to consult with "[a]ny city or county which borders on a city or county within which the project is located." Other cities in the County bordering the unincorporated community of Altadena and counties bordering on the County of Los Angeles that have been noticed for consult include:

- City of Pasadena
- Ventura County
- Kern County
- San Bernardino County
- Orange County

Pursuant to State CEQA Guidelines 15086(a)(5), the project is not "of statewide, regional, or areawide significance." Pursuant to State CEQA Guidelines 15086(a)(6), the EIR is not being prepared for a "highway or freeway project." Pursuant to State CEQA Guidelines 15086(a)(7), the project is not a "subdivision project located within one mile of a facility of the State Water Resources Development System." Therefore, no additional agency notifications are required by CEQA.

2.2.5 Notice of Preparation and Scope of Project-specific EIR

Pursuant to State CEQA Guidelines Section 15082(a), a Notice of Preparation ("NOP") was circulated for review and comment to "the Office of Planning and Research and each responsible and trustee agency," on May 2, 2023. The 30-day review period proceeded from May 8, 2023 through June 7, 2023. The NOP and NOP Responses are included in Section 11 Appendix A, and the NOP Responses are summarized in Section 1.8. No federal agencies were "involved in approving or funding the project," and no other consultations for this EIR were required by CEQA. Pursuant to State CEQA Guidelines Section 15082(c), neither any "responsible agency, [any] trustee agency, [nor] the Office of Planning and Research" requested a scoping meeting in response to the NOP. Pursuant to State CEQA Guidelines Section 15082(c)(1) and 15206(a)(2)(b)(2), the project does not meet any of the criteria for "statewide, regional or areawide significance." Pursuant to State CEQA Guidelines Section 15082(c)(3), the project does not "affect highways or other facilities under the jurisdiction of the Department of Transportation." Pursuant to CEQA Sections 21104(a) and 21153, the Applicant did not request any scoping meeting for this project. Therefore, no scoping meeting was required by CEQA.

In light of previous litigation petitioning this "full" EIR under LA Superior Court Case # BS167311 and California Appellate Court Case # B290379, the County has acceded to the Applicant's written request and belief that an EIR is required to avoid future costly litigation, and pursuant to State CEQA Guidelines Section 15063(a), "an Initial Study is not required." That all impact areas of analysis were included in the scope of this EIR and that the objections of project opponents had been made known through the public hearing process and in an earlier petition for writ of administrative mandamus alleging a fair argument of significance in every impact area of analysis further justified and informed the decision to forego devotion of resources to a scoping meeting.

2.2.6 Decision to Create a Project-specific EIR

In a written letter to the County, the Applicant requested that because of what he characterized as a pattern of abusive behavior and tactics from CEQA plaintiffs in general, and from immediate neighbors of the project parcel attacking an earlier Negative Declaration (SCH#2015121100) for the project in particular, he is unwilling to further pursue the project unless this project-specific EIR is accepted as one form of environmental documentation/determination for the project. In its discretion, the Lead Agency has assented to this request. However, the Lead Agency does not believe that preparation of a project-specific EIR was necessary for this project to comply with CEQA, as evidenced in part by the other independent CEQA tracks of compliance included as Appendices to this EIR.

As it relates to the categorical exemption that would for a single-family residence typically be the operative track of CEQA determination, the County Department of Regional Planning ("Regional Planning") staff decided to prepare an earlier Initial Study for the project prior to being informed of the implications of the California Supreme Court's decision in *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086 ("*Berkeley Hillside*"). Prior to this decision, Regional Planning typically would choose to prepare an Initial Study for an otherwise categorically exempt project if it believed that there was a possibility of a fair argument of the existence of an exception, as judged relative to the entire class of projects in California, not a particular neighborhood. In general, this allowed state and local agencies and members of the public to participate in the CEQA review process whenever there was a possibility that mitigation might be useful.

Under these assumptions, County staff believed that the existence of seasonal waters on the project parcel, albeit at a substantial distance from the development footprint, as well as the presence of oak trees impacted by development, could possibly present a fair argument of an unusual circumstance compared to the average single-family parcel in California.

However, the California Supreme Court had only recently clarified that "[i]n determining whether the environmental effects of a proposed project are unusual or typical, local agencies have discretion to consider conditions in the vicinity of the proposed project," specifically in "one particular neighborhood." *Id*. at 1118-1119. "While evidence of a significant effect may be offered to prove unusual circumstances, circumstances do not become unusual merely because a fair argument can be made that they might have a significant effect. Evidence that a project *may* have a significant effect is not alone enough to remove it from a class consisting of similar projects that the Secretary has found "*do not* have a significant effect on the environment." (§ 21084, subd. (a), italics added; [Citations.])" *Id*. at 1101. As attributed in the Appendix L Checklist, these criteria are not unusual in the neighborhood in which the project is sited, or statewide, as the 10 million acres of California comprised of oak woodlands[7] is approximately 10% of the landmass of the state. Proximity outside the mapped bounds of wetland drainages is also characteristic of every project to varying degrees, and dozens of homes in the neighborhood maintain similar offsets. *See Hines v California Coastal Comm'n.* (2010)

[7] Source: California Department of Fish and Wildlife: Oak Woodlands Conservation Program Application and Guidelines, Preface. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18730.

186 Cal.App.4th 830, 844-848 (single-family residence sited less than 100 feet from a waters was properly categorically exempt where substantial evidence supported riparian resources would not be significantly impacted); *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1101 (CEQA's applicability turns on "questions of degree," upholding the effects of degree of single-family residences as less than significant).

While Regional Planning had previously determined exemptions to be valid for single-family residential projects sited nearer waters and encroaching upon a greater number of oak trees, it was aware of concerns from comment letters, as well as the interest of the Altadena Town Council, which recommended approval of the project after the Initial Study was written. While finding no mitigation was required to compensate for a significant effect, Regional Planning staff resolved to afford any responsible or trustee agency the opportunity to propose reasonable mitigation to incorporate in that document. However, no responsible or trustee agency, County department, or member of the public proposed any mitigation measures during the Initial Study's period of public review in December of 2015 and January of 2016. The Initial Study determined that compliance with existing County, state and federal statutes, and standard conditions was sufficient to avoid or compensate for any potentially significant effect, consistent with the determination of a Negative Declaration (SCH#2015121100), with a finding that the project is one single-family residence that is categorically exempt from CEQA, and with the analysis of this EIR.

2.2.7 Framework of Significance Criteria and Impact Assessment

Pursuant to State CEQA Guidelines Section 15064.7(b), "[t]hresholds of significance to be adopted for general use as part of the Lead Agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence."

All of the formally adopted, generally applicable thresholds of significance formulated discretely by the County are included in Appendix D "Significant Effects" of the County's CEQA Environmental Document Reporting Procedures and Guidelines ("County CEQA Guidelines").[8] Generally, these Guidelines track the form of State CEQA Guidelines Appendix G that was in effect when these thresholds were adopted in 1987.

The State CEQA Guidelines Appendix G[9] and F[10] checklist criteria provide the default regulatory framework of significance assessment, and are generally considered to be operative unless a Lead Agecy overrides with substantial evidence. The State CEQA Guidelines are "binding on all public agencies in California" (State CEQA Guidelines § 15000), and "courts should afford great weight to the Guidelines." *Laurel Heights Improvement Association. V.*

[8] Source: County Department of Regional Planning: County of Los Angeles Environmental Document Reporting Procedures and Guidelines (CEQA Guidelines), adopted by the Board of Supervisors in 1987. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/LAC_CEQA_Guidelines.pdf.
[9] Source: California Natural Resources Agency: 2019 CEQA Statutes and Guidelines, pages 309-327. Available at: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2019_CEQA_Statutes_and_Guidelines.pdf.
[10] Source: California Natural Resources Agency: 2019 CEQA Statutes and Guidelines, pages 307-309. Available at: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2019_CEQA_Statutes_and_Guidelines.pdf,

Regents of University of California (1988) 47 Cal.3d 376, 391, fn. 2. The analysis of the 2035 County General Plan EIR employed these criteria exclusively. Because the 2035 County General Plan EIR is the basis for all subsequent planning decisions, the current Appendix G and F thresholds are considered the appropriate thresholds for the project. The County has not overridden any of these criteria in the County CEQA Guidelines.

These two sources are the only generally applicable thresholds of significance that apply to the project. Regional Planning has also identified and formalized additional project-specific thresholds of significance, along with substantial evidence in support of their derivation. *Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 896 (CEQA supports development of significance thresholds on a project-by-project basis); *Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 362-363 (Lead Agency may rely on its own experts to derive suitable thresholds of significance).

This EIR is structured into the separate impact areas of analysis characteristic of State CEQA Guidelines Appendix G and F, each with multiple distinct significance criteria. Because the 2035 County General Plan EIR assembled closely related and/or overlapping thresholds into single impacts that were analyzed together, this EIR follows the same pattern to avoid repetitive text and better relate the analysis back to that of the 2035 County General Plan EIR.

Pursuant to State CEQA Guidelines § 15378(a), the definition of a project includes the "whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." Direct project impacts are those that occur at the same time and place. Indirect project impacts can occur later in time or farther removed in distance while still being reasonably foreseeable and attributable to the project.

As such, the project is inseparable from the regulations that pre-exist it and with which it is reasonably foreseeable to comply. For this reason, the regulatory framework is described in each impact area of analysis. Where regulations are credited in constraining potential vectors of impact, these are identified as "regulatory compliance measures." Likewise, standard conditions that uniformly characterize the class of projects, including any that inure from use permit authority to limit social, economic and physical impacts, are attributed separately from mitigation measures for significant physical impacts. *See Association for Protection etc. Values v. City of Ukiah* (1991) 2 Ca1.App.4th 720, 735-736 (standard conditions from the Uniform Building Code to address soil stability and water runoff are "common and typical concerns" for hillside construction and do not constitute mitigation improperly exempted from public review); *Berkeley Hillside Preservation v. City of Berkeley* (2015) 241 Cal.App.4th 943, 961 (standard construction traffic control plan was not an improper mitigation measure because traffic management is a "common and typical concern" and not a tailored mitigation measure for a significant effect peculiar to the project); *Citizens for Environmental Responsibility v. State ex. Rel. 14th District Agricultural Association* (2014) 242 Cal.App.4th 555, 570-571 (constraints "pre-existing" the project are not mitigation measures for that project).

Pursuant to State CEQA Guidelines Section 15126.4(A), "[t]he discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be

included in the project and other measures proposed…which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project." Project design features are intrinsic design and/or operational characteristics that an applicant – not the Lead Agency – elects to incorporate as discretionary parts of the project, which may act to reduce or constrain a possible effect compared to other possible exercises of right. For this project, these formalize intentions of the Applicant to act in a neighborly fashion, and to preserve or enhance the quality of the site. Project design features are incorporated into the Monitoring and Reporting Program in order to credit their effect in the analysis, ensuring that they are implemented as a part of the project. However, none of the project design features proposed by the Applicant are required to substantiate any significance determination.

Impact analysis determines whether significant effects remain after application of any supportive regulatory compliance measures, standard conditions and project design features. The level of specificity of this analysis is informed by the nature of the project and the "rule of reason." *Al Larson Boat Shop, Inc. v. Board of Harbor Commissioners* (1993) 18 Cal.App.4th 729, 741-742. As the nature of this project is construction of one structure that is more than six times smaller than the statutory definition of a small structure that would typically be categorically exempt from CEQA, the rule of reason dictates that the level of specificity required is low in comparison to more impactful projects with significant effects, such as a stadium, an industrial facility, a highway, or similar projects that have been analyzed by EIRs since the conception of CEQA.

Where a significance criterion is not characteristic of the project to any extent, the analysis attributes the evidence supporting this conclusion. For instance, the analysis identifies the source of information indicating that a particular resource is not present. Where the criterion is or may be characteristic of the project to some extent, the analysis attributes whether the project would exceed the applicable threshold of significance. For instance, the analysis may identify whether emissions of any criteria air pollutant would result in exceeding concentrations that have been identified as significant. If a threshold of significance is exceeded, mitigation measures must be considered, and if feasible and effective measures can be formulated, the analysis must attribute how the measures reduce the impact below the level of significance. Pursuant to State CEQA Guidelines Section 15126.4(a)(4)(B), mitigation measures may not be more than "roughly proportional" to the significant impacts of the project – or more precisely, to the marginal impact above the level of significance. *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233.

If a threshold of significance is not exceeded after consideration of the standard conditions, regulatory compliance measures and project design features, no mitigation measure is required. Any mitigation measure(s) incorporated after arriving at this conclusion are included for this project where prescribed by the 2035 County General Plan EIR, thereby facilitating the tracks of compliance under State CEQA Guidelines Sections 15168, 15183 and 15183.3, as attributed in the Appendix Checklists for these tracks of compliance. Generally, these measures were formulated for more impactful projects that are not categorically exempt from CEQA for their presumptively insignificant effects, and none of these measures are necessary to support the conclusion that the project's impacts would be expected to be less than significant. Nevertheless, the effect of these measures must be credited as a part of the project. *See Save Cuyama Valley v.*

County of Santa Barbara (2013) 213 Cal.App.4th 1059, 1073 (EIR was valid where error in conclusion regarding the level of significance was not prejudicial because sufficient mitigation was incorporated nevertheless).

The analysis attributes whether a significant effect is present before application of any mitigation. Where an effect is analyzed to be less than significant, this EIR need not undertake analysis of the effectiveness of any mitigation measures for that effect. Pursuant to CEQA Sections 21100(b)(3) and 21150 and State CEQA Guidelines 15126.4(a)(3), valid analysis of mitigation measures is required by CEQA only for environmental effects that were analyzed to be significant. *See San Franciscans for Reasonable Growth v. City & County of San Francisco* (1989) 209 Cal.App.3d 1502, 1517 (because the EIR had concluded that the impacts that could trigger a need for mitigation were less than significant, claims of inadequacy in a mitigation measure for those impacts were irrelevant); *North Coast Rivers Alliance v. Marin Municipal Water District* (2013) 216 Cal.App.4th 614, 649 (EIR was not required to discuss mitigation measure for impacts when the EIR had properly determined that the project's impacts would be less than significant).

Nevertheless, this EIR will discuss the effect of mitigation measure(s) regardless of the analyzed significance of an impact, as well as the final impact of the project as altered by any mitigation measure(s), attributing both the positive effect and any potential for negative secondary effects introduced from those mitigation measure(s).

Finally, the analysis considers whether the whole of the project would introduce any effects that are cumulatively considerable or that may introduce a significant cumulative effect when added to the impacts of related projects or projects with related impacts.

The significance assessment for each threshold begins with a general analysis of how the project conforms to the analysis of the 2035 County General Plan EIR. Pursuant to State CEQA Guidelines Section 15168(d)(1), this analysis may "[p]rovide the basis…for determining whether the later activity may have any significant effects." The table below provides a summary and mapping of this analysis.

Table 2-1: 2035 County General Plan EIR Analysis Mapping

Project Impact(s)	Corresponding General Plan (GP) EIR Impact(s) [11]	GP EIR Mitigation Measure(s)	Project Manner of Consistency[12]
5.1-1	5.1-1	None	Conformity

[11] Source: GPEIR, *in passim*. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

[12] Where no mitigation measures were found to be required, a project may comply with the GPEIR's analysis by conforming to applicable regulations and General Plan policies ("conformity"). Where mitigation measures were formulated in the GPEIR, a project may comply with that measure in one of three ways. (1) "Incorporation" implements the scope of the mitigation measure applicable to the project, e.g., by providing a reconnaissance-level biological survey (2) "Transcendence" means that the project does not meet a threshold for an impact that is characteristic of the project to some degree, e.g., the project would result in the emission of criteria pollutants, but only below a localized or regional threshold of cumulative considerability. (3) "Non-applicability" means that the

Project Impact(s)	Corresponding General Plan (GP) EIR Impact(s) [11]	GP EIR Mitigation Measure(s)	Project Manner of Consistency[12]
5.1-2	5.1-2	None	Conformity
5.1-3, 5.1-5	5.1-3	None	Conformity
5.1-4	5.1-4	None	Conformity
5.2-1, 5.2-6	5.2-1	None	Conformity
5.2-2	5.2-2	None	Conformity
5.2-3	5.2-3	None	Conformity
5.2-4	5.2-4	None	Conformity
5.2-5	5.2-5	None	Conformity
5.3-1	5.3-1	None	Conformity
5.3-2, 5.3-3, 5.3-4, 5.3-5	5.3-2, 5.3-3	AQ-1	Transcendence
5.3-3	5.3-4, 5.3-5	AQ-2, AQ-3	Non-applicability
5.3-4	5.3-6	AQ-4	Non-applicability
5.4-1, 5.4-2, 5.4-3 5.4-7, 5.4-9, 5.4-10, 5.4-11	5.4-1, 5.4.-2, 5.4-3	BIO-1, BIO-2	Incorporation
5.4-4, 5.4-8	5.4-4	BIO-3	Transcendence
5.4-5, 5.4-6	5.4-5	None	Conformity
5.5-1	5.5-1	CUL-1, CUL-2, CUL-3	Non-Applicability
5.5-2, 5.5-4, 5.5-5	5.5-2	CUL-4, CUL-5	Transcendence, Incorporation
5.5-3	5.5-3	None	Conformity
5.6-1	5.6-1	None	Conformity
5.6-2, 5.6-3, 5.6-4	5.6-2	None	Conformity
5.6-5	5.6-3	None	Conformity
5.6-6	5.5-2	CUL-5	Transcendence, Incorporation
5.7-1, 5.7-2,	5.7-1, 5.7-2	None	Conformity
		GHG-1	Non-applicability

scope of the mitigation measures formulated as feasible and/or warranted could not apply to the project, e.g, measures formulated specifically for industrial facilities. Where the GPEIR found an effect to be significant and unavoidable either with or without feasible mitigation, this was uniformly attributable to an expectation that some fraction of the projects approved under the scope of all future permitted development in the County, alone or together, would exceed a threshold for which no feasible mitigation is known to exist (e.g., traffic density, air quality, historic quality, etc.).

Project Impact(s)	Corresponding General Plan (GP) EIR Impact(s) [11]	GP EIR Mitigation Measure(s)	Project Manner of Consistency[12]
5.7-3, 5.7-4, 5.7-5, 5.7-6, 5.7-7, 5.7-8			
5.8-1, 5.8-2, 5.8-3, 5.8-8	5.8-1	None	Conformity
5.8-4	5.8-2	None	Conformity
5.8-5	5.8-3	None	Conformity
5.8-6, 5.8-9	5.8-4	None	Conformity
5.8-7	5.8-5	None	Conformity
5.9-1, 5.9-5, 5.9-6	5.9-1	None	Conformity
5.9-2	5.9-2	None	Conformity
5.9-3	5.9-3	None	Conformity
5.9-8	5.9-4, 5.9-5	HYD-1	Non-applicability
5.10-1	5.10-1	None	Conformity
5.10-2, 5.10-3, 5.10-4, 5.10-5	5.10-2	None	Conformity
5.11-1	5.11-1	None	Conformity
5.11-2	5.11-2	None	Conformity
5.12-1, 5.12-4	5.12-1, 5.12-2, 5.12-3	N-1	Incorporation
		N-2	Non-applicability
5.12-2	5.12-4	N-3, N-4, N-5	Non-applicability
5.12.3	5.12-5	None	Conformity
5.13-1, 5.13-3	5.13-1	PH-1	Non-applicability
5.13-2, 5.13-4	5.13-2	None	Conformity
5.14-1.i	5.14-1	PS-1	Incorporation
		PS-2	Non-applicability
		PS-3	Non-applicability
5.14-1.ii	5.14-2	PS-4	Non-applicability
5.14-1.iii	5.14-3	None	Conformity
5.14-1.iv, 5.14-1.v	5.14-4	None	Conformity
5.15-1	5.15-1	None	Conformity
5.15-2	5.15-2	None	Conformity
5.16-1, 5.16-5	5.16-1	T-1	Transcendence
		T-2	Incorporation
		T-3	Non-applicability
		T-4	Non-applicability
		T-5	Transcendence

Project Impact(s)	Corresponding General Plan (GP) EIR Impact(s) [11]	GP EIR Mitigation Measure(s)	Project Manner of Consistency[12]
5.16-2	5.16-5	None	Conformity
5.16-3	5.16-3	None	Conformity
5.16-4	5.16-4	None	Conformity
5.17-1	5.17-1, 5.17-5	None	Conformity
5.17-2	5.17-3	None	Conformity
5.17-3	5.17-2	USS-1 through USS-23	Non-applicability
5.17-4, 5.17-5	5.17-4	None	Conformity
5.18-1	5.8-4	None	Conformity
5.18-2, 5.18-3	5.8-5	None	Conformity

2.2.8 Authority

Pursuant to Public Resources Code Section 21082.1, this EIR has been prepared by the County of Los Angeles as Lead Agency. This EIR is accurate and contains all of the information required by State CEQA Guidelines Sections 15120 through 15132. Where determinations or clarifications of CEQA or similar circumstances have been documented in published case law, these have also been attributed.

Pursuant to State CEQA Guidelines Section 15084(d)(3), the Lead Agency has elected to "[a]ccept[] a draft prepared by the applicant" to assist in its preparation of this Draft EIR, and pursuant to State CEQA Guidelines Section 15084(c), the Applicant has elected to provide this assistance in the "form of a Draft EIR." "[L]ead agencies commonly…accept an EIR prepared by the applicant or its consultant rather than have their own staff prepare the EIR." (Kostka & Zischke, Practice Under the California Environmental Quality Act (2d ed Cal CEB) § 9.7, p. 9-9).

The County Environmental Document Reporting Procedures and Guidelines (CEQA Guidelines)[13] Section VI(602)(E) states that "for private projects, the lead County agency may require the applicant to provide necessary data to assist in the preparation of an EIR by the lead County agency. Such data may be provided in the form of a draft EIR." *See also Friends of La Vina v. County of Los Angeles* (1991) 232 Cal.App.3d 1446, 1455 ("Like section 21082.1 and the Guidelines, the cases recognize that preparation of an EIR is not a solitary, ruminative process but an inquisitive, cooperative one, in which the applicant and its experts naturally can and will be heavily involved…to the point of initially drafting the text.") Pursuant to State CEQA Guidelines Section 15149(b), "[i]n its intended usage, an EIR is not a technical document that can be prepared only by a registered professional." However, technical biological, arboricultural,

[13] Source: County Department of Regional Planning: County of Los Angeles Environmental Document Reporting Procedures and Guidelines. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/LAC_CEQA_Guidelines.pdf.

and geotechnical analyses in support of this EIR's conclusions, which are included in Section 11, have been prepared by credentialed professionals, as appropriate and/or required by law.

Pursuant to State CEQA Guidelines Section 15084(e), prior to distribution for review, the Lead Agency must "subject the draft to the agency's own review and analysis" and certify that it "reflect[s] the independent judgment of the Lead Agency." The analysis in this EIR is informed by and consistent with the analysis of an earlier Initial Study independently drafted by Regional Planning staff (SCH#2015121100),[14] which also concluded that the project would not have a significant effect on the environment, resulting in the issuance of a Negative Declaration. The analysis in this EIR has been coordinated with and validated by County staff, including professionals in the Department of Regional Planning, the Department of Public Works, and the Fire Department Forestry Division who are qualified in applicable areas of expertise, including, but not limited to, land use and planning, arboriculture, biology, traffic, hydrology, geology and related engineering disciplines. "An agency may rely on the expertise of its planning staff in determining whether a project will not have a significant impact on the environment." *Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 907.

2.3 Citation and Incorporation by Reference

State CEQA Guidelines Section 15148 instructs that citations "required for accountability and to allow statements to be verifiable" "should be cited but not included in the EIR." This EIR cites to numerous documents throughout the body of the text with source entity, document name, page number if necessary, and URLs where available, so that should any URL become broken, the information may still be identified. A list of citations is included in Section 9. Citations are not incorporated by reference and are not subject to physical availability requirements. *El Morro Community Association v. California Dept. of Parks and Recreation,* 122 Cal.App.4th at 1354, fn. 5. Project-specific technical studies comprising analysis in this EIR are included as appendices that are available as part of the EIR.

State CEQA Guidelines Section 15150(a) permits an EIR to "incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public," which "shall be considered to be set forth in full as part of the text of the EIR." Pursuant to State CEQA Guidelines Section 15150(f), examples of documents incorporated by reference include "long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand." Pursuant to State CEQA Guidelines Section 15150(b), documents incorporated by reference "shall be briefly summarized" with description of the "relationship between the incorporated part of the referenced document and the EIR," along with its "state identification number."

Pursuant to State CEQA Guidelines Section 15150(d), a Lead Agency may "incorporate[] information from an EIR that has previously been reviewed through the state review system." This EIR incorporates by reference the 2035 County General Plan EIR (SCH#2011081042). The

[14] Source: County Department of Regional Planning: Environmental Checklist Form (Initial Study) for Project #R2014-02411. Available at: https://case.planning.lacounty.gov/assets/upl/case/r2014-02411_initial-study.pdf.

2035 County General Plan EIR provides environmental definitions, regulatory framework, descriptions and environmental impact analysis for all potential development projects in the County of Los Angeles according to zoning and land use designation, including the 368,462 vacant residentially zoned parcels in existence in the County at the time, one of which was the proposed project parcel. As such, the General Plan EIR provides a sufficient basis for analysis in this EIR, attributed as "General Analysis" in the impact areas of analysis in Section 5. The 2035 County General Plan EIR is available at https://planning.lacounty.gov/long-range-planning/general-plan/programmatic-eir/ or upon request at the Department of Regional Planning located at 320 W Temple Street, Room 1356, Los Angeles, CA 90012.

3. PROJECT DESCRIPTION

3.1 Project Location

The project parcel is a 44,390 square-foot (approximately 1.02-acre) vacant parcel zoned R-1-10000 in the lower Canyon Crest residential neighborhood of the unincorporated community of Altadena in the West San Gabriel Valley Planning Area of the County of Los Angeles, near the San Gabriel Mountains in southern California. The project parcel is located approximately 50 feet north of the City of Pasadena. The address for the project parcel is 3577 Canyon Crest Road (latitude: 34.204858°N longitude: 118.162713°W), and the Assessor's Parcel Number ("APN") is 5830-003-016. The nearest signalized intersection is the corner of Altadena Drive and Lincoln Avenue, an approximately 0.6-mile drive southeast of the project parcel. The proposed single-family home and associated oak tree removal (one tree) and encroachments subject to discretionary review are located on the eastern portion of the project parcel adjacent to existing residential development along Canyon Crest Road. (*See* Figure 3-6: Proposed Project Site Plan).

Pursuant to State CEQA Guidelines Section 15124(a), the project description of an EIR must include "the precise location and boundaries of the proposed project…on a detailed map."

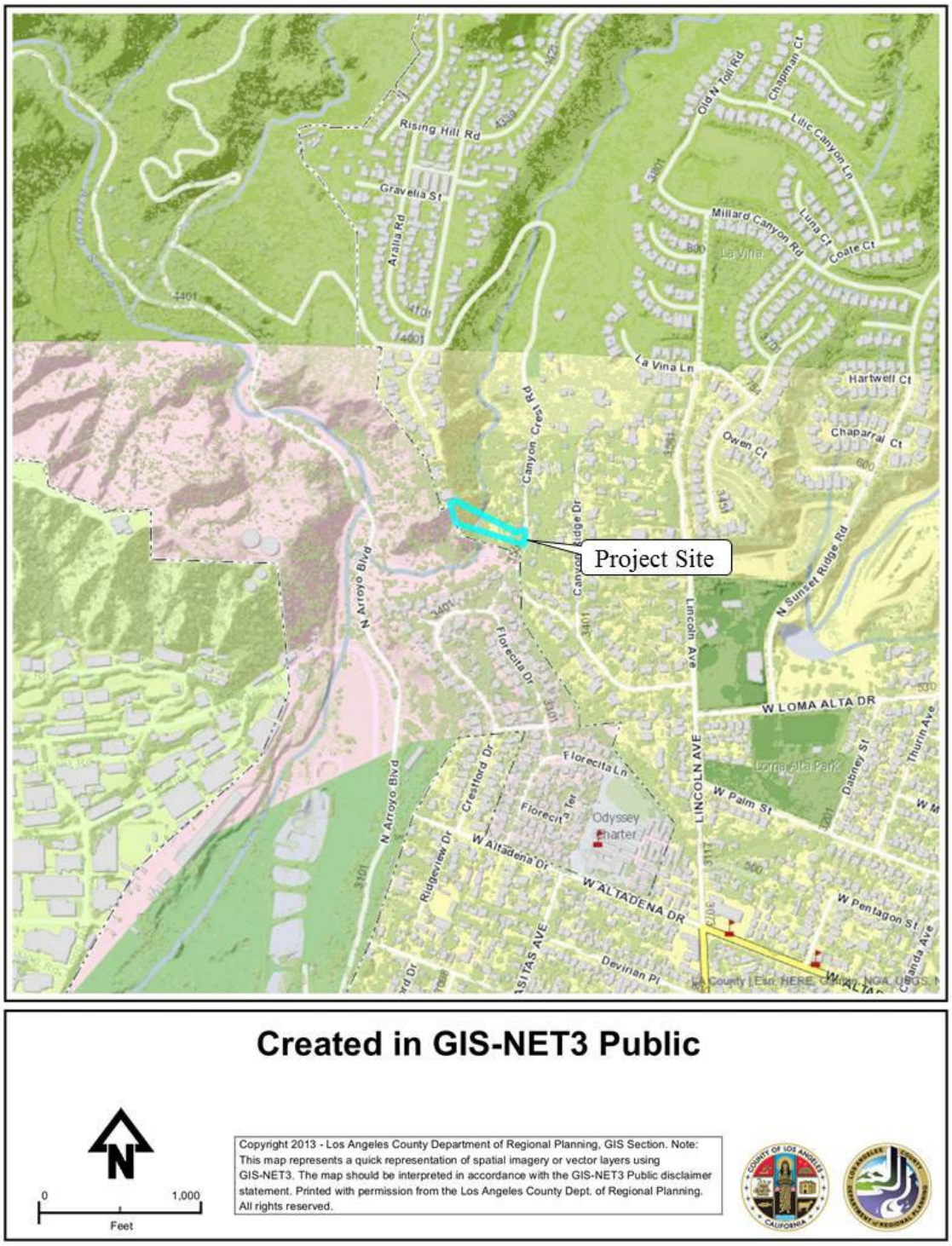

Figure 3-1: Project Vicinity Map[15]

[15] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

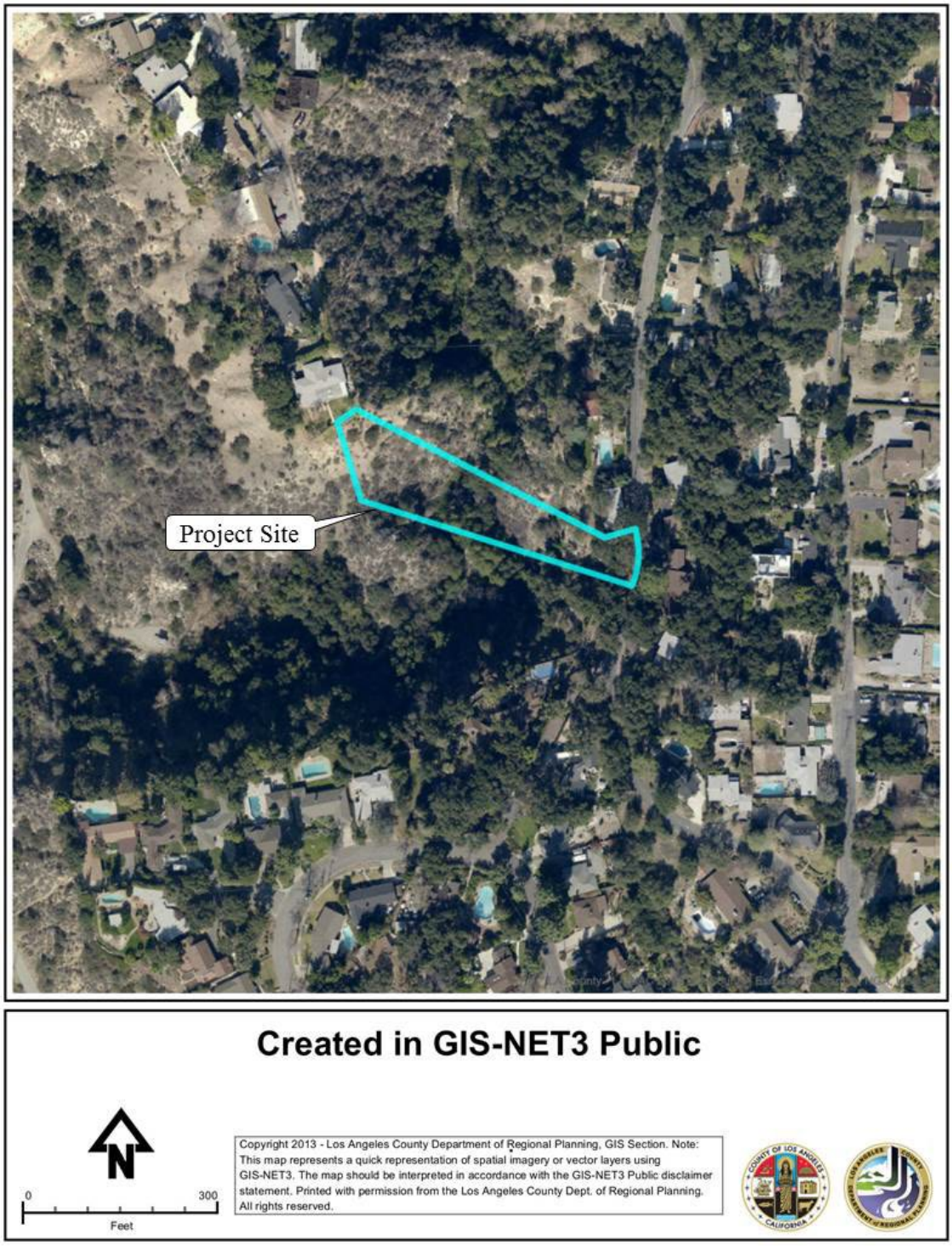

Figure 3-2: Project Vicinity Aerial Photograph[16]

[16] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

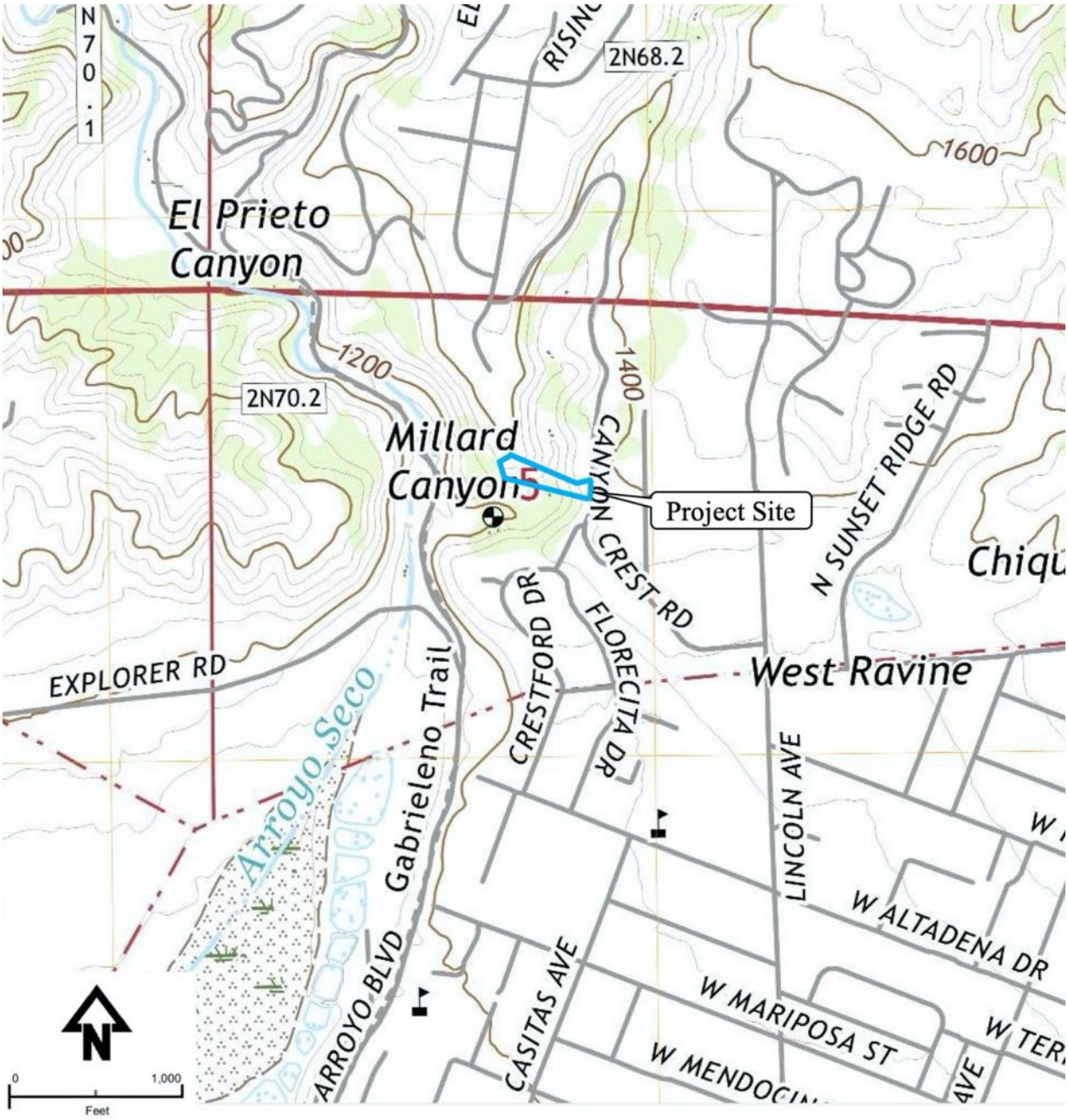

Figure 3-3: Project Vicinity Topographic Map[17]

Pursuant to State CEQA Guidelines Section 15124(a), the project description of an EIR must include "the location of the project…on a regional map."

[17] Source: United States Geological Survey. Available at: https://ngmdb.usgs.gov/topoview/viewer/#14/34.1938/-118.1363.

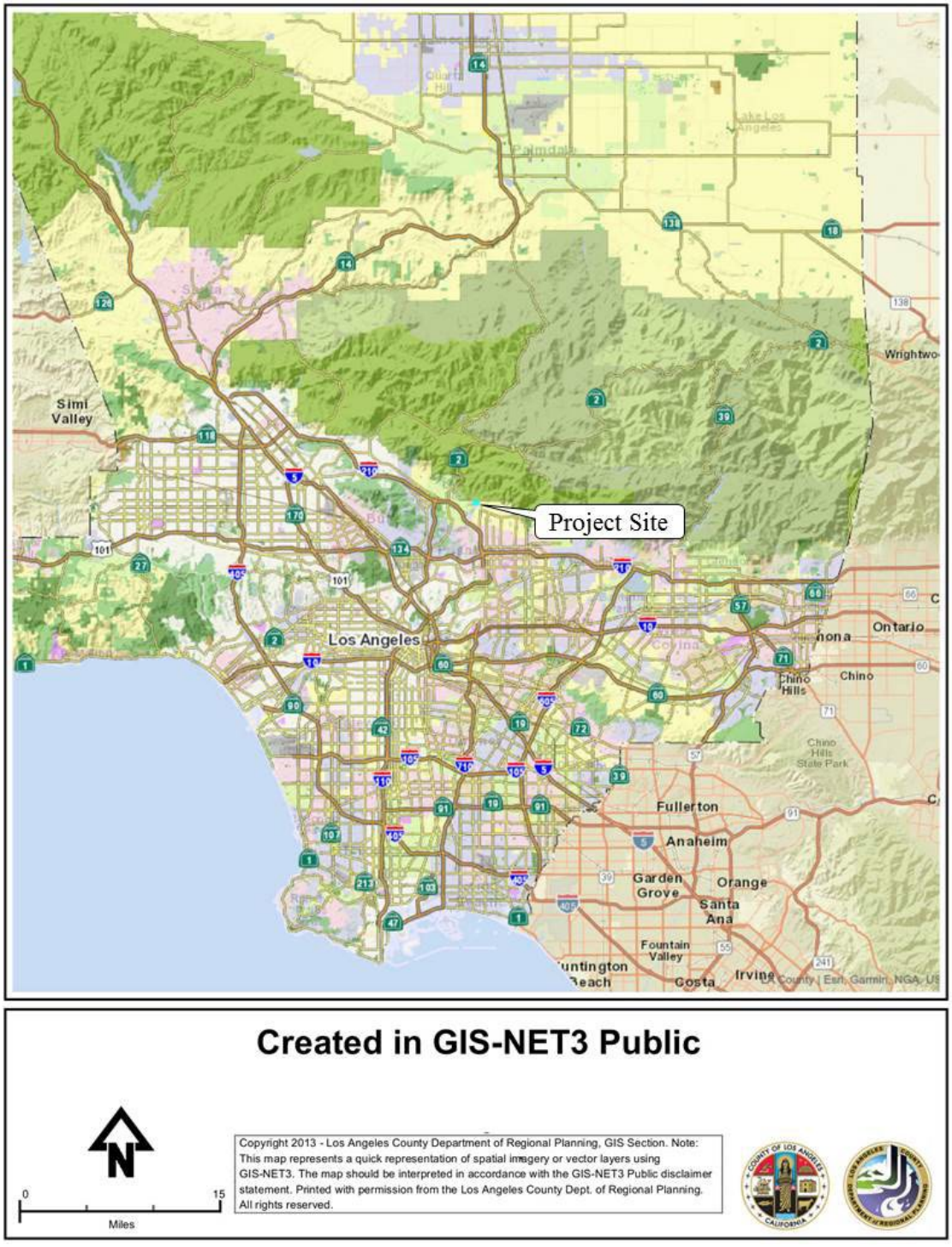

Figure 3-4: Regional Map[18]

[18] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

3.2 Project Objectives

Pursuant to State CEQA Guidelines Section 15124(b), the project description of an EIR must include "a statement of the objectives sought by the proposed project," which "should include the underlying purpose of the project."

Implementation of the project would achieve the following intended specific objectives and goals, which have been identified by the Applicant:

- Construct a custom single-family home, consistent with the Los Angeles County General Plan, Altadena Community Plan, and all applicable zoning regulations, that:
    - provides for living/dining area, as many as three bedrooms, two bathrooms and office area to meet the living needs of the Applicant and his family;
    - provides an outdoor living area adjacent to the living/dining area;
    - provides an enclosed garage with two parking spaces;
    - provides sufficient storage space that two cars may always be parked in the garage;
    - is located near enough to the Applicant's place of employment that he may commute by walking.
- Site and design the home to minimize impacts to existing oak trees on the site and use these trees to screen the home to the extent feasible from public vantages.
- Site and design the home with architecture consistent with the Altadena Community Plan's policy regarding "single-family character" for new homes to "utilize innovative residential construction and siting techniques…compatible with…the environmental setting."
- Site and design the home to best fulfill the Altadena Community Plan's Natural Resources policy #12 to "minimize grading in foothill areas."
- Site and design the home to be resilient to wildfire.
- Site and design the home to minimize alteration of sightlines of Millard Canyon and of oak tree canopy from public vantages.
- Retain the maximum amount of native biota on the project parcel, and introduce new native trees, shrubs and groundcovers to provide aesthetic and habitat value and slope stabilization.
- Utilize design strategies including building orientation, footprint minimization, profiling of the existing grade, building articulation, exterior materials and colors, and landscaping to blend the structure into the natural environment, consistently with the County's Hillside Management Area Sensitive Design Guidelines.
- Utilize the existing graded and compacted area at street grade for construction staging, as well as the driveway for the home, to minimize marginal compaction.
- Rehabilitate a history of past impacts to oak trees on the project parcel.
- Utilize well-oriented roof-mounted solar to render the home net-zero energy.
- Site and design the driveway to permit occupants to execute a two-point turn on-site, so that they may egress onto Canyon Crest Road in the forward direction.
- Obtain a Minor Conditional Use Permit and Oak Tree Permit to construct the home for the reasons provided in these Project Objectives.

3.3 Project Characteristics

Pursuant to State CEQA Guidelines Section 15124(c), the project description of an EIR must include "[a] general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities."

The home would provide an additional single-family residence, increasing the existing housing supply in the County, and would also increase the property tax base in the County. However, these economic effects are both positive and negligible in the context of regional housing supply and property tax receipts.

3.3.1 Home

The proposed project is one single-family home of 1,555 square feet in gross structural area, omitting the square footage of the portion of the home classified as a cellar in the building segment containing that loft space, an additional 190 square feet. The footprint of the home at grade would occupy approximately 1,159 square feet and comprise less than 3% of the 44,390 square-foot project parcel.

The proposed design of the home has been tailored to the project parcel, consistent with the Altadena Community Plan policy governing "single-family character" to "utilize innovative residential construction and siting techniques…compatible with…the environmental setting." The cladding of the home would be a non-reflective, matte finished, horizontally aligned reveal, rainscreen assembly metal panel that is colored to blend with the oak tree canopy. The roof of the home would not be expected to be readily visible from any public vantage but would be dominated by typically black or off-black solar panels. The garage door and garage overhang would be of natural wood finish. Together, these finishes would blend the home into its surroundings.

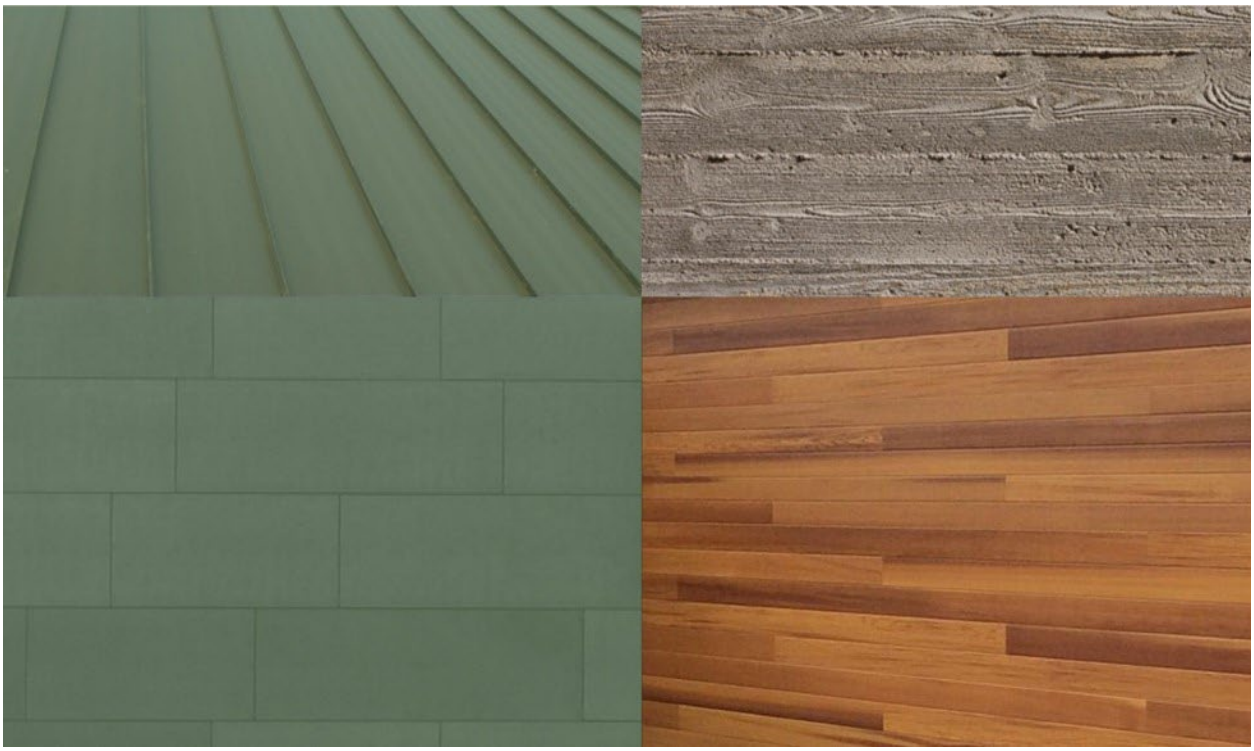

Figure 3-5: Project Exterior Finish Materials[19]

The proposed design of the home complies with all building and zoning regulations and is at most two stories above grade in a split-level, terraced design, consistently with the Hillside Management Area Sensitive Design Guidelines technique to follow the natural topography of the terrain with stepped levels, while minimizing grading. The proposed design contains a two-car garage and a pervious driveway comprised of an open-celled tree root protection system to distribute ground pressure and reduce soil compaction. Above a portion of the garage would be an unconditioned loft storage space, open to the garage below and taking access from stairs wrapping around the western and northern portions of the garage and entryway. At garage level, a recessed, covered entryway leads to a foyer that would descend a stairwell to the main level of the home, containing two bedrooms, two bathrooms, and a living/kitchen area. A cantilevered projection would provide a roof deck at the main living level, with outdoor space adjacent to the living/kitchen area. The central stairwell would descend from the main level to a single office room below. The home would be at most approximately 33’ in height – at the minimum absolute elevation of the home, approximately coincident with the street grade plane[20]. At street level, the home would be approximately 26’ in height at the maximum elevation and would present a shed roof profile descending from approximately 25 feet above the street grade plane at the northeast corner of the home’s footprint to approximately 13 feet above the street grade plane at the southeast corner of the home’s approximately 30 feet width of street frontage.

[19] Source: Applicant. Clockwise from upper left: standing seam roof; board formed concrete; wood-finish soffit and garage door panels; panelized rainscreen cladding

[20] Height above the street grade plane normalizes visually apparent elevations from the publicly accessible Canyon Crest Road and best describes apparent height from the roadway.

The proposed design founds the structure on six two-foot diameter reinforced concrete friction piles in monolithic decomposed granite, spanned by reinforced concrete grade beams, together comprising the foundation of the home. Concrete stem walls ascend to the floor levels of the office and main living level, the floors of which would be formed of structural concrete slab. All loads would be supported through the six piles, such that no mechanical soil compaction would be required. The walls supporting the garage floor would be reinforced concrete, and the lowest level floor in each building segment would be a structural slab. The remaining construction of the exterior envelope would be framed in steel and steel-skinned structural insulated panel. The home has been designed with fire-rated assemblies and fire sprinklers in accordance with the California Building Code. Specifically, non-combustible concrete walls near the grade provide excellent fire resistance, and the use of exterior rockwool insulation and non-combustible framing maintains resilience. Non-combustible cladding and roofing, temperered glass, and other requirements in accordance with building standards in Very High Fire Hazard Severity Zones would complete a resilient envelope. Permanent fencing on the parcel would be non-combustible matte brown, screened by oak-compatible landscaping.

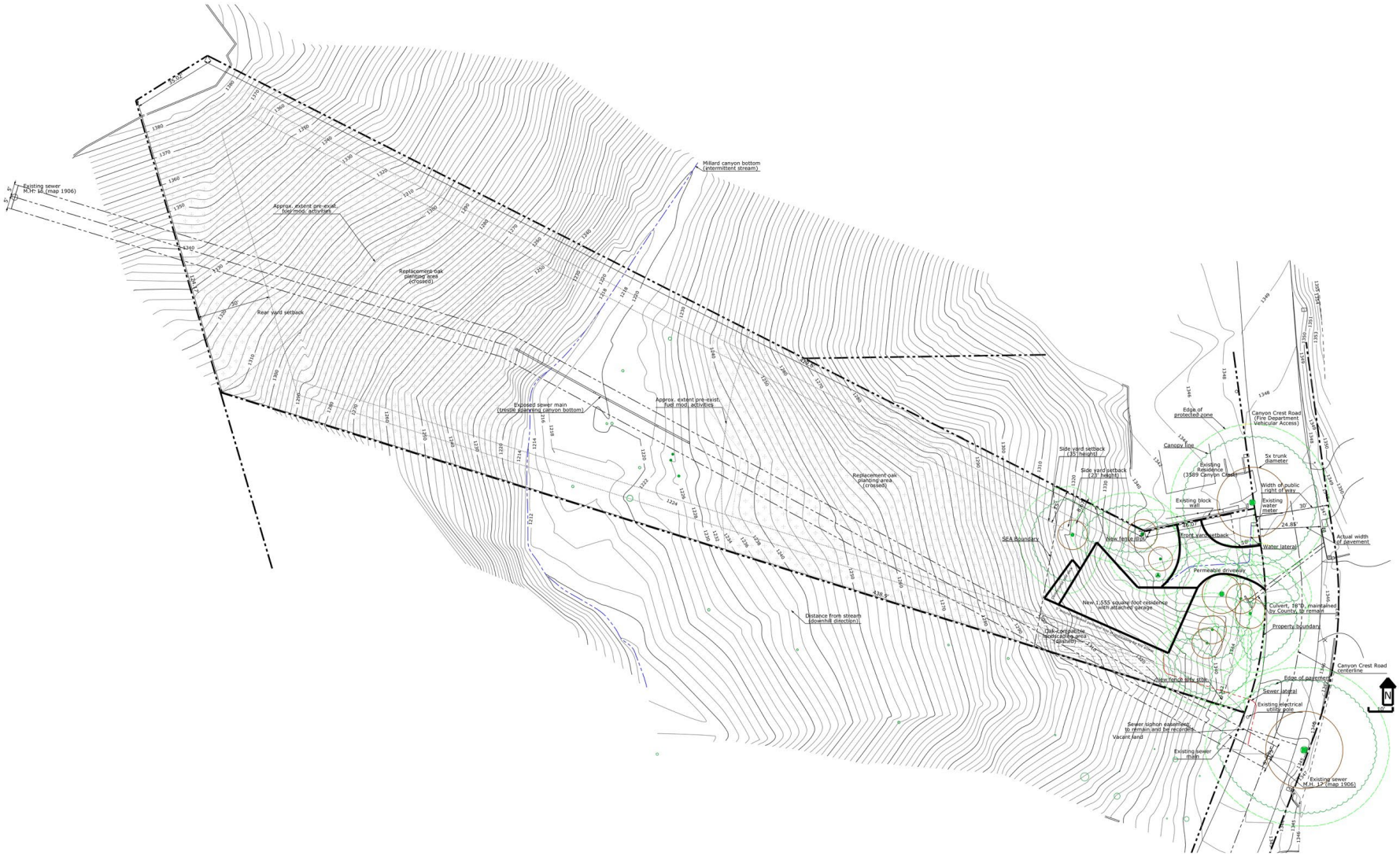

Figure 3-6: Proposed Project Site Plan[21]

[21] Source: Applicant

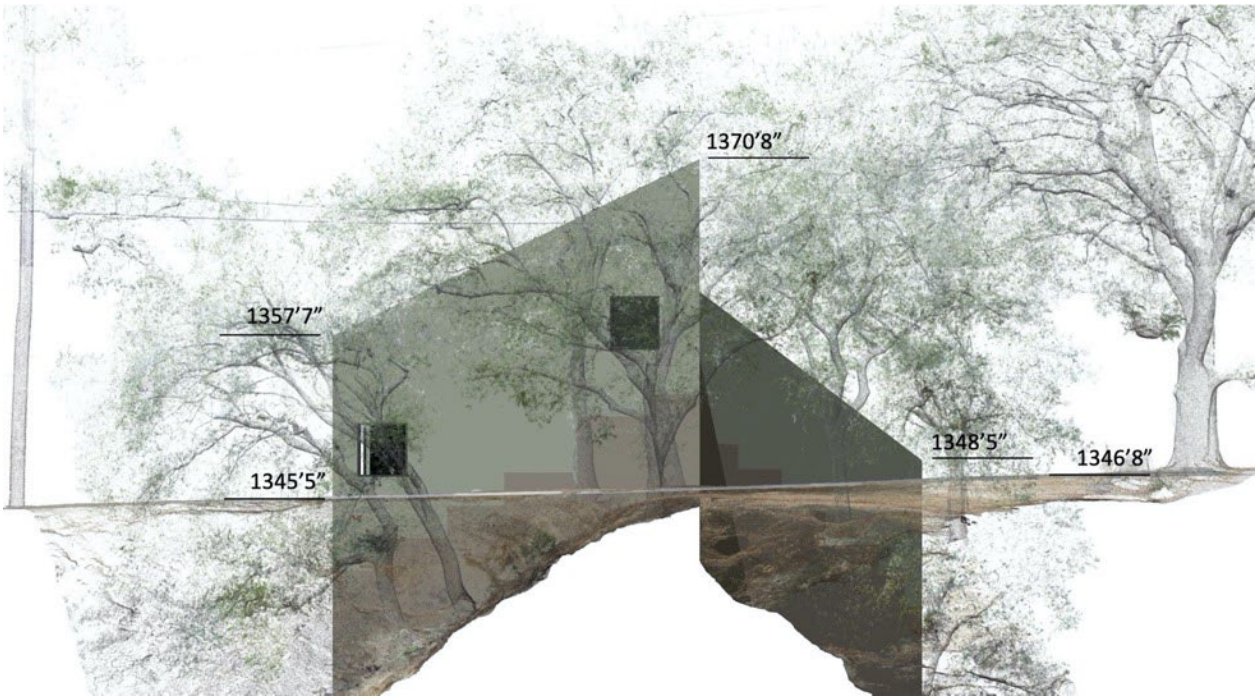

Figure 3-7: Project East Elevation[22]

[22] Source: Applicant

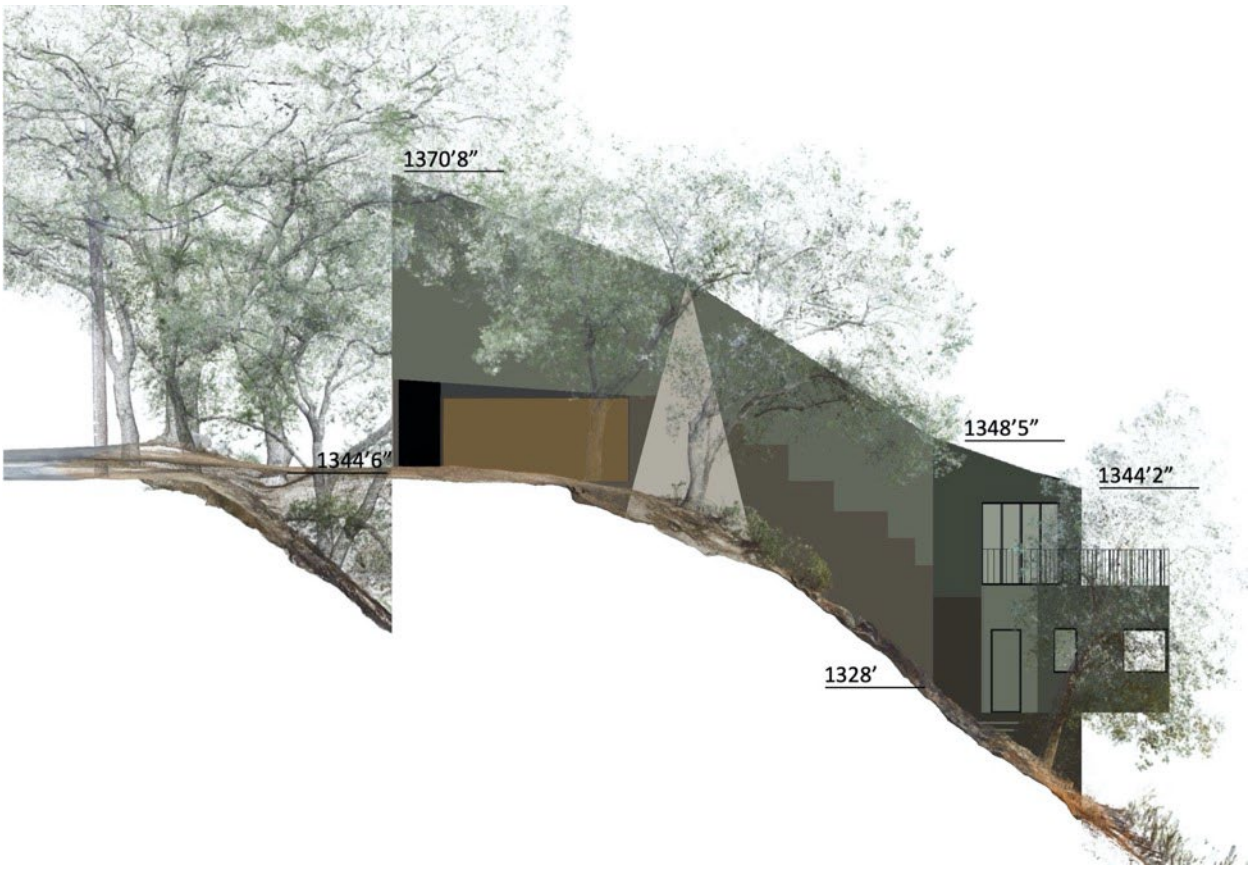

Figure 3-8: Project North Elevation[23]

[23] Source: Applicant

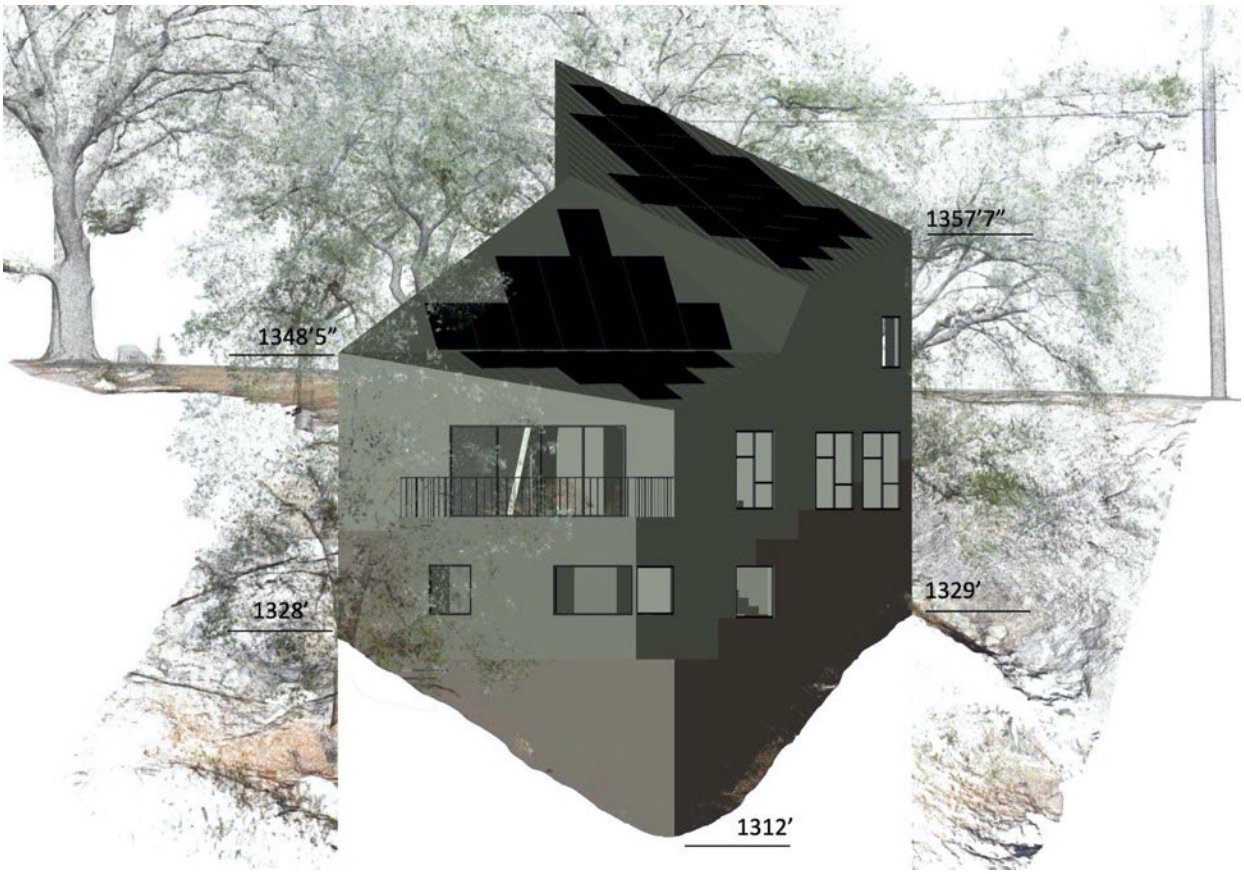

Figure 3-9: Project West Elevation[24]

[24] Source: Applicant

Figure 3-10: Project South Elevation[25]

3.3.2 Sustainable Features

Passive Systems

- Site Planning/Orientation
  - Footprint minimization
    - The footprint of the proposed home design at grade is limited to 1,159 square feet, or less than 3% of the project parcel, reducing the impervious surface area and extent of disturbance on site.
  - Natural Ventilation
    - Stack effect airflow would use the open central stairwell to provide a vertical ventilation component.
    - Large operable openings located throughout the conditioned and unconditioned space of the home would provide a horizontal ventilation component.
  - Natural Day Lighting

[25] Source: Applicant

        - The building would capitalize on southern and western exposure to provide abundant natural light throughout the home.
    - Thermal mass
        - The lowest floor in each building segment, all below grade walls, and some additional floors and walls would be of cast concrete construction, providing thermal mass to attenuate daily swings in temperature and reduce HVAC loads.
    - Landscape
        - A landscape of native drought-tolerant and oak-compatible plants would be installed.
    - Hardscape
        - The project would avoid any hardscape outside the footprint of the home.
- Building Materials
    - Cool Roof
        - The roof would be constructed of matte, glare-free, pigmented or patinated standing seam metal roofing constituting a radiative barrier.
    - Exterior Insulation
        - All exterior roof and wall framing would be covered in several inches of high-density mineral wool and/or phenolic sheet insulation.
    - Glazing
        - All glazing would be double pane, with low-E coating to minimize heat transfer.
    - Pervious Driveway
        - The driveway would be constructed as a pervious surface of open-cell, high recycled content HDPE panels in a matrix of mulch, thus minimizing the concentrated runoff from the site and enabling groundwater recharge while protecting underlying tree roots from compaction and preserving their processes of gas and water exchange.
    - Low VOC and Formaldehyde Free Paints and Coatings
        - Rated coatings would reduce off-gassing resulting in air pollution and reduced indoor air quality.

Active Systems

- Solar Energy
    - The building would be wired for and incorporate a roof-mounted photovoltaic system sized to render the home net-zero energy.
- Electrical Vehicle Charging Station
    - The building would be wired and separately metered for two electrical vehicle charging stations in the attached garage.
- Lighting
    - High efficacy lighting would be used throughout both interior and exterior portions of the project.
- HVAC System

  - A multi-zone, high-efficiency ductless hydronic heat pump system would provide both radiant and forced air heating and cooling so that areas may be conditioned independently.
- Appliances
  - All appliances would be Energy Star Certified.

3.3.3 Landscaping

The landscape plan for the project proposes less than 500 square feet of alteration to the existing vegetation, principally to replace areas where non-native species are currently present with native species, providing soil stabilization, surface runoff interception/recharge, and additional screening of the home. Landscaping would also include the establishment of coast live oak (*Quercus agrifolia*) plantings to permanently expand the area of oak woodlands on the project parcel and replace the one mature oak tree removed. The proposed project would preserve the existing oak trees that shield the home, the protected zones of which may only be planted with compatible native understory that do not require irrigation, as attributed in SC-BIO-1. RCM-BIO-2 also prohibits the introduction of any invasive species or noxious weeds. The list of landscaping species, including those planted adjacent to existing oak trees, are all both compatible with fuel-modification requirements and either listed by the County of Los Angeles Fire Department Forestry Division in their guide entitled "Oak Trees: Care and Maintenance" or by the California Oak Foundation as compatible for establishment under and around oak trees.[26] The Applicant maintains discretion to augment or revise landscaping consistently with these documents.

[26] Source: California Oak Foundation: Compatible Plants Under and Around Oaks. Available at: http://californiaoaks.org/wp-content/uploads/2016/04/CompatiblePlantsUnderAroundOaks.pdf.

Figure 3-11: Project Landscaping Species[27]

[27] Source: Applicant
A: *Achillia millefolium* ("Common Yarrow")
B: *Arctostaphylos densiflora* ("Howard McMinn manzanita")
C: *Arctostaphylos edmundsii* ("Little Sur manzanita")
D: *Ceanothus griseus horizontalis* ("Carmel Creeper ceanothus")
E: *Heteromeles arbutifolia* ("Toyon")
F: *Penstemon heterophyllus australis* ("Foothill penstemon")
G: *Ribes aureum* ("Golden currant")
H: *Ribes viberniflorum* ("Catalina perfume")
I: *Rhamnus californica* ("Eve Case coffeeberry")

3.3.4 Fuel Modification and Fire Protection

The project parcel is located in a Very High Fire Hazard Severity Zone, along with all of the northern parts of Altadena and Pasadena.[28] However, the footprint of the home and area extending to the canyon bottom below is already subject to fuel modification activities servicing other nearby residences. (*See* Figure 3-6: Proposed Project Site Plan). Annual inspections by the County Fire Department and/or County Department of Agriculture pursuant to Very High Fire Hazard Severity Zone requirements ensure that fuel modification is maintained. In addition, the project is required to comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, fire-rated wall assemblies and windows and Class A roof coverings.[29] Those species proposed for introduction to the project parcel pursuant to the project's landscaping plan are compliant with fuel modification requirements and are all fire-resistant native species.

As a fire-resistant species, fuel modification guidelines do not require any pruning of the coast live oak trees in close proximity to the home, and fuel modification inspectors for the area, when consulted by the Applicant and his consulting arborist, have indicated that it is sufficient that the trunks, branches and canopy of the trees to remain are pruned such that they do not physically contact the structure. This guidance is reflected in the existing conditions of the surrounding area, which contain examples of oak trees with trunks, branches and/or canopy in near contact to existing residences, most of which are also not constructed with fire-rated or fire-tolerant assemblies. (*See* Figure 4-6: Examples of Oak Tree Proximity of Development Surrounding Project).

3.3.5 Grading

The proposed project would require approximately 40 cubic yards of cut in the footprint of the home. Some of this volume would be integrated into temporary bag berms at the toe of the soil disturbance areas. Portions of these in the landscaped area below the project footprint and outside the protected zone of any oak tree would be expected to remain as lightly reinforced terrace faces of less than four feet in height, promoting slope stability. The remainder would be expected to be balanced under the footprint of the home. This amount of cut is more than 60 times lower than the 2,500 cubic-yard threshold in the Altadena Community Standards for a Conditional Use Permit and nearly 400 times lower than the 15,000 cubic-yard threshold for a Conditional Use Permit in a County Hillside Management Area. This amount is also lower than the 5,000 cubic yards of grading that qualifies as a Class 4 Minor Land Use alteration in the County's CEQA Reporting Guidelines.[30] This excavation permits a portion of the main level of the home beneath the existing graded pad at street level to extend to the pile at the northeast

[28] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[29] Source: California Department of Forestry and Fire Protection: Fire Hazard Severity Zoning and New Building Codes for California's Wildland Urban Interface. Available at: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_faqs.
[30] Source: County Department of Regional Planning: County CEQA Guidelines, Appendix G, page G-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/LAC_CEQA_Guidelines.pdf.

corner of the home. The depth of grading is a maximum of approximately eight feet at this location, and trails away in depth to the west and south, comprising a footprint that can be approximated as an isosceles triangle with long legs of approximately 20 feet and a short leg of about 15 feet. All grading would be performed by hand implements, and any terminal pruning of roots greater than 2" in diameter in the protected zone of any oak tree to remain would be performed under the supervision of the consulting arborist, in accordance with SC-BIO-1. The less than 20 cubic yards of spoil from augering of the six piles can also be disposed similarly to required cut grading.

3.3.6 Drainage

The proposed project's development footprint would not intercept any hydrological feature. The geotechnical report included in Section 11 Appendix G also addresses site drainage, stating that "surface drainage generally is by sheet flow runoff down the contours of the land toward the stream channel at the central portion of the lot." In accordance with the County's Low Impact Development Standards, the project's two downspouts would be routed through rain gardens (located outside the protected zone of any oak tree approved for encroachment) back into the open drainage swale that transits a portion of the property. The project is subject to Department of Public Works Building and Safety Division drainage and grading plan check review and must comply with all Best Management Practices to limit for erosion, siltation and sedimentation.

3.3.7 Access

The proposed project would be accessed from Canyon Crest Road to the east, by a driveway comprised of an open-celled HDPE tree root protection system in a matrix of mulch, across the existing graded pad at street level. According to the manufacturer, this long-lasting, rot-resistant system is equivalent in compaction mitigation to 12 inches of gravel at a fraction of the weight, while permitting restoration of mulch below and above the level of the open-celled panels as it degrades.[31] As such, performance is expected to be superior to the recommended compaction minimizing technique of mulch or gravel topped by plywood. A portion of the driveway is able to accommodate a two-point turn out of the garage, such that both entrance and exit may be performed while driving in a forward direction, for best visibility. Pursuant to standard County Fire Department conditions, a 5-feet wide by 6-feet tall volume around the perimeter of the home where it possesses any exit windows would be kept free and clear of obstructions that impede foot travel, such as tree limbs or taller shrubs, in order to permit passage of a fireman on foot. No requirement exists that this area be improved in any way, only that it permit passage, and it would therefore be mulched along with the adjacent oak understory. No point of the resulting area around the perimeter would be more than 150 feet from Canyon Crest Road along this path of traverse, enabling a fireman to deploy the typical 150 feet length of fire hose to a fire truck parked on Canyon Crest Road. As a public road maintained in accordance with all applicable rules and regulations, Canyon Crest Road would provide the required 13'6" of vertical clearance to permit passage of a fire truck, such that it may park at any point along the frontage of the project parcel.

[31] Source: Presto Geosystems: GeoTerra Construction Mats Research Summary. Available at: https://www.prestogeo.com/wp-content/uploads/2016/10/GT-GeoTerra-Mats-Performance-Testing-Ukansas.pdf.

3.3.8 Utilities

Potable Water and Fire Flow

The Lincoln Avenue Water District is a private water purveyor serving the surrounding area of Altadena. A water meter exists on the project parcel, which was installed by a previous parcel owner in or around 2005. The proposed project's water lateral would connect to this meter, along a path extending radially from oak tree #1, thereafter skirting the protected zone of oak tree #4. The lateral would be installed at the minimum depth required by code, disturbing less than 1/3 of the typical root depth, with this lateral threaded under any significant oak tree roots encountered. Fire flow availability tests for a hydrant within 100 feet of the project parcel indicate acceptable flow and pressure.

Electrical Service

Southern California Edison would provide electrical service to the project from an existing power pole at the southeast corner of the project parcel. A service drop at the northeast corner of the home would connect to existing power lines along the frontage of the project parcel.

Natural Gas or Propane

The project would not incorporate any natural gas or propane service connection. All mechanical equipment and appliances for the home would be operated electrically.

Wastewater

The home would be served by an existing County sewer main adjacent to the southeast corner of the project parcel. A sewer ejector pump would discharge through a 2" force lateral adjacent to the southern edge of the property, connecting to a short extension of this main in the southbound lane of traffic along Canyon Crest Road. The use of a force lateral would limit the extent of trenching required in the protected zone of oak trees on the property, as compared to much deeper excavation to accommodate a gravity lateral. Encroachments to the protected zone of any oak tree that occur for necessary utility work in the public right of way do not require a project-specific Oak Tree Permit, and any encroachment in the public road right of way would occur in an area already degraded by the compacted and impervious pavement of Canyon Crest Road.

Trenching

Trenching is required for the potable water service and wastewater service.

Pursuant to California Plumbing Code Section 609.1, and because the frost depth for the project parcel is 0"[32], the 1" diameter water lateral would be placed in a hand-dug trench approximately 3" wide and 12" deep and threaded under or around any significant roots encountered. These

[32] Source: California Residential Code, Figure R301.2(1).

dimensions are typical of the compaction mitigation technique known as “radial trenching.” This is approximately the top third of the depths in which oak tree roots would be expected to be found, though fill had been deposited in this area by a previous owner to alter the native grade, and roots may not extend to the same depth below grade. The water lateral encroaches on the protected zones of oak trees #1, #2 and #4, as discussed in the Oak Tree Report in Section 11 Appendix E.

Pursuant to California Plumbing Code Section 718.3, the 2” diameter sewer ejector pump force lateral would be placed in a hand-dug trench approximately 3” wide and 12” deep and threaded under or around any significant roots encountered. The sewer lateral encroaches on the protected zones of oak trees #5 and #6, as discussed in the Oak Tree Report in Section 11 Appendix E.

3.4 History and Evolution of the Project

The earliest plans for the project, dating from its application in August of 2014, portray a project not substantially different from that documented in this EIR. The Applicant thereafter volunteered modest changes to reduce the building envelope and other project impacts.

In early 2016, the Applicant removed a short concrete driveway transition apron from the design in order to eliminate any impervious surfaces outside the footprint of the home and further reduce disturbance to the root zone of oak trees #4 and #7, though this footprint did not encroach on the protected zone of oak tree #1. This also resulted in a change to the garage and entryway, removing approximately three feet of garage depth in favor of a larger recess under the loft space, allowing a covered entryway facing east. These changes were reflected on the plans approved at a Los Angeles County Hearing Officer public hearing on April 19, 2016, and on those dated April 25, 2016, which made minor clarifications to some plan annotations. The project was subsequently approved at a Regional Planning Commission public hearing on September 7, 2016.

Shortly thereafter, the Applicant volunteered additional reductions to the height of the roofline, as portrayed on plans dated November 2, 2016. The northern and eastern ridgelines of the home were lowered, reducing impacts to oak trees #4, #5 and #7. The Applicant and his consulting arborist submitted LiDAR renderings showing that canopy removal of these trees had been limited to 20-30%, and root removal was limited to 20% or less, maintaining a high probability (between one and two standard deviations for these three trees) of sustaining the required construction impacts, with replacement required in any event should they decline. The Board of Supervisors subsequently indicated an intent to approve the project on December 6, 2016, pending the creation of project findings. On March 21, 2017, the Board approved the project’s MCUP and OTP applications, and adopted a Negative Declaration, concluding that the project as constrained by existing regulations and standard conditions could not have a significant effect on the environment.

Canyon Crest Conservancy, a nonprofit incorporated during the administrative proceedings for the proposed project whose officers were immediate neighbors of ther project parcel, petitioned for a writ of administrative mandamus in the Los Angeles Superior Court to set aside the approval of the project’s entitlements and adoption of its Negative Declaration. On May 9, 2017,

a motion to stay the home's entitlement approvals was granted in the Los Angeles County Superior Court pending a trial on the merits. The Applicant subsequently requested the County vacate entitlements in order to end the litigation, citing its economic infeasibility. The County noted that the minor CUP and oak tree permit applications would remain on file should the Applicant wish to pick them up.

Continuing the litigation, Canyon Crest Conservancy sought a fee award in the Los Angeles Superior Court under California Code of Civil Procedure Section 1021.5. Canyon Crest Conservancy was then found not to have satisfied any one of the five requirements for award under Section 1021.5, including a sustainable showing of merit. (Los Angeles Superior Court case # BS167311). On appeal, the appellate court similarly held that Appellant had not vindicated a right to any additional environmental analysis. (2nd District Court of Appeals case # B290379, Canyon Crest Conservancy v. County of Los Angeles (2020) 46 Cal.App.5th 398). The viability of the exemption tracks documented in Appendices are consistent with this conclusion.

Subsequently, the Applicant made minor changes to the design that had been previously approved:

1. The footprint of the proposed project was translated by less than three feet and rotated clockwise by less than five degrees when viewed from above. These changes were made to fulfill the most conservative quantified industry guidelines addressing minimum coast live oak tree root encroachment distance, maintaining a very high probability (more than two standard deviations) of each tree sustaining its impacts without decline.
    a. This change in footprint transferred the single requested removal from oak tree #6 to oak tree #7.
    b. Retaining oak tree #6 provided some additional screening of the home as seen driving north on Canyon Crest Road.
2. Minor adjustments to the roofline of less than three feet were made in order to more easily accommodate building code requirements for stairwell and ceiling clearances that had been reduced as a part of the Applicant's attempts to minimize impacts to oak tree #7. The design of the proposed project continues to transition from approximately 25 feet above the street grade plane at the northeast corner to approximately 13 feet above the street grade plane at the southeast corner.
3. The deck was reduced in size to minimize impacts to the canopy of oak tree #10 from the slightly shifted footprint. The office level was expanded in a cantilever, such that the roof of the cantilevered projection comprised the deck of the main level, eliminating any joist penetrations of the fire-resistant envelope. An exterior door was added to the office level since the deck no longer provides exterior access to the grade. This change increased the square footage of the project by less than 200 square feet, though it did not affect the footprint at grade.
4. A window was added to the street-facing frontage to add some visual contrast, though the facet is mostly obscured in oak tree canopy. The Applicant had previously sought to preserve as much of the green cladding coloration to best blend the project into the oak tree canopy, to limit impacts to the privacy of neighbors, and to better maintain the energy efficiency and fire resiliency of the home, as well as storage possibilities along the walls of the garage.

5. In response to what the Applicant characterized as persistent malicious trespassing and harassment by immediate neighbors, as well as repeated movement and then theft by those neighbors of a temporary chain-link fence meant to prevent such trespassing, the Applicant proposes to permanently fence the frontage of the parcel. The Applicant stated that local law enforcement advised him that the presence of a permanent fence was necessary for them to determine that a trespassing individual had no right of passage, so that they may effectively respond to complaints.
6. The shape of the project's driveway was slightly changed to ensure that no permanent compaction occurred within five trunk diameters of any oak tree, and to provide space for a two-point turn.
7. The project's sewer connection was revised to connect along the southern edge of the project parcel, in order to reduce encroachment of oak trees from the sewer lateral to the greatest extent feasible.
8. The landscape plan was updated to reflect the above changes.

3.5 Project Construction Scenario

The Applicant proposes to construct the entire project in the following four phases over a non-continuous, lower-intensity interval of at least 18 months:

1. site preparation;
2. construction of the reinforced concrete portions of the structure;
3. construction of the steel and structural insulated panel framed portions of the structure;
4. trades and finish work.

However, given constraints on the time of year for certain activities, and uncertainties in when these activities will be reached in timeline of construction, the expected construction interval may not be consecutive. A list of the type of equipment and quantity of construction trips that would be expected to be used is provided in Table 3-1: Expected Construction Equipment and Trips.

Site preparation and construction would be undertaken in accordance with all federal, state, and County regulations. As required by County Code Section 12.08, daily construction activities generating appreciable amounts of noise would commence no earlier than 7:00 a.m. and cease no later than 8:00 p.m and would not occur on Sundays or holidays. Any project activities not generating substantial amounts of noise would be bound by ambient noise requirements outside these hours. Construction equipment usage would be limited due to the amount and manner of grading/excavation. However, all construction equipment would be turned off when not in use and properly maintained so as to minimize noise and emissions impacts, and all vehicles and compressors must use exhaust mufflers and engine enclosure covers, pursuant to RCM-NOI-1.

Approximately three to five workers would be expected to be on-site during peak construction activity periods. One to three workers would be expected on-site during off-peak construction activity periods. One to two passenger vehicles would be associated with these numbers of workers. Site improvements for the project would involve approximately 40 cubic yards of cut, with a maximum cut depth of approximately eight feet at the northeast corner of the home. The

project would also accommodate the retention in the project footprint of the less than 20 cubic yards of spoil from augering of the six piles. Were some fraction of this spoil to be removed, it could also be accommodated in a small number of light truck trips.

The limited extent of soil disturbance area, modest depth of excavation, and performance of all grading activities with hand tools only would limit vectors for potential impacts. Fill would be balanced under the footprint of the proposed structure in terraced lifts, providing support for eventual formwork and serving to confine any rocks or loose soil during and after construction. The project does not require any mechanical compaction of soils, as it is supported exclusively by six two-foot diameter augered piles. The project would be required to adhere to Best Management Practices required as part of the Building and Safety Division Drainage and Grading and Geotechnical Materials and Engineering Division plan check review processes, pursuant to RCM-GEO-1 and RCM-GEO-2. The plans and specifications for the project require compliance with all provisions of the NPDES Program administered by the Los Angeles RWQCB as they relate to avoiding impacts on stormwater quality during construction.

The six augered piles would be drilled with a limited access auger designed for hillside construction, which may be wheeled and/or winched into position from the existing graded pad.

The placement of rebar and formwork for the second phase of construction would require no special equipment. All rebar is sized to be placed by hand, with larger longitudinal reinforcement spliced as needed. All formwork is sized to be placed by hand and would be comprised of dimensional lumber secured with screws. The grade beams would be formed above and following the existing grade where not located in the footprint of excavation. Staging of any carpentry required for the formwork would be accommodated in the more than 1,000 square feet of staging area for the project parcel, or in the building footprint, once rough grading is completed. Concrete placement would be expected to be uniformly below the level of the concrete truck staged on the existing graded pad at street level. Therefore, concrete would be placed without the need for a boom or any other overhead clearance. Where formwork encroaches below grade into the protected zone of oak trees, it would be of the “blind side” method of construction, requiring little to no over-excavation, pursuant to the arborist conditions documented in SC-BIO-1. Where over-excavation would occur, roots encountered would be preserved to the greatest extent feasible.

The third phase of construction would use the concrete floor area in the garage, office and main level as staging for the installation of framing. Framing using steel and steel-skinned structural insulated panels for this project would be characterized by in-situ assembly. Roof beams would be sized for placement using material lifts from the floor below, without the need for overhead access. Exterior coatings, insulation and cladding would then be installed from wall-mounted scaffolding. The third phase would generally create impacts similar to single-family residential additions in the vicinity.

Finishing work would include the application of architectural coatings such as paints, sealants and floor finishes, the installation of fixtures, appliances and mechanical equipment, and finish carpentry such as the installation of cabinetry, trim, and interior doors. Finish work would generally create impacts similar to single-family residential remodels in the vicinity.

Construction workers would park on the project parcel out of the road right-of-way along the shoulder, in the existing graded portion of the project parcel, or in the project garage and driveway, depending on the phase of construction. The project parcel accommodates the largest vehicle required to construct the project without encroaching into traffic on Canyon Crest Road, as well as space for several passenger vehicles to park. Alternatively, workers may park legally off-site, as at the nearby residence of the Applicant, and carpool, walk or be dropped off at the project parcel.

Most types of materials would be expected to be delivered and/or staged off-site (either at the nearby residence of the Applicant or at a local supplier facility), especially during the initial phases of construction. (*See* Table 3-1: Expected Construction Equipment and Trips). These include rebar, dimensional steel and lumber, insulated panels, windows and doors, cabinets, appliances, and other bulk materials. These materials would then be transported in smaller quantities to the project parcel by light truck. However, should direct delivery of these other materials to the project site prove useful, this may be accommodated on the project parcel in the same manner as those material deliveries that cannot be accommodated by smaller incremental delivery, such as concrete.

To minimize further compaction from those materials and vehicles that would be staged on site, a 6-8" layer of wood mulch and rigid sheeting would be placed and maintained throughout construction activities, pursuant to SC-BIO-1. In addition, pursuant to PDF-BIO-2, rehabilitation of pre-existing and construction-related compaction with deep root aeration would occur after construction has completed.

Table 3-1: Expected Construction Equipment and Trips[33]

Type	Estimated Number of Days Used During Construction	Estimated Number of Round Trips
Trips to Project Site		
Concrete Truck	10	15
Mobile Drill Rig	10	1
Passenger Vehicles/Light Trucks	200	700
Flatbed Truck or Delivery Van Off-site		
Structural Insulated Panels	4	4
Dimensional steel	2	2
Rebar	2	2
Formwork	1	1
Roofing	1	1
Cladding	2	2
Other Insulation	1	1
Flooring	1	1

[33] Source: Applicant

Mechanical Equipment	1	1
Appliances	1	1
Cabinetry	1	1

4. ENVIRONMENTAL SETTING

4.1 Introduction

State CEQA Guidelines Section 15125(a) requires that an EIR "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published…from both a local and regional perspective." The regional and local environmental setting is summarized below. Additional description of the environmental setting as it relates to each impact area of analysis is included in discussion of each of those areas in Section 5.

4.2 Regional Environmental Setting

The project is located on a vacant residentially zoned parcel, within a single-family residential neighborhood in the unincorporated census-designated community of Altadena in the County of Los Angeles in southern California, which is governed by the Altadena Community Plan and by the 2035 Los Angeles County General Plan. Altadena is a suburban community bordered by the City of Pasadena to the south, west and east, and the San Gabriel Mountains to the north. The project parcel is located approximately 1.3 miles northeast of U.S. Interstate Highway 210, 1.7 miles southeast of California State Highway 2 and approximately 1,000 feet south of the southern boundary of the Angeles National Forest. The project parcel is located approximately 14 miles northeast of the County Civic Center. The Meadows neighborhood of more than 200 single-family homes exists further to the north and northwest of the project parcel along Canyon Crest Road, primarily within the Angeles National Forest. The La Viña specific plan area providing for 272 single-family homes[34] exists to the northeast of the project parcel, primarily within the Angeles National Forest. Nearby landmarks include the NASA Jet Propulsion Laboratory, located approximately 0.3 miles southwest of the project parcel, and the Devil's Gate Dam, located approximately 1.5 miles southwest of the project parcel. (*See also* Figure 3-4: Regional Map).

The project is located on the United States Geological Survey ("USGS") 7.5-minute series Pasadena topographic quadrangle. (See Figure 3-3: Project Vicinity Topographic Map). The project is located at the rim of a canyon that is characterized in the project vicinity by residential development along its edge in either direction and on both sides, along with degraded oak woodlands permeating this existing residential environment. The canyon originates in the Angeles National Forest approximately 3.5 miles northeast of the project parcel and exhausts into the Arroyo Seco approximately 0.2 miles to the west of the project parcel, comprising a watershed of nearly 2,000 acres. (*See* Figure 5-21: Millard Canyon Watershed). The Arroyo Seco is a tributary of the Los Angeles River and connects to it more than nine miles to the southwest of the project parcel.[35]

[34] Source: County Department of Regional Planning: La Vina Specific Plan. Available at: https://planning.lacounty.gov/long-range-planning/la-vina-specific-plan/#:~:text=The%20La%20Vina%20Specific%20Plan,in%20Los%20Angeles%20County%2C%20California/.
[35] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.4. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip

4.3 Local Environmental Setting

The project parcel is zoned R-1-10000 (Single-Family Residence, 10,000 Square-Feet Minimum Required Lot Area) and contains the Non-Urban land use designation (one residential unit per gross acre) in the Altadena Community Plan.[36] The site is made up of an approximately rectangular area with its major axis aligned east-west. (*See also* Figure 3-1: Project Vicinity Map, Figure 3-2: Project Vicinity Aerial Photograph, Figure 3-3: Project Vicinity Topographic Map, and Figure 4-3: Existing Zoning). The minor axis of the project parcel fronts onto Canyon Crest Road to the east, a two-lane road that provides access for more than 200 residences further to the north and northwest. The eastern portion of the property, including most of the area impacted by development of the home, has been impacted by past grading activities, both when Canyon Crest Road was constructed in the early part of the 20th century and more recently by previous owners of the property to augment the usable parking and storage area at street level. This area has been used for parking and storage by neighboring residences, and the home is accessed with a pervious driveway across this compacted area. The project parcel is not yet permanently fenced, though temporary chain-link fencing was installed along the frontage of the parcel in order to prevent further unauthorized driving and compaction of the protected zones of oak trees on the project parcel, following what the Applicant characterized as repeated incidents of malicious trespass. The boundaries of the property are marked with embedded surveyor's landmarks and recorded with a Registered Survey on file with the County.

The site contains both east-facing and west-facing slopes that are separated by what the USGS 7.5-minute topographical map for Pasadena portrays as an intermittent[37] wetland feature in the bottom of Millard Canyon (*see* Figure 3-3: Project Vicinity Topographic Map) more than 150 feet northwest and nearly 100 feet below the downslope edge of the home's footprint. Consistent with the USGS annotation, the drainage carries water seasonally. Depending on seasonal precipitation, the canyon bottom is typically dry from August or September to November or December when the winter rains commence. Near street level along the eastern portion of the property, a flat, graded pad extends across the frontage and widens to nearly 50 feet in depth at the northern edge of the property. Elevations on the site range from approximately 1,346 feet above mean sea level at street grade on the east edge of the property, to approximately 1,216 feet in the canyon bottom along the southern edge of the property, to approximately 1,385 feet at the canyon rim along the west edge of the property.

[36] Source: County Department of Regional Planning: Altadena Community Plan, page 73.
[37] Intermittent features are portrayed on USGS maps with dashed lines. USGS topographical legend available at: https://pubs.usgs.gov/gip/TopographicMapSymbols/topomapsymbols.pdf.

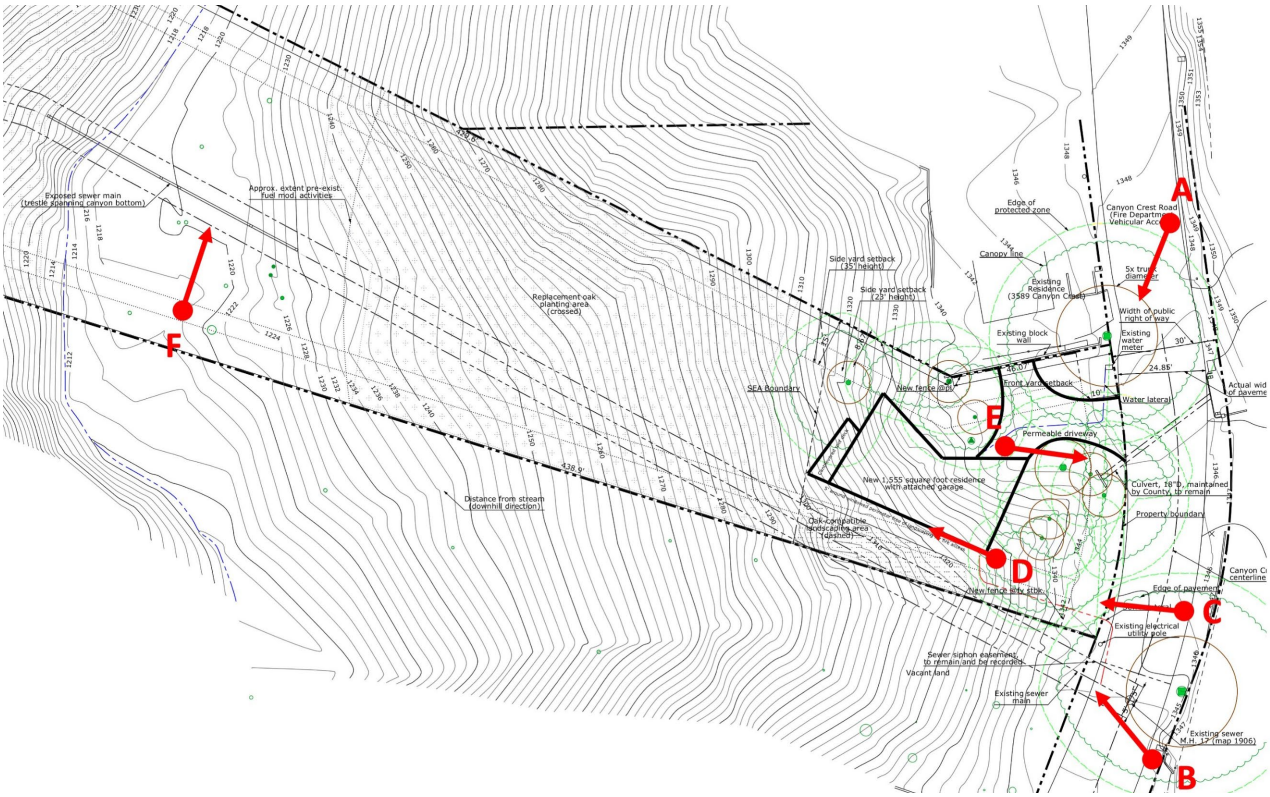

Figure 4-1: Project Site Photograph Locations[38]

[38] Source: Applicant

Figure 4-2: Project Site Photographs[39]

[39] Source: Applicant. Note: unfenced images are included here because such images provide greater visibility of the project site.

Provided below are summaries of the existing environmental setting of the project in each impact area of analysis. These are described in greater detail in the descriptions of the existing conditions in Section 5, along with citations to source information, which are not replicated in this introduction.

4.3.1 Aesthetics

The aesthetic environment of the project is characterized by wooded residential development in a residential neighborhood. Oak woodlands and other native and non-native trees and vegetation permeate the setting, along with homes of varied architectural styles with associated hardscape, fences, pools and other typical impacts of residential development. Views of portions of Millard Canyon are intermittently present throughout the neighborhood, where not occluded by vegetation, topography and existing residential development.

The project is not visible from any state scenic highway. There are also no County-designated scenic highways near the project. The nearest designated state scenic highway is the Angeles Crest Highway/Route-2, more than 1.7 miles to the northwest of the project. Interstate-210 is an "eligible" state scenic highway that is not officially designated, more than 1.3 miles to the southwest of the project. The project is not visible from any park or public garden. (*See also* Table 5-28: Existing Parks Within a Two-Mile Radius of the Project). Loma Alta Park to the southwest of the project parcel is more than 1,000 feet to the southeast, and sightlines between the park and project are entirely obstructed by topography, vegetation and residential development. Hahamongna Watershed Park to the southwest of the project is more than 1,000 feet distant, and sightlines between the park and project are nearly entirely obstructed by topography, vegetation and residential development. The project is not visible from any designated riding or hiking trail. The nearest designated trail is Altadena Crest Trail, more than 2,000 feet to the east, and sightlines between the trail and project are entirely obstructed by topography, vegetation and residential development.

4.3.2 Agriculture and Forestry Resources

There is no designated agricultural land, Agricultural Resource Area or Williamson Act Contract Lands on or near the project parcel. There is no designated forest land or timberland reserve on or near the project parcel.

4.3.3 Air Quality

The project is located within the South Coast Air Basin ("SCAB"), a 6,600 square-mile area encompassing the non-desert portions of Los Angeles, Riverside, San Bernardino and Orange Counties. A persistent high-pressure area that commonly resides over the eastern Pacific Ocean largely dominates regional meteorology. Local climate is characterized by warm summers, mild winters, infrequent rainfall, and moderate humidity. The SCAB fails to meet national standards for several criteria pollutants, including ozone and particulate matter, and is classified as a "non-attainment" area for those pollutants.

4.3.4 Biological Resources

The site supports a variety of native and non-native landscape species, comprising California sagebrush (*Artemisia californica*) and coast live oak (*Quercus agrifolia*) woodland communities, which extend through the existing residential development in all directions. The oak woodlands are represented on the project parcel in two locations. (*See* Section 5.4.3 for plans and photographs portraying these trees). A stand or portion of a stand comprised of 10 oak trees (#1 - #10 in the Oak Tree Report included in Section 11 Appendix E) located at street level is affected by the project. This cluster is severely degraded by impacts from past and current residential usage and alteration, including grading and compaction from driving and parking. This cluster possesses no substantive native understory, and what little understory does exist is dominated by non-native *Crassula* and *Opuntia sp*. The entirety of this stand is already subject to fuel modification activities servicing nearby residences. (*See* Figure 3-6: Proposed Project Site Plan). Like several residential parcels in the vicinity, the western portion of the project parcel is designated as a Significant Ecological Area ("SEA") as of December 2019.

The riparian portion of the project parcel functions as a wildlife corridor between parts of the San Gabriel Mountains and the Arroyo Seco. The potential for occurrence of sensitive wildlife and plant species in the vicinity of the project and throughout the site is discussed in greater detail in Section 5.4.3. The riparian portion of the project parcel contains an additional seven mature oak trees (including #14 and #15 in the addendum to the Oak Tree Report included in Section 11 Appendix E). This stand of oak woodlands is best described as "intact," though some signs of development are present, including a steel trestle and sewer main, as well as an abandoned concrete pump house dating from the turn of the 20th century. Oak trees that are neither encroached in their protected zones nor located on the project parcel are not required by the County Code to be included in the Oak Tree Report. (*See*

Table 5-14: Oak Tree Permit Findings Analysis; Table 5-15: Oak Tree Permit Materials Analysis). However, the surrounding context is portrayed in Figure 5-14: Extent of Oak woodlands at "Landscape" Scale. The project would not be expected to impact the protected zones of any oak tree not included in the Oak Tree Report.

4.3.5 Cultural and Tribal Cultural Resources

The bedrock and disturbed fill layers on the project parcel have negligible potential for encounter of paleontological or historical resources of any kind. The surficial layer of alluvial terrace on the project parcel has a low potential for encounter of such resources. Like nearly all of the San Gabriel Valley, at the time of Spanish contact, the Millard Canyon and Arroyo Seco area are believed to have been inhabited by the native Gabrieliño, or Tongva people. As such, the possible existence of tribal cultural resources in subsurface volumes that may have remained intact since the time of tribal activity characterizes all of the San Gabriel Valley. In addition, several historical resources are designated by the state or County in Altadena. However, the nearest is more than one mile distant. The California Historic Resources Inventory System has no record of any historical resource on the project parcel.

4.3.6 Geology/Soils

No known active faults cross the subject property, and the site is not located within an Alquist-Priolo Fault Rupture Hazard Study Zone. The surface trace of the potentially active Sierra Madre fault zone is mapped approximately 150 feet south of the site. There is no geomorphic or geologic evidence that would indicate faulting within the subject property. The ground rupture hazard on the project parcel is considered low to nil. The geology of the site is characterized by a thin layer of alluvial terrace several feet in thickness sitting atop monolithic decomposed granitic bedrock, which is visible at the surface on portions of the project parcel where the alluvial terrace has eroded. A wedge of fill soil dating from the construction of Canyon Crest Road and the adjacent residence sits atop these layers near street level. No part of the proposed structure is supported by this fill. The alluvial terrace is characterized by a matrix of sandy soil interspersed with gravel, cobbles, and boulders. Boulders larger than the thickness of the alluvial terrace are intermittently visible at the surface throughout the neighborhood.

4.3.7 Greenhouse Gas Emissions and Energy

No appreciable sources of net greenhouse gas emissions or energy usage are currently identified on the project parcel, a vacant, residentially zoned parcel.

4.3.8 Hazards and Hazardous Materials

The project parcel is located in a Very High Fire Hazard Severity Zone, along with all of the northern parts of Altadena and Pasadena.[40] The County Operational Area Emergency Response Plan sites the project in Disaster Management Area C, with the nearest designated disaster route

[40] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

located along Altadena Drive, 0.35 miles to the south. The project parcel is currently vacant, and there is no known use or disposal of hazardous materials on or from it. Federal, state and local databases for vectors of contamination from hazardous materials do not include any entries on or in the immediate vicinity of the project parcel. A sewer siphon serving the Meadows neighborhood to the north spans a portion of the project parcel and transports sewage waste. According to the County Department of Public Works, the sewer siphon is serviced every 60 days, following an incident reported in 2009 in which approximately 150 gallons of sewage overflowed at manhole #16 of sewer index map 1906.

4.3.9 Hydrology and Water Quality

Surface runoff drains onto the project parcel from a residential area of approximately one acre to the east of the project parcel, as collected in an 18" diameter culvert under Canyon Crest Road. From there, an unnamed open drainage swale partially lined with riprap and cobbles runs across the southeast portion of the project parcel from this culvert and spans additional parcels before merging into the canyon below. Drainage on the property is principally by sheet runoff intercepted by the swale or the canyon bottom. According to the United States Army Corps of Engineers, this open drainage channel is non-jurisdictional, as a "small wash…characterized by low volume, infrequent, or short duration flow…draining only uplands…that [does] not carry a relatively permanent flow of water." No sustained soil saturation is present, no hydrophytes are present and non-hydrophytic vegetation is present in and along the boundaries of the swale. This erosional feature does not appear as a "river, stream or channel" on the County's watershed map, nor can it be resolved in the earliest topographical maps of the area, dating to 1896. As both the Arroyo Seco and the feature in the bottom of Millard Canyon that is tributary to it are portrayed as intermittent by the USGS, this small wash is not a "significant nexus" to a "traditional navigable waterway," the nearest down-grade of which is the Los Angeles River, more than nine miles distant. The proposed project site is underlain by the Raymond Groundwater Basin aquifer, one source of potable water for the private water purveyor serving the project site and vicinity, Lincoln Avenue Water Company.

4.3.10 Land Use and Planning

The area surrounding the project is developed with privately owned single-family residences and a small number of vacant residentially zoned parcels. To the south are single-family residences in the city of Pasadena, many of which are similarly situated at the rim of Millard Canyon or the Arroyo Seco. To the east are single-family residences zoned R-1-10000 with Low Density land use designation (1-6 units/gross acre) in the Altadena Community Plan. To the north are five existing residences along the canyon side of Canyon Crest Road, similarly situated at the rim of Millard Canyon, as well as additional residences to the northeast, zoned R-1-10000 with Non-Urban land use designation (up to one unit/gross acre) in the Altadena Community Plan. To the west are the southernmost residences of the Meadows neighborhood of more than 200 homes, zoned predominantly R-1-7000 with Low Density land use designation in the Altadena Community Plan. Farther west is the Arroyo Seco.

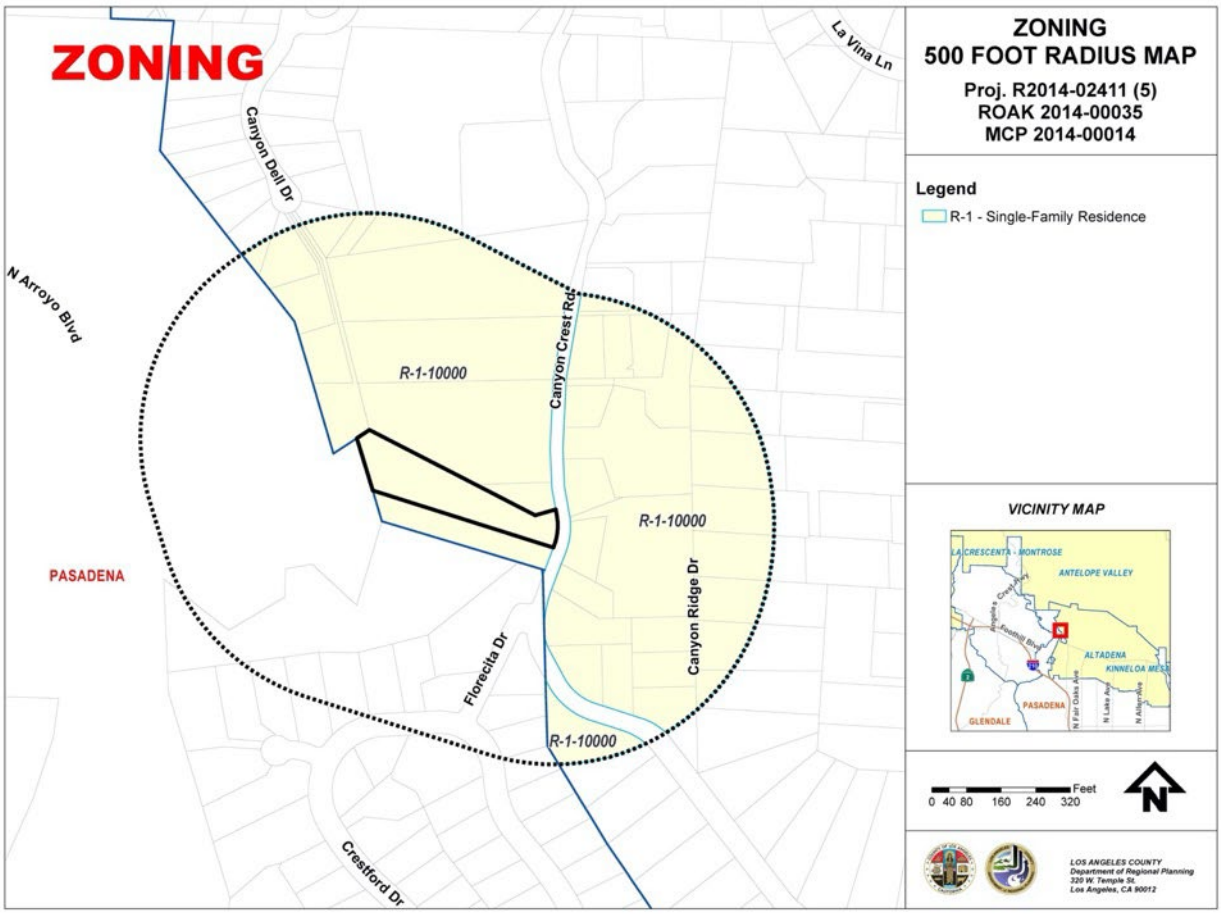

Figure 4-3: Existing Zoning[41]

[41] Source: County Department of Regional Planning: Zoning Map for Project #R2014-02411. https://case.planning.lacounty.gov/assets/upl/case/r2014-02411_zoning-map.pdf.

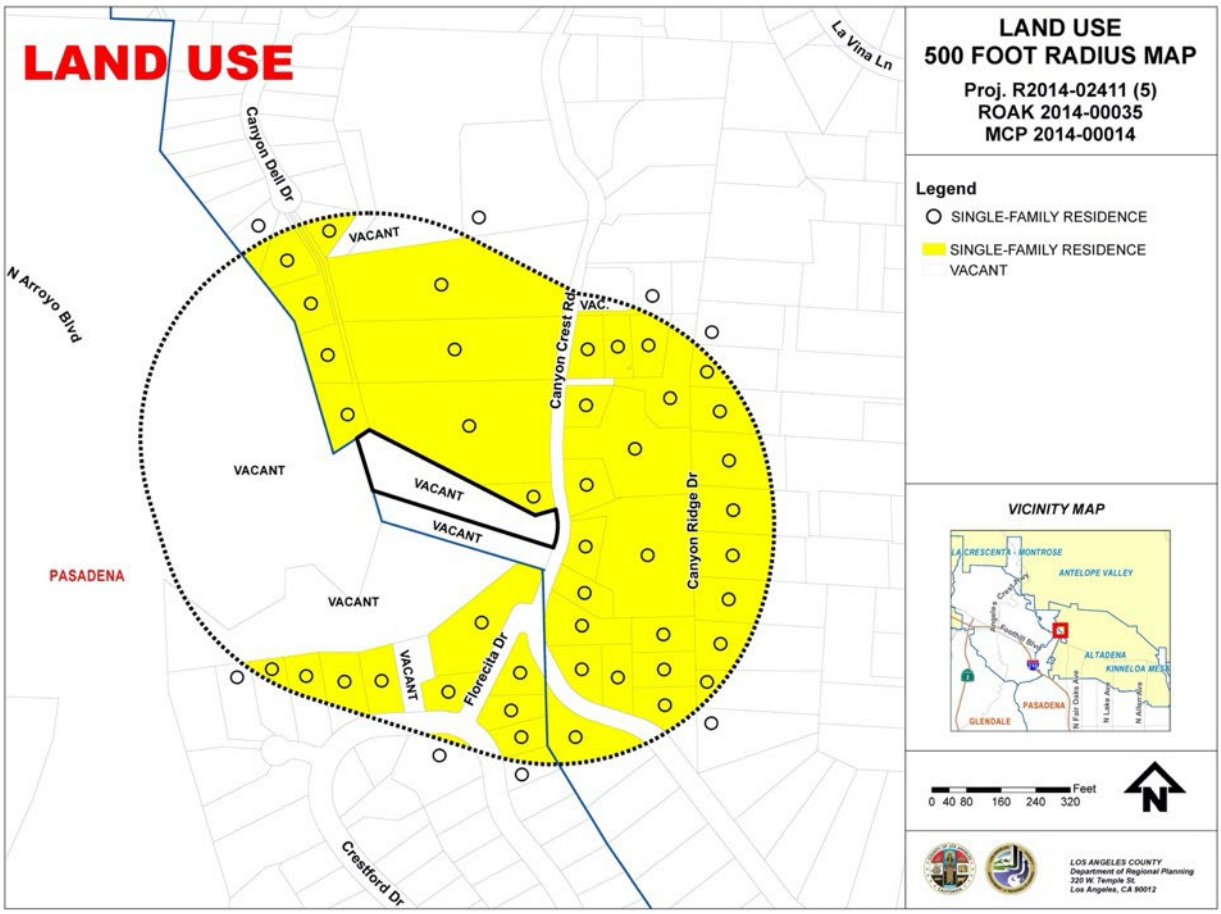

Figure 4-4: Existing Land Use[42]

As identified in Figure 4-4: Existing Land Use, there are 57 sensitive receptors (51 single-family residences and six vacant single-family residential lots) that have been identified within a 500-foot radius of the project parcel. These residences, including those sited at the rim of Millard Canyon, are characterized by typical residential impacts, including residential landscaping and lawns, as well as paved driveways and parking areas. Pruning for roadway, parking, residence, and power line clearance is present in the oak woodlands that permeates the area. The five homes to the north along Canyon Crest Road all incorporate fencing across most or all of the frontage of each parcel. Pools are present at seven of the residences along the rim of Millard Canyon within 1,000 feet of the project parcel.

The lower Canyon Crest neighborhood is characterized by a variety of architectural styles in homes built primarily from the turn of the century to the 1960s, sited at the canyon rim and on the hillside ascending above it. Every residential site within 500 feet of the project parcel is characterized by the presence of oak woodlands, most of which is encroached by pruning and impervious hardscapes. Residences of one, two and three stories above grade, with as many as four levels, are present within 300 feet of the project parcel. One home within 300 feet has a

[42] Source: County Department of Regional Planning: Land Use Map for Project #R2014-02411. Available at: https://case.planning.lacounty.gov/assets/upl/case/r2014-02411_lu-map.pdf.

greater maximum height than the project, and two homes immediately to the east have a greater height above the street grade plane. (*See* Table 5-20: Comparison of Zoning Parameters of Residences Within 300 Feet of [Project]).

Figure 4-5: Examples of Architectural Styles of Development Surrounding Project[43]

[43] Source: Applicant
A: 3588 Canyon Crest Road, immediately across Canyon Crest Road to the northeast of the project parcel
B: 3535 Canyon Dell Road, ~150 feet east of project parcel

Figure 4-6: Examples of Oak Tree Proximity of Development Surrounding Project[44]

C: 3556 Canyon Crest Road, ~150 feet southeast of project parcel
D: 3617 Canyon Crest Road, ~250 feet north of project parcel
E: 4209 Canyon Crest Road, ~2000 feet northwest of project parcel
F: 4380 Canyon Crest Road, ~3000 feet north of project parcel
[44] Source: Applicant

4.3.11 Mineral Resources

The State of California's Geological Survey (State Department of Conservation, Division of Mines and Geology) identifies deposits of regionally significant aggregate resources. The project parcel is located within a designated Mineral Resources Zone-3. The MRZ-3 designation at this location likely reflects underlying alluvial sand and gravel deposits. Mineral resources of county-wide significance are described in the Natural Resources element of the County General Plan. As such, the nearest designated mineral resource is more than 500 feet to the west of the project parcel, and the nearest designated oil and natural gas resource is more than 10 miles to the southwest of the project parcel. The project parcel is not zoned to permit the extraction of mineral resources.

4.3.12 Noise

Within a 500-foot radius of the project are 51 single-family residences and six vacant single-family lots that have been identified as sensitive receptors. (*see* Figure 4-4: Existing Land Use). Ambient noise levels in the project footprint of development were measured in Table 5-24: Measured Total Ambient Noise Levels (dBA). Generators of ambient noise include primarily vehicular traffic, as well as noise from aviation, landscaping equipment, mechanical equipment and speakers associated with adjacent residential development, wind, other residential renovations in the vicinity, human voices, animals and insects, and other scattered sources.

4.3.13 Population/Housing

The project parcel is a vacant, residentially zoned parcel in a residential neighborhood of single-family homes.

4.3.14 Public Services

Fire protection facilities and service to the subject property are provided by the Los Angeles County Fire Department ("LACFD"). Fire Station/Engine Company No. 12 (of division 3, battalion 4 of the LACFD) is located less than one mile south of the project. Police services are provided by the Los Angeles County Sheriff. The Altadena Sheriff station is located less than two miles to the southeast of the project. The area is served by public and private primary and secondary schools in the Pasadena Unified School District. The public primary and secondary schools for the project are Franklin Elementary School, Eliot Middle School, and John Muir High School. The area is served by a mix of neighborhood, community and regional parks. (*See* Table 5-28: Existing Parks Within a Two-Mile Radius of the Project). The area is served by the Altadena Public Library.

A: 3637 Canyon Crest Road, ~350 feet north of project parcel
B: 3617 Canyon Crest Road, ~250 feet north of project parcel
C: 3617 Canyon Crest Road, ~250 feet north of project parcel
D: 3556 Canyon Crest Road, ~150 feet southeast of project parcel
E: 3405 Florecita Drive, ~500 feet southwest of project parcel
F: 3665 Canyon Crest Road, ~500 feet north of project parcel
G: 3340 Crestford Drive, ~650 feet south of project parcel

4.3.15 Recreation

The existing parkland in the vicinity is summarized in Table 5-28: Existing Parks Within a Two-Mile Radius of the Project. There are no other identified recreational facilities within a two-mile radius. The California Department of Fish and Wildlife also maintains the California Protected Areas Database, containing data on lands owned in fee by governments, non-profits and some private entities, that are protected for open space purposes. The areas in the vicinity of the project are portrayed in Figure 5-28: California Protected Open Space Areas in Vicinity of Project.

4.3.16 Transportation

The project parcel is bounded by Canyon Crest Road to the east, which connects to Lincoln Avenue to the southeast, which in turn provides access to Altadena Drive and to the Interstate Freeway 210 farther south, both of which are designated disaster routes in the County General Plan. According to the Department of Public Works, single-lane closures occur regularly on Canyon Crest Road at the southeast corner of the property for one to several hours every two months in order to service the sewer siphon that spans Millard Canyon. In accordance with the Manual on Uniform Traffic Control Devices, proper signage and flagging ensures that this lane closure is safely managed, and the level of service on Canyon Crest Road is such that sustained queuing does not result during this single-lane closure. Canyon Crest Road has been subject to other single-lane closures or partial obstructions in the vicinity of the project for utility trenching and repairs, pavement resurfacing, and activity associated with existing residences. Access on Canyon Crest Road to the north of the project parcel has been compromised during past stormwater events, including washout of the roadway with debris in major stormwater events following the 2009 Station Fire, and from erosion of steep cut slopes underlying the eastern slope of the Meadows neighborhood above the roadway. The County Department of Public Works maintains responsibility to clear the roadway when this obstruction occurs. The area is serviced by public transportation within a half mile of the project site to the south, providing medium-intensity bus stops on routes that connect with the broader metropolitan public transportation system.

4.3.17 Utilities/Service Systems

The project parcel has an existing water meter installed at its northeast corner from Lincoln Avenue Water Company, a private mutual water corporation in the Altadena area. Electricity is available from Southern California Edison with existing overhead lines along the western side of Canyon Crest Road. The project would not incorporate any natural gas usage or connection. The project would connect to a County sewer main adjacent to the southeast corner of the project parcel, in County Sewer Maintenance District 17. A sewer siphon serving the Meadows neighborhood to the north spans a portion of the project parcel. The 6” diameter cast iron main comprising the siphon is encased below grade in concrete, where not exposed on a trestle spanning the canyon bottom. The exposed portion of the sewer main is more than 70 feet offset from the valley lines describing the area downslope of the project development footprint. Connection of the project’s private sewer lateral to the sewer main is the only utility work required in the road right of way in order to construct the project.

4.3.18 Wildfire

The project parcel is located in a Very High Fire Hazard Severity Zone, along with all of the northern parts of Altadena, Pasadena and La Canada Flintridge.[45] The urban-wildland interface of Altadena and surrounding communities has experienced large and small wildfires, including the catastrophic Eaton Fire and Station Fire. Causes for fires in and around the Altadena urban-wildland interface have not consistently been publicly attributed, but suspected causes have included irresponsible flame spread by humans, potentially associated with homeless activities; smoking; camping; unauthorized discharge of fireworks; arcing or sparking electrical distribution lines or componentry; arson; and lightning strike.

The Eaton Fire, which destroyed thousands of structures in Altadena, began on January 7, 2025, after the Notice of Preparation for the project was distributed on May 2, 2023. Pursuant to State CEQA Guidelines Section 15125(a)(1), "the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published." Nevertheless, the Eaton Fire is referenced in places in this EIR, at the discretion of the Lead Agency. The Eaton Fire burned four homes on or tributary to Canyon Crest Road and thousands of structures in Altadena, predominantly to the east of Lincoln Avenue.

4.4 Related Projects and Framework of Cumulative Impacts Assessment

Pursuant to State CEQA Guidelines Section 15355(b), "[t]he cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Pursuant to State CEQA Guidelines Section 15130(d), "[a] pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general…plan where the Lead Agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan." Pursuant to State CEQA Guidelines Section 15152(f)(3), "[s]ignificant environmental effects have been 'adequately addressed' if the Lead Agency determines that" they either "have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental report" *or* "examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project."

[45] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

Cumulative impacts were examined at a sufficient level of detail in the 2035 County General Plan EIR to enable the cumulative impacts of the proposed project to be dispositioned for significance. All general constraints that could apply were incorporated into this subsequent activity, and this subsequent activity transcends all findings of unavoidable significance in the 2035 County General Plan EIR from cumulative impacts. The cumulative impacts analysis of the 2035 County General Plan EIR is incorporated by reference into this EIR. The 2035 County General Plan EIR is available at https://planning.lacounty.gov/long-range-planning/general-plan/programmatic-eir/ or upon request at the Department of Regional Planning located at 320 W Temple Street, Room 1356, Los Angeles, CA 90012.

When a comprehensive and appropriately recent analysis of cumulative impacts from a general plan EIR is incorporated by reference in an EIR, no further cumulative impacts analysis is required by CEQA. *Las Virgenes Homeowners Federation v. County of Los Angeles* (1986) 177 Cal.App.3d 300, 307. Nevertheless, project-specific cumulative impacts have been analyzed, including for each finding of unavoidable significance in the 2035 County General Plan EIR.

The purpose of the cumulative impacts assessment is to consider whether an adverse project impact remains mitigated in the context of an expanded scope of impact assessment. In effect, the analysis intends to prevent inadequate piecemealing of multiple projects for which the sum of impacts may become greater than the sum of mitigation by a difference that itself becomes significant. Cumulative impacts analysis considers two related tiers of inquiry.

The first tier determines whether a project's incremental effect is "cumulatively considerable," when combined with the effects of the many other past projects that have together established the existing condition. Pursuant to State CEQA Guidelines Section 15065(3)(a), a cumulatively considerable effect is present if "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." If the project's incremental effect is not cumulatively considerable, the basis for this determination may be briefly described, and no further cumulative impacts analysis is required. *City of Long Beach v. Los Angeles Unified School District* (2009) 176 Cal.App.4th 889, 909. If the existing condition has already approached or exceeded a threshold of significance or other criterion such as an attainment goal, it may have become "saturated" and therefore levered in its sensitivity to marginal impacts from the project. In effect, the criteria for assessing significance may have changed, and the assessment of "cumulative considerability" of a project may incorporate different methodology. *See Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 719 (where there already is a high pollution burden on a community, the "relevant question" is "whether any additional amount" of pollution "should be considered significant in light of the serious nature" of the existing problem); *Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1025 (holding that "the relevant issue…is not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant in light of the serious nature of the traffic noise problem already existing…")

Where no established threshold exists to inform this new analysis, the Lead Agency must use reasonable judgment. Alternatively, thresholds may already be formulated for identifying a

cumulatively considerable effect where the framework of the analysis is inherently cumulative, such as for air quality, traffic or greenhouse gas emissions.

To be cumulatively considerable, a project must make more than an "insubstantial" contribution to an adverse effect. *Save the Plastic Bag Coalition v. City of Manhattan Beach* (2011) 52 Cal.4th 155, 175 (effect of plastic bag ban "insubstantial" because limited to one small city). In other words, there is no "one molecule rule" rendering an incremental impact cumulatively considerable if it adds any quantum to an already "saturated" condition. *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 120.

This EIR will briefly attribute in summary for each area of analysis whether the potential for cumulative considerability exists, and if so, derive a dispositive threshold distinguishing an insubstantial contribution, to which the project is then analyzed to conform. Where no potential is analyzed to exist, the environmental setting is attributed for the lack of an existing adversely "saturated" condition. This analysis will be appropriately brief. *Citizens to Preserve the Ojai v County of Ventura* (1985) 176 Cal.App.3d 421, 429.

The second tier of analysis becomes operative only where a project breaches a threshold of cumulative considerability. It re-considers whether the impacts of a group of related projects together may exceed a given threshold of significance. In effect, the inputs to the second tier of analysis expand, but the same method of analysis used for the project in isolation is repeated. Pursuant to State CEQA Guidelines 15030(a)(2), "[w]hen the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR." Likewise, when an EIR concludes that a project's potential contribution to an adverse cumulative impact will be fully mitigated, cumulative impact analysis is not required. *Environmental Protection Information Center v. Department of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 526. While some less than significant impacts by their nature are difficult or impossible to mitigate to a net-neutral or positive effect (e.g. air quality emissions), this EIR attributes where mitigating constraints do result in a net-neutral or positive effect from the project (e.g. a net addition of oak woodlands resources). Without more, this finding alone is sufficient to preclude any requirement of further cumulative impacts analysis of these effects, or attribution of the other projects that collectively serve as input to a cumulative impacts analysis. Pursuant to State CEQA Guidelines Section 15130(b), "[t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." As no proposed project impacts are found to be significant in this EIR, this analysis will be appropriately brief.

As a result of this framework, a cumulative impacts significance discussion becomes necessary only when a project breaches a threshold of cumulative considerability *and* a cumulatively considerable effect is not fully mitigated as a part of the project.

Where such an analysis is warranted, the cumulative impacts discussion of an EIR must include information about past projects only to the extent such information is relevant to an understanding of the impacts of the project considered cumulatively with other pending and

future projects. This enumeration of past projects "should be guided by the standards of practicality and reasonableness." *Environmental Protection Information Center v. Department of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 525. This EIR assumes that a description of the existing environmental setting is sufficient attribution of the impacts of past completed projects and does not attempt a historical account or exhaustive catalogue of the vast number of past, closely related residential projects and projects with related impacts within the applicable spatial scope of consideration of cumulative impacts. *City of Long Beach v. Los Angeles Unified School District* (2009) 176 Cal.App.4th 889, 910-911 (approving Lead Agency's approach to omit from cumulative impacts project enumeration of the large number of past completed projects by describing their collective impact on the existing environmental setting, thereafter to be incorporated into the assessment of cumulative considerability).

4.4.1 Related Projects Method

Pursuant to State CEQA Guidelines Section 15130(b)(1)(A), one sufficient method to discuss cumulative impacts employs "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." Therefore, cumulative impacts consider "closely related…projects" and "related…impacts." Pursuant to State CEQA Guidelines Section 15130(b)(2), consideration of the types of projects to include when utilizing a list pursuant to State CEQA Guidelines Section 15130(b)(1)(A) should weigh "the nature of each environmental resource being examined, the location of the project and its type."

For this new single-family home, construction or significant alteration of other single-family residences in northwest Altadena would be "closely related" projects. Any project of any kind in this vicinity could produce "related impacts."

4.4.2 Consistency with Plans Method

Pursuant to State CEQA Guidelines Section 15130(b)(1)(B), another sufficient method to discuss cumulative impacts is "[a] summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact."

The 2035 County General Plan contained projections for ambient growth and both described and evaluated the regional conditions that contributed to a cumulative impact. Application of the 2035 County General Plan EIR's cumulative impacts analysis to this subsequent activity is attributed in general analysis of the cumulative impacts in each impact area analysis in Section 5.

The Altadena Community Plan contained projections for ambient growth according to designated land use maps with which the proposed project is consistent. It also described local conditions within the spatial scope of cumulative impacts analysis appropriate to the project. The consistency of the project with the policies of the Altadena Community Plan is attributed in Table 5-12: Altadena Community Plan Policy Consistency Analysis.

The SCAG's 2016 RTP/SCS includes growth projections for population, housing and employment that account for ambient growth in the San Gabriel Valley planning area, with which the proposed project is consistent.

Pursuant to this framework, project impacts will be attributed for their cumulative consierability and whether they are fully mitigated, in each impact area of analysis in Section 5. This EIR analyzes that the project would not be expected to produce any cumulatively considerable effects that are not fully mitigated. Nevertheless, the consistency of the cumulative impacts analysis of the 2035 County General Plan EIR is attributed in each impact area analysis in Section 5. Pursuant to State CEQA Guidelines Section 15130(b)(1)(B), this analysis would serve as sufficient discussion of any cumulatively considerable effect that was not fully mitigated.

5. ENVIRONMENTAL ANALYSIS

5.1 Aesthetics

5.1.1 Introduction

This section of the EIR evaluates the project's potential impacts to scenic resources and visual character, including analysis of the aesthetic characteristics of the existing environment in the vicinity of the project, impacts to any adopted scenic vistas, scenic highways, and other publicly designated scenic resources such as trails, parks and gardens, as well as visual effects such as glare or shadowing.

5.1.2 Regulatory Framework

State and local laws, regulations, plans, or guidelines that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to aesthetics.

State Regulation

California Scenic Highway Program

The California Scenic Highway Program, which is maintained by the California Department of Transportation ("Caltrans"), protects scenic state highway corridors from changes that would diminish the aesthetic value of lands adjacent to these highways.

California Building Code

The California Building Code ("CBC"), Part 2 of Title 24 in the California Code of Regulations, is based on the International Building Code ("IBC") and combines three types of building standards from three different origins:

- Building standards that have been adopted by State agencies without change from building standards contained in the International Building Code.
- Building standards that have been adopted and adapted from the International Building Code to meet California conditions.
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

The CBC includes standards for outdoor lighting that are intended to improve energy efficiency, and to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls.

Local Regulation

Several sections of the Los Angeles County Code address visual resources. The following descriptions provide a brief overview of the sections potentially applicable to the project. Compliance of the proposed project with all land use regulations is attributed in Section 5.10.

Title 22 – Planning and Zoning

Title 22 (Zoning Ordinance) describes the development standards that apply to each zone (e.g., height limits, setbacks, etc.). Chapter 22.18 (Residential Zones) contains provisions that regulate the uses that are permitted in residential zones, as well as the development standards that apply in those zones. Division 10 (Community Standards Districts) of Chapter 22.300 contains development regulations for a list of communities that form districts for this purpose, including the community of Altadena, in which the project is sited. The development standards outlined in Division 10, which apply to these districts, supersede the countywide standards in the Zoning Ordinance. Finally, Chapter 22.110 (General Site Regulations) contains a number of general regulations.

Hillside Management Areas ("HMAs") Ordinance

With related provisions contained in Chapter 22.104 and Chapter 22.102 (Hillside Management Areas and Significant Ecological Areas) of the Zoning Ordinance, Hillside Management Areas were established to ensure that development preserves the physical character and scenic value of areas of the Project Area with a natural slope of greater than 25 percent. In order to accomplish this, provisions relating to HMAs encourage protecting scenic hillside views and conserving natural hillside character.

Oak Tree Ordinance

Contained in Chapter 22.174 (Oak Tree Permits) of Division 8 (Permits, Reviews, and Legislative Actions) of the Zoning Ordinance, the Oak Tree Ordinance was established to recognize oak trees as significant aesthetic, historical and ecological resources. The ordinance establishes permitting requirements for removal of protected oak trees.

Minor Conditional Use Permits

Where other portions of the County Code have established standards that would trigger the necessity of a Minor Conditional Use Permit ("minor CUP" or "MCUP"), Division 8 (Permits, Reviews, and Legislative Actions), Chapter 22.160 (Minor Conditional Use Permits), contains regulations that pertain to the County's review of such permits. This section establishes that the purpose of CUPs is to allow for special consideration where particular project characteristics exist relating to the project's size, technological process or type of equipment, or because of its location with reference to surroundings, street or highway width, traffic generation or other demands on public services, but which "by their nature, are limited in scope and impacts" relative to a non-minor CUP. Provisions in Division 8 ensure that development projects subject to review associated with a CUP are consistent with applicable development standards and thereby, consistency with other developments held to those same standards.

Significant Ecological Areas ("SEAs") Ordinance

The SEA Ordinance regulates SEAs, which have been identified as representing a wide range of biotic communities. Their complex ecological relationships are the subject of both aesthetic enjoyment as well as scientific study.

Rural Outdoor Lighting District Ordinance (County Code Section 22.80)

The Rural Outdoor Lighting District Ordinance controls the type, intensity, and location of lighting in certain districts proximate to open space and SEAs in order to "promote[s] and maintain[s] dark skies for the health and enjoyment of individuals and wildlife." However, the project is not located in a Rural Outdoor Lighting District, the nearest of which is approximately 1,000 feet to the north, coincident with the boundary of the Angeles National Forest.

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to aesthetics and visual resources, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.1.3 Existing Conditions

Scenic Resources

The project is not visible from any state scenic highway or County-designated scenic highway.[46,47] The nearest designated scenic highway is the Angeles Crest Highway/Route-2, more than 1.7 miles to the northwest of the project parcel. Interstate-210 is an "eligible" state scenic highway that is not officially designated, more than 1.3 miles to the southwest of the project parcel.

The project is not visible from any designated riding or hiking trail.[48] The nearest designated trail is the Altadena Crest Trail, more than 2,000 feet to the east, and sightlines between the trail and project parcel are entirely obstructed by topography, vegetation and existing residential development. While the "Millard Canyon gap" has been proposed as an additional portion of the Altadena Crest Trail along Millard Canyon bottom, the trail has not yet been constructed and would require the grant of easement from private landowners across whose properties the trail is proposed to run, including the Applicant. Alternative routes have also been proposed to connect to Hahamongna Watershed Park. Therefore, the construction of a trail along Millard Canyon

[46] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9-7. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[47] Source: California Department of Transportation: California Scenic Highway Mapping System. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.
[48] Source: County Department of Regional Planning: 2035 County General Plan, Figure 10.1. Available at: https://trails.lacounty.gov/Files/Documents/138/gp_2035_2018-FIG_10-1_regional_trail_system.pdf.

bottom through the project parcel is a "speculative possibilit[y]" that need not be considered in this analysis. *Citizen Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 756; *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 734 (claimed impacts on trails that might be established in future held to be speculative). In addition, the proposed project would be expected to be obscured from the Millard Canyon bottom by riparian trees and other vegetation.

The project is not visible from any park or public garden. *See also* Table 5-28: Existing Parks Within a Two-Mile Radius of the Project. Loma Alta Park to the southwest of the project is more than 1,000 feet distant to the southeast, and sightlines between the park and project parcel are entirely obstructed by topography, vegetation and residential development. Hahamongna Watershed Park to the southwest of the project parcel is more than 1,000 feet distant, and sightlines between the park and project parcel are entirely obstructed by topography, vegetation and existing residential development.

The proposed project is not visible from any river/waterway.

The County has designated 44 discrete scenic vistas in the Santa Monica Mountains, pursuant to County Code Section 22.44.2000, the nearest of which is more than 30 miles to the west of the project and not visible from it.[49] While the County is considering adoption of a Scenic Resources Ordinance pursuant to 2035 County General Plan goal C/NR-6 to designate additional scenic vistas, no other designated scenic vistas exist in the County at present. California has designated one scenic vista in the County, the Lamont Odett Vista Point, which is more than 30 miles north of the project and not visible from it.[50]

The proposed project is not visible from nor does it obstruct views from any public vantage of any ridgeline designated as scenic by the Altadena Community Standards District[51] or by the County.[52] The nearest scenic ridgeline is more than 2,500 feet to the east and sightlines between the ridgeline and project are entirely obstructed by topography, vegetation and residential development.

Existing Visual Character

The project parcel is a residentially zoned parcel surrounded by other parcels designated for and developed with low- or medium- density single-family residences. The existing visual character of the neighborhood is defined by structures of varying architectural styles (*see* Figure 4-5: Examples of Architectural Styles of Development Surrounding Project), along with associated hardscape, fences, pools and other typical impacts of residential development, permeated by

[49] Source: County Department of Regional Planning: Santa Monica Mountains Local Coastal Program Map 3: Scenic Resources (East). Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/SMMLCP-Scenic-Resources.pdf.
[50] Source: California Department of Transportation: 2015 Named Freeways, Highways, Structures and Other Appurtenances in California. (No longer hosted by Caltrans at a public URL).
[51] Source: County Code Figure 22.306.060-A. Available at: https://mcclibrary.blob.core.usgovcloudapi.net/codecontent/16274/367411/22.306.060_A.png.
[52] Source: County Department of Regional Planning: 2035 County General Plan EIR, Figure 9.8. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

vegetation including oak woodlands and other native and non-native species. Intermittent views of portions of Millard Canyon and the foothills of the San Gabriel Mountains to the north and west characterize these existing residences and the adjacent sections of Canyon Crest Road. The massing of portions of those structures within 300 feet of the project subtending a larger angular field of view, as viewed orthogonal to the frontage of these structures from the centerline of the roadway at eye level, is provided in the figures below.

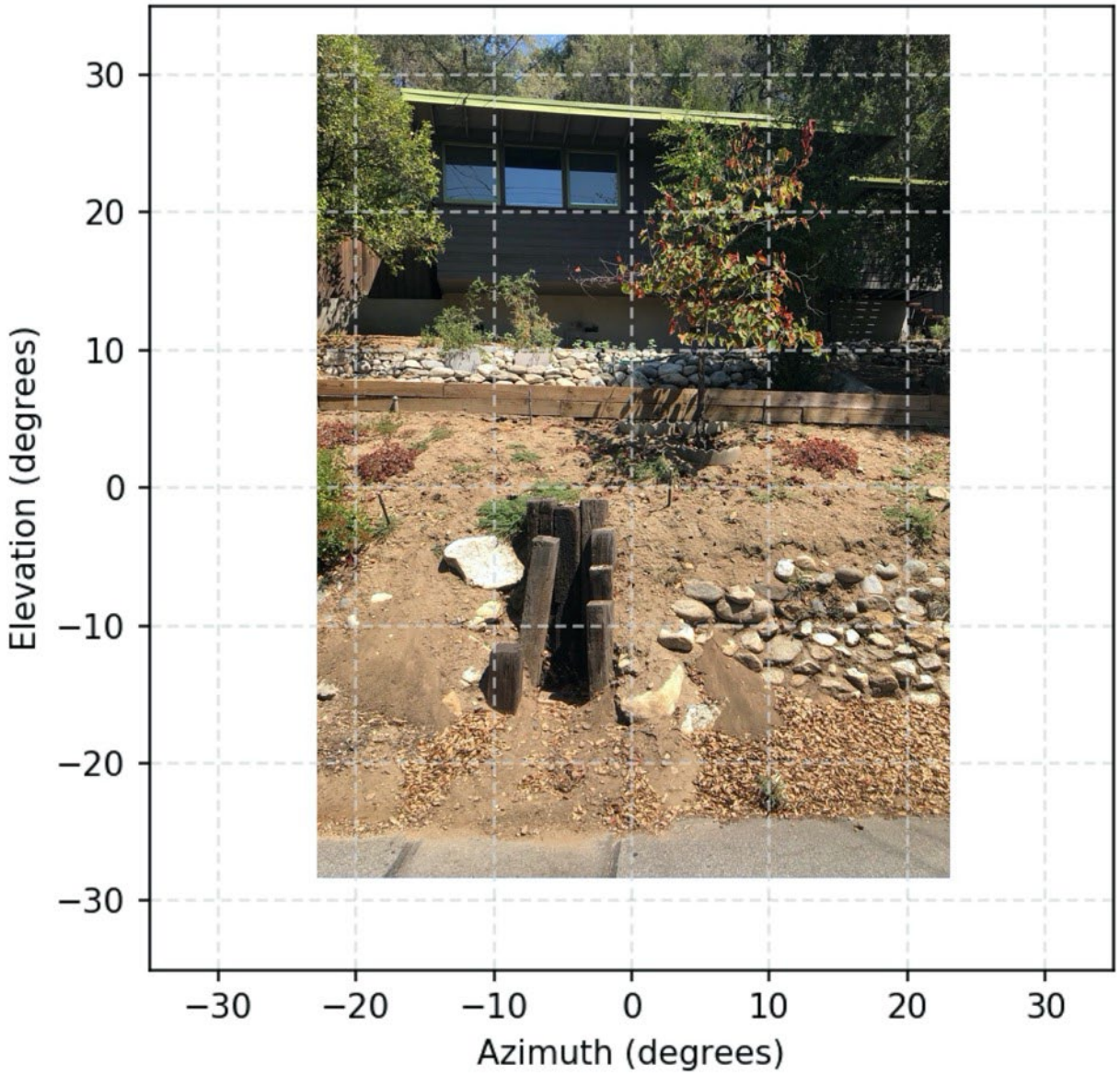

Figure 5-1: Visual Massing of a Portion of 3588 Canyon Crest Road[53]

[53] Source: Applicant

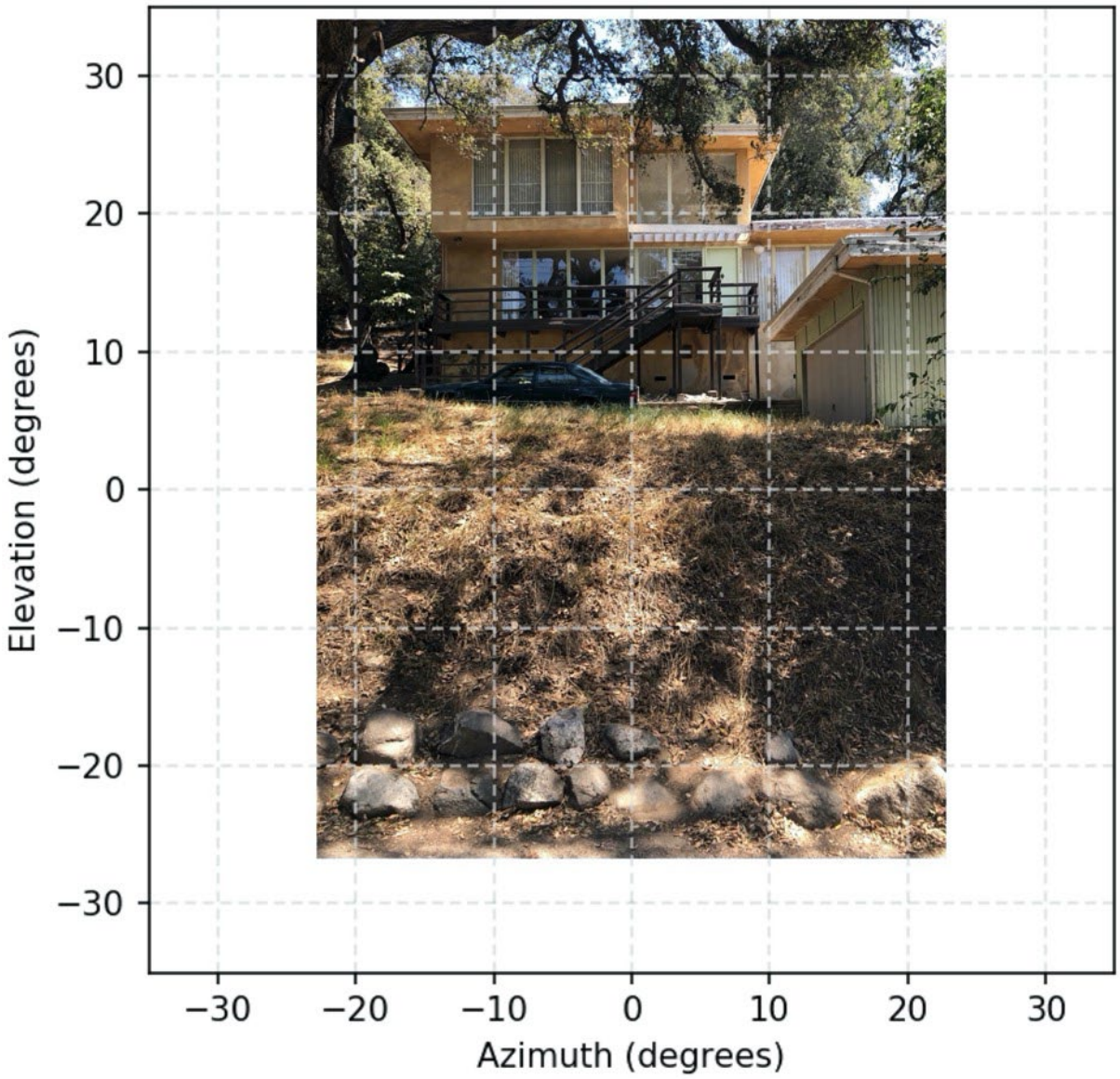

Figure 5-2: Visual Massing of a Portion of 3556 Canyon Crest Road[54]

[54] Source: Applicant

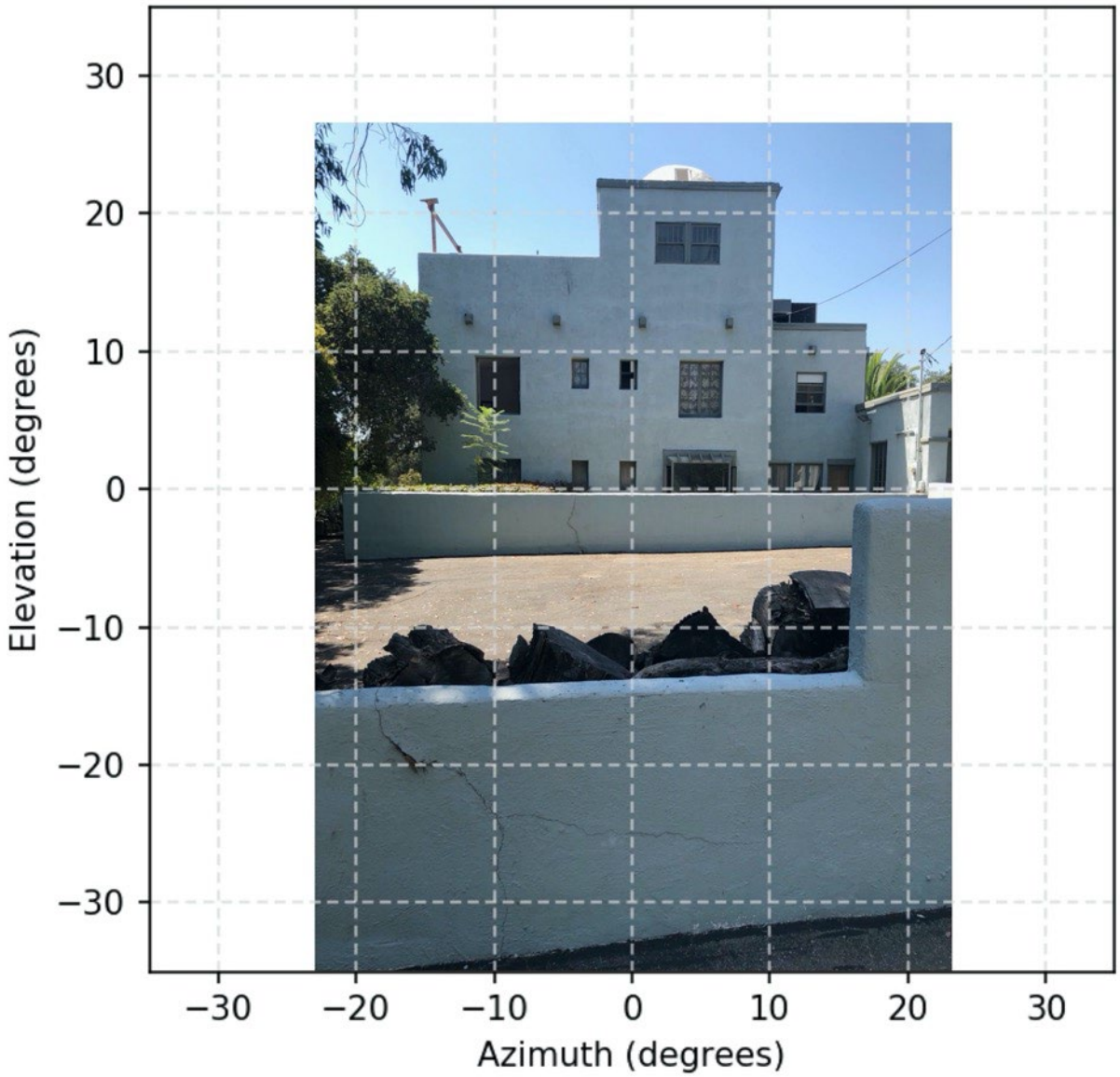

Figure 5-3: Visual Massing of a Portion of 3535 Canyon Ridge Drive[55]

[55] Source: Applicant

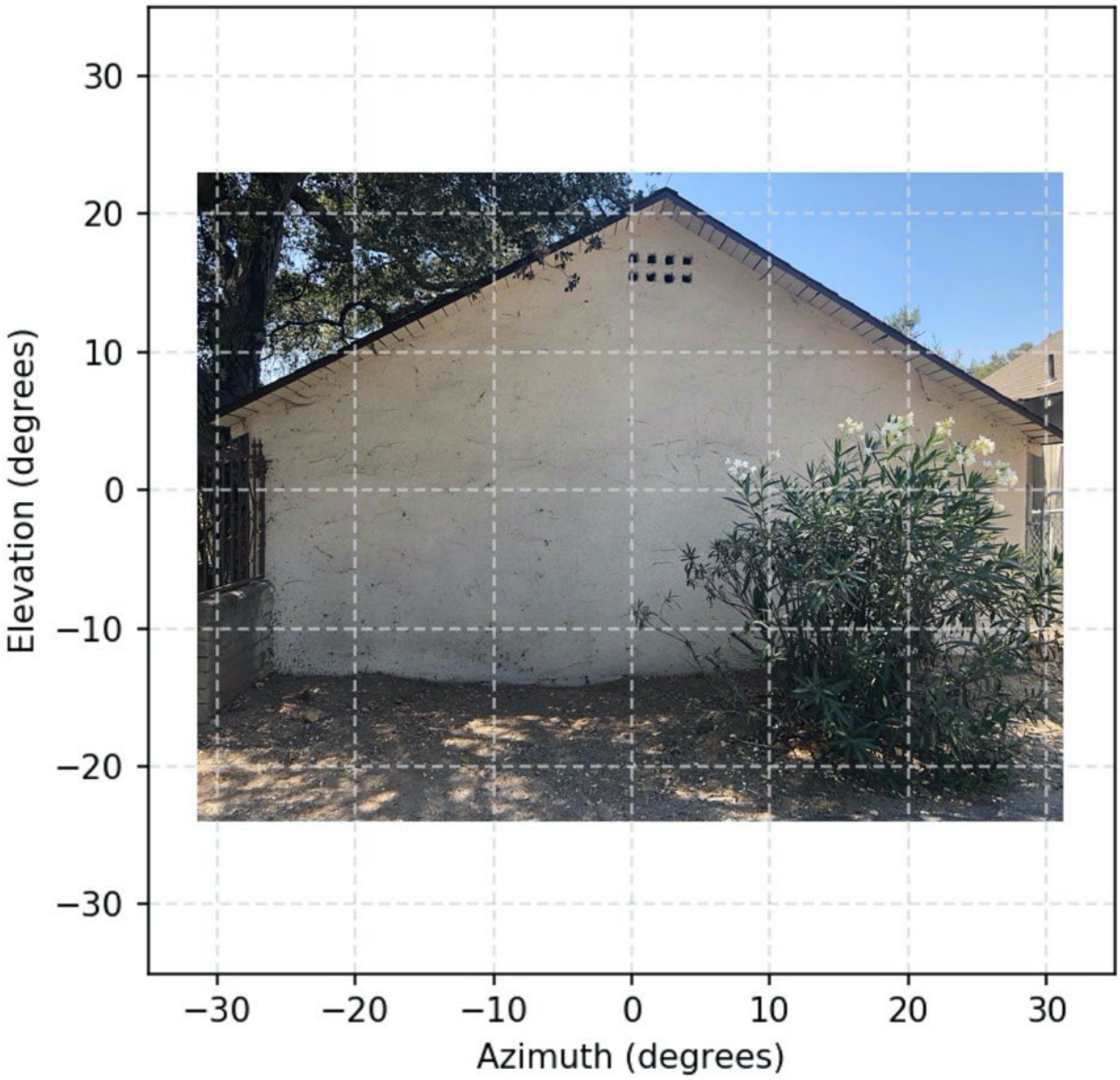

Figure 5-4: Visual Massing of Garage of 3617 Canyon Crest Road[56]

[56] Source: Applicant

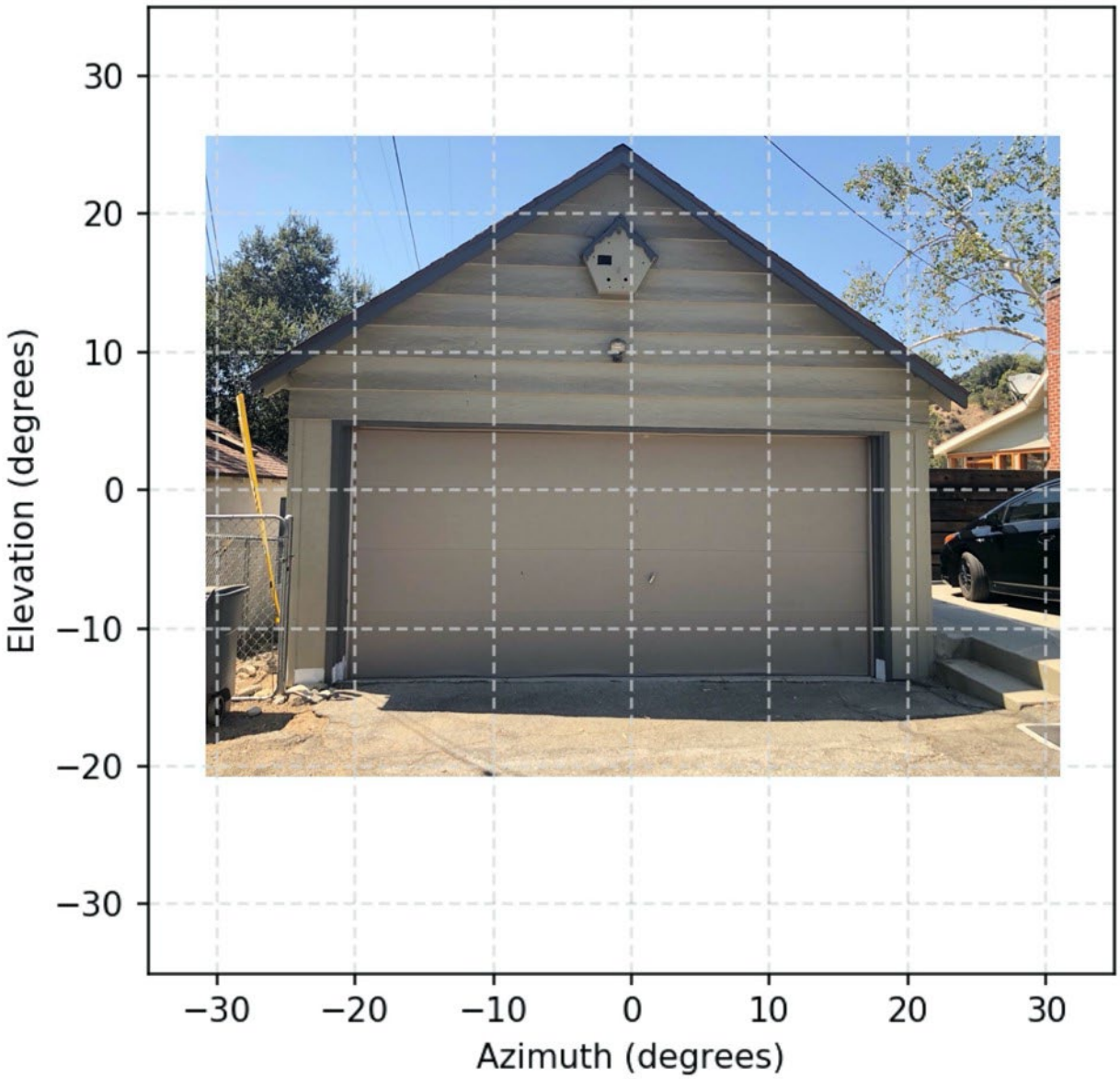

Figure 5-5: Visual Massing of Garage of 3637 Canyon Crest Road[57]

5.1.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.1-1**: Have a substantial adverse effect on a scenic vista

[57] Source: Applicant

- For purposes of analysis in this EIR, a "scenic vista" is an expansive view from any publicly accessible area that has been designated by a federal, state, or local government for its scenic quality, including as a trail, park, garden, recreational site, waterway, scenic district, scenic ridgeline, scenic roadway or scenic viewpoint, where that view is predominated by features of scenic quality.
  - For purposes of analysis in this EIR, a feature of scenic quality is a natural feature, or an artificial feature otherwise designated as an aesthetic resource, or commonly understood to have scenic quality.[58]

- **Threshold 5.1-2**: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
  - For purposes of analysis in this EIR, a "state scenic highway" is a California highway[59] or County highway[60] that has been designated as a "scenic highway" by the California Department of Transportation.

- **Threshold 5.1-3**: Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, …conflict with applicable zoning and other regulations governing scenic quality
  - For purposes of analysis in this EIR, "visual character or quality" is the size, shape, color, texture, and general composition of distinct elements in a field of view, as well as the relationships between these elements.
  - Because the project is located in an urbanized area, compliance with zoning and land use regulation is sufficient to establish a less than significant effect. (See Section 5.10).

- **Threshold 5.1-4**: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.1-5**: Have a substantial, demonstrable negative aesthetic effect

[58] For instance, a trail may have expansive views of the ocean, and of a common highway, and of a bridge noted for its architecture. While the trail is an identified scenic resource, an expansive view from it in which the highway predominates is not a scenic vista.
[59] Source: California Department of Transportation, List of eligible and officially designated State Scenic Highways. Available at: https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_a11y.xlsx
[60] Source: California Department of Transportation, List of Officially Designated County Scenic Highways. Available at: and https://dot.ca.gov/-/media/dot-media/programs/design/documents/od-county-scenic-hwys-2015-a11y.pdf.

5.1.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to aesthetic resources first identifies whether any class of designated aesthetic resources is affected by the project. These resources include scenic highways, designated vistas or ridgelines and public venues for the shared enjoyment of aesthetic character such as designated trails, public parks, gardens, or waterways. The impacts of a project that is consistent with its intended land use designation and with all applicable development standards to sightlines from public roadways or other publicly accessible vantages that are not officially designated according to a significance criterion are not deemed to be significant, as these impacts are typical and were properly considered in the specification of land use designation and development standards. *Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 889, 901; *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Ca1.App.4th 720, 734. Visual impacts to private properties in the vicinity are not environmental impacts subject to CEQA. *Ibid.*; *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492; *Eureka Citizens for Responsible Growth v. City of Eureka* (2007) 147 Cal.App.4th 357, 376.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-AES-1: The project shall comply with the County Code Section 22.140.580(D) residential development standard prohibiting any shiny roofing and cladding.

Impact Discussion

- **Threshold 5.1-1**: Have a substantial adverse effect on a scenic vista

The project would be expected to result in no adverse impacts on any scenic vista and less than significant impacts on views in the area of the project.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[r]equirements relating to CUPs would ensure that development projects that would be accommodated by the [2035 County General Plan] would be held to appropriate development standards of the County Code. Regulations outlined in the County Code relating to HMAs would ensure that the physical character and scenic value of areas of the County with a natural slope gradient of steeper than 25 percent are preserved. Since hillsides and ridgelines are some of the primary resources related to scenic vistas in Los Angeles County, the provisions of the County Code would significantly reduce impacts to these areas….The existing regulatory setting, as well as the goals and policies contained in the [2035 County General Plan], would serve to lessen potential impacts to scenic vistas associated with

implementation of the [2035 County General Plan]."[61] The 2035 County General Plan EIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[62] The proposed design of the project meets all developmental standards of the County Code, including those tightened in the Altadena Community Standards District. (*See* Table 5-19: Development Standards Tightened in Altadena Community Standards; Section 5.10). The proposed project is consistent with its zoning, which anticipates the existence of a code-compliant residence on the project parcel. As attributed in Table 5-16: Hillside Management Area Findings Analysis and Section, Table 5-11: County General Plan Policy Consistency Analysis, and Section 11 Appendix C, the proposed project is consistent with the Hillside Management Area Ordinance and its sensitive design guidelines, which "would serve to minimize…potential impacts [to scenic vistas]."[63]

Additional Project-specific Analysis

As attributed in Section 5.1.3, the project would not be visible from any designated scenic viewpoint, roadway or public resource dedicated to the provision of scenic value, such as a park, trail, garden, or waterway.

Expansive, northerly views of parts of the San Gabriel Mountains and its foothills exist from Canyon Crest Road in the lower Canyon Crest Road neighborhood, but these views do not occur across the project parcel, which presents westerly sightlines from public vantages. In this direction, close (<500 feet distant) vantages of the upper western face of Millard Canyon (with residences at the crest), oak woodlands, and beyond, JPL water towers and other structures in La Cañada Flintridge. Across the envelope of the structure, these sightlines have been mostly occluded by vegetation including oak tree canopy, though some new occlusion would be introduced. (*See, e.g*. Figure 5-6: Before and After View of Project Site Driving North on Canyon Crest Road). The proposed project does not differ in this respect from the other single-family residences that define the aesthetic character of the neighborhood. Like other similar vantages in neighborhoods of the San Gabriel Mountains foothills, these vantages have also not been designated as scenic vistas.

- **Threshold 5.1-2:** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

The project would be expected to result in no adverse impacts from damaging scenic resources within a state scenic highway.

General and Project-specific Analysis

[61] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.1-19 and 5.1.20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[62] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[63] Source: County Department of Regional Planning: CEQA Findings of Fact…For the Final EIR for the County General Plan Update, page 17. Available at: http://file.lacounty.gov/SDSInter/bos/supdocs/92422.pdf.

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "future discretionary projects accommodated by the [2035 County General Plan] would be subject to a separate project-level environmental review in accordance with CEQA, wherein the individual project's contribution to the degradation of scenic highways would be assessed at the time formal development plans/applications are submitted to the County for review and approval. In addition, a number of goals and policies of the [2035 County General Plan] would also serve to minimize potential impacts to scenic highways by preventing degradation of existing vistas, as well as by promoting actions that would make existing scenic vistas more accessible to individuals."[64] The 2035 County General Plan EIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[65] As attributed in Section 5.1.3, the proposed project would not be visible from any state scenic highway or County-designated scenic highway, the nearest of which is more than 1.3 miles distant. Sightlines between these highways and the project parcel are entirely obstructed by topography, vegetation and residential development.

- **Threshold 5.1-3:** Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point) If the project is in an urbanized area, …conflict with applicable zoning and other regulations governing scenic quality
- **Threshold 5.1-5**: Have a substantial, demonstrable negative aesthetic effect

The project would be expected to result in no adverse impacts under these thresholds from substantially degrading the existing visual character in the area of the project or by non-compliance with zoning and land use regulation and less than significant impacts on the aesthetic quality of the visual environment of the project.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[e]xisting regulations, including provisions contained in the County's Zoning Ordinance relating to the regulation of building form, massing, subdivisions, signs, architectural features, CUPs, design, and oak tree preservation would serve to lessen the impact of the [2035 County General Plan] on the visual character of [Los Angeles County]….Additionally, several of the guiding principles, goals, policies, and implementation programs contained in the [2035 County General Plan] would serve to lessen or mitigate potential impacts of the [2035 County General Plan] by providing direction for future decision making….[A]pplicable portions of the County Code, and relevant goals and policies of the [2035 County General Plan] would reduce these impacts to a less than significant level."[66] The proposed design of the home meets all developmental standards of the County Code, including those tightened in the Altadena Community Standards District, which "ensure[s] that new and

[64] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.1-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[65] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[66] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.1-27. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

expanded structures are compatible in size and scale with the characteristics of surrounding residential neighborhoods, protecting the light, air, and privacy of existing single-family residences from negative impacts while providing certain flexibility within residential areas."[67] (*See* Table 5-19: Development Standards Tightened in Altadena Community Standards). The proposed project is consistent with all 2035 County General Plan policies, including those related to aesthetics. (*See* Table 5-11: County General Plan Policy Consistency Analysis). The proposed project is consistent with the zoning of the project parcel, which anticipates the aesthetic effects of one code-compliant residence. As attributed in Table 5-16: Hillside Management Area Findings Analysis and Section 11 Appendix C, the proposed project complies with the Hillside Management Area Ordinance and its sensitive design guidelines, which "ensure[s] that development preserves the physical integrity and scenic values of HMAs, provides open space, and enhances community character."[68]

Additional Project-specific Analysis

Existing visual character is defined by the uses to which land in the vicinity is purposed and other visual elements in the environment, including vegetation and landforms. The reference visual character of the vicinity is that of a hillside residential neighborhood of medium density and varying architectural styles, permeated by wooded vegetation. The proposed project is not inconsistent with this character. The proposed project complies with all applicable land use regulations imposed on this neighborhood and would preserve wooded vegetation surrounding the home. As such, the project would not be expected to alter or degrade the existing visual character. *See Clover Valley Found. v. City of Rocklin* (2011) 197 Cal.App.4th 200, 243 (determination that impacts to visual character were less than significant in a 558-unit single-family residential development was supported by substantial evidence because the visual elements introduced – single-family residences – were consistent with the same use to which the surrounding land was purposed). Nevertheless, this conclusion may be substantiated with further evidence.

The proposed home has been designed to preserve the aesthetic of oak canopy that would screen the home and to blend in color with the environment. (*See* Figure 5-6: Before and After View of Project Site Driving North on Canyon Crest Road and Figure 5-7: Before and After View of Project Site Driving South on Canyon Crest Road). The home would not be expected to be visible from other public roadways in the area apart from Canyon Crest Road in the immediate vicinity of the project parcel. From isolated prominences thousands or more feet distant in the Meadows neighborhood, La Cañada Flintridge, and the San Gabriel Mountains, the home would be expected to be obscured by existing vegetation to the north and west of the project footprint, and the green, brown, and wood tones of the home would be expected to blend with the backdrop of existing vegetation to an equal or greater extent than other residences in the vicinity.

[67] Source: County Code Section 22.306.010.
[68] Source: County Department of Regional Planning: CEQA Findings of Fact…For the Final EIR for the County General Plan Update, page 3. Available at: http://file.lacounty.gov/SDSInter/bos/supdocs/92422.pdf.

Figure 5-6: Before and After View of Project Site Driving North on Canyon Crest Road[69]

[69] Source: Applicant

Figure 5-7: Before and After View of Project Site Driving South on Canyon Crest Road[70]

[70] Source: Applicant

Height, bulk, pattern and scale can be synthesized by attributing the massing of development, which is the extent to which it subtends a field of view ("FOV"). A comparison of Figure 5-8: Visual Massing of Proposed Project to similar figures portraying nearby residences in Section 5.1.3 establishes the consistency of the project with the visual massing characteristic of existing residential development. As seen from eye level along the centerline of Canyon Crest Road, the proposed project does not subtend the tallest or the widest angular FOV of the existing structures on either the eastern or western side of Canyon Crest Road within 300 feet, nor does it subtend the largest FOV. None of its planning and zoning parameters exceed those of one or more other residences within 300 feet. (*See* Table 5-20: Comparison of Zoning Parameters of Residences Within 300 Feet of [Project]).

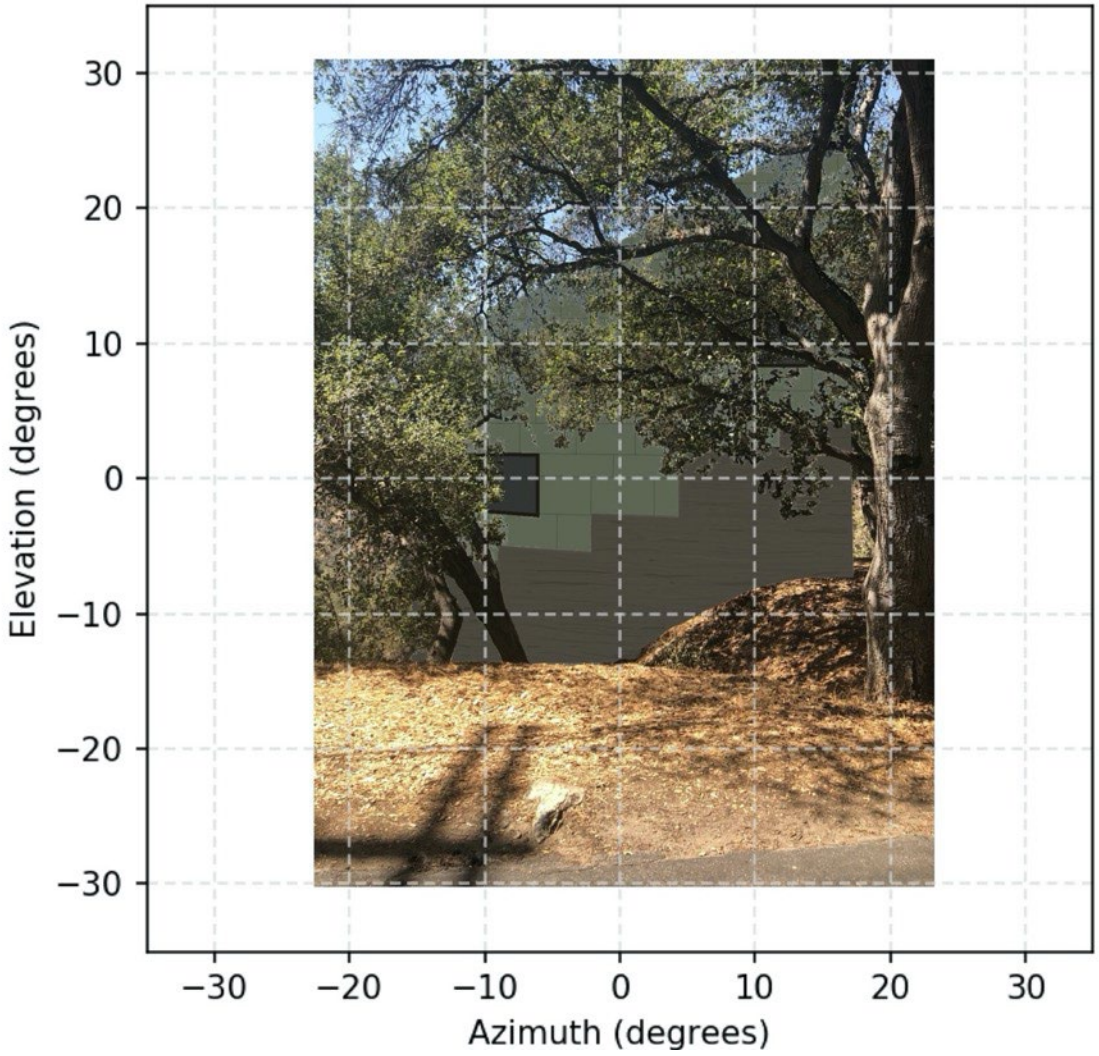

Figure 5-8: Visual Massing of Proposed Project[71]

In accordance with the Hillside Management Area Sensitive Design Guidelines and 2035 County General Plan policy C/NR 13.5, the house is split-level to follow the topography of the terrain

[71] Source: Applicant. Note: fence not pictured for clarity, roughly coincident with 0-elevation (eye height)

and minimize grading. Such a stepped, terraced or split-level design is encouraged in hillside settings as a project design feature. For example, the City of Los Angeles listed in its "CEQA Thresholds Guide," in effect from 2006 until a re-integration with State CEQA Guidelines Appendix G in 2018, as a "Sample Mitigation Measure" in its "Aesthetics and Visual Resources" Guidelines to "[d]esign structures to conform to the existing natural terrain (e.g. multi-level structures on hillsides which are "stepped" in line with the slopes)."[72]

The maximum plumb-line (vertical) height of the proposed home is less than the 35-foot limit permitted in the Altadena Community Standards District, and the maximum height of the home occurs at the minimum absolute elevation, which is lower than the level of the street grade plane, with a correspondingly reduced visual massing when viewed from the street. The home is less than 15 feet in height above the street grade plane over the large majority of the footprint. This metric more accurately relates the project's visual impacts to the majority of existing residences that were graded with fill and cut to create a flat pad at or above street level. While other multi-level homes exist in the vicinity (*see again* Table 5-20: Comparison of Zoning Parameters of Residences Within 300 Feet of ^{Project}), the terraced design of the home distinguishes itself from the form of these existing hillside residences principally to the extent that it avoids such grading of a flat pad, which hillside design guidelines discourage for their greater impacts.

Consistently with the Hillside Management Area Sensitive Design Guidelines, the proposed home has been designed to present the minor axis to the road, comprising a width of less than 30 feet. At the maximum absolute elevation at the northeast corner, the home is 26'2" in height, equivalent in height to a two-story home of similar width with a common 4:12 gable roof. Along the street frontage, the home follows the grade in descending by more than 13 feet from this maximum elevation, such that at the southeast corner, the elevation is less than 13 feet above the street grade plane. Thus, the visual massing of the street frontage of the home transitions from a two-story profile to a one-story profile, when compared to the massing of adjacent homes for which flat pads near the elevation of the street grade plane were created by fill and cut of the hillside.

Throughout this residential environment, relatively dense oak woodlands exist in close proximity to existing residences. Other native and non-native trees and vegetation are present. The project would result in the removal of one oak tree. The removal of one oak tree would alter the aesthetic of the project parcel. However, the oak tree to be removed exists in an area of overlapping canopy that limits the potential growth of adjacent oak trees. The removal of this tree would permit these smaller trees to mature. Additional oak trees and native woodlands understory would be planted and eventually contribute to the visual character of the community.

The exterior finishes of the project visible from the roadway include matte pigmented metal panels in an understated green, with ¼" reveals as part of a rainscreen assembly; wooden doors and soffits, and dark gray trim. The color and appearance such cladding would not be dissimilar to nearby residences that incorporate painted cladding in earth-toned colors. (*See* Figure 4-5: Examples of Architectural Styles of Development Surrounding Project; Figure 3-5: Project

[72] Source: City of Los Angeles, CEQA Thresholds Guide, page A.2-4. Available at: https://planning.lacity.gov/eir/CrossroadsHwd/deir/files/references/A07.pdf

Exterior Finish Materials). The proposed project's finish materials use colors that are consistent with and blend into the surroundings but are non-combustible or fire-resistant as required by building code standards in Very High Fire Hazard Severity Zones.

The proposed home would be screened to a significant extent from the roadway and from homes along the east side of Canyon Crest Road by five existing, mature oak trees that would remain, only one of which would require any pruning[73], comprising less than 25% of its canopy. Other native shrub-layer landscaping would be expected to provide further screening from northbound and southbound traffic on Canyon Crest Road as it becomes established.

To the extent the visual quality of the surroundings may be defined in part by lower density, open spaces are designated nearby in the County General Plan Conservation and Natural Resources element. Portions of the Angeles National Forest to the north and northwest are designated as open spaces by the County General Plan.[74] However, these designated areas are more than 3,000 feet distant, and the proposed project does not obstruct the appreciation of these spaces from any public vantage.

County- and non-profit-owned parcels that are protected as open spaces exist further to the north along Canyon Crest Road. However, they are more than 1,000 feet distant, and the proposed project does not obstruct the appreciation of these spaces from any public vantage. A protected parcel owned by the City of Pasadena is located less than 100 feet south of the project parcel. However, this parcel is largely obscured from public vantages by the landform of Millard Canyon and by oak tree canopy. Also, the property is not designated for public use, and is posted with a "No Trespassing" sign by the City of Pasadena. Millard Canyon itself is not designated as an open space by the County General Plan within visual proximity of the project parcel.

- **Threshold 5.1-4**: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

The project would be expected to result in no adverse impacts to any existing view in the area from lighting effects that would compromise the view and less than significant impacts from any other lighting effects.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[i]n addition to applicable provisions of the County Code…the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. These regulations would serve to mitigate potential impacts of new land

[73] No ordinance requirements exist for the pruning of vegetation in close proximity to residential structures. The prevailing practice of fuel modification inspectors in the vicinity is that vegetation not be kept in contact with the wall or roof of a structure, and this practice is also assumed to be characteristic for the proposed project.
[74] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.1. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

uses.…Goals and policies of the [2035 County General Plan] would serve to minimize potential impacts related to additional sources of light and glare."[75] The 2035 County General Plan EIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[76] The proposed project meets all developmental standards of the County Code and California Building Code. The proposed project is consistent with all 2035 County General Plan policies, including those related to aesthetics. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with lighting effects, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The project's exterior finish materials would not be expected to result in a significant source of glare. Pursuant to RCM-AES-1, County Code constrains residential development by prohibiting any shiny roofing and cladding, and the home's matte colored cladding and roofing would not be expected to result in any perceivable reflection of light. As the home complies with all height and setback requirements and is surrounded by taller trees with dense canopy that define the existing extent of shadowing in the vicinity, it would not be expected to generate a substantial or unexpected change in shadowing. The sources of light generation of the proposed project would be expected to be consistent with the surrounding residential development, including typical emissions through windows of interior light and limited use of low-intensity exterior lighting at garage and entryways.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The project would not affect any public scenic resource identified by any state or local authority as potentially significant if impacted, including any scenic highway, scenic vista, riding or hiking trail, public park, garden or waterway. The home would be consistent with the existing wooded and architecturally varied residential character of the site and its surroundings. The project would not be expected to generate light or glare to any extent that deviates from the expectations for the permitted use of a single-family home. The home has been designed to conform to the building and development standards prescribed in the R-1 Altadena Community Standards District and Hillside Management Ordinance, consistency with which reasonably precludes significant impacts from incompatible massing. The home would be screened to a significant extent by vegetation and clad in colors that are consistent with the surrounding vegetation. The proposed design of the home is consistent with the success criteria of the County's Hillside Management Area Sensitive Design Guidelines.

[75] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.1-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[76] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to aesthetics would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on scenic resources to a less than significant level, the proposed project's contribution to County-wide impacts would not be cumulatively considerable. Cumulative impacts of the proposed project related to scenic vistas and scenic resources are therefore considered less than significant….[B]ecause development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on visual and character to a less than significant level, the [2035 County General Plan's] contribution to County-wide impacts would not be cumulatively considerable. Cumulative impacts of the proposed project related to visual character and quality are therefore considered less than significant….Impacts from glare are generally localized and not cumulative in nature; therefore, a significant cumulative impact related to glare would not occur."[77] The proposed project is consistent with all applicable goals, policies and regulations and localized to one location.

Past projects in visual proximity of the project site have not affected designated scenic resources and have not degraded the aesthetic environment with uses that are incompatible with zoning and land use designation, with which the project would also remain consistent.

Other closely related present and future projects would be expected to either be consistent with all applicable land use regulations and policies informing aesthetic compatibility or to be subjected to a conditional use process requiring substantiation of burdens of proof that include aesthetic compatibility.

[77] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.2 Agriculture and Forestry Resources

5.2.1 Introduction

This section of the EIR evaluates the project's potential impacts to agriculture and forestry resources, including analysis of whether the project would convert any quality farmland, zoned agricultural usage, timberland, or forest land.

5.2.2 Regulatory Framework

State and local laws, regulations, plans, or guidelines that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to agriculture or forestry resources.

State Regulation

Farmland Mapping and Monitoring Program

The goal of the state Farmland Mapping and Monitoring Program ("FMMP") is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. FMMP produces Important Farmland Maps, which are a hybrid of resource quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. Data is also released in statistical formats - principally the biennial California Farmland Conversion Report.

Farmland Classifications

The California Department of Conservation ("CDC"), through the FMMP, classifies agricultural lands as follows:

Prime Farmland

Prime Farmland consists of land that has the best combination of physical and chemical features capable of sustaining long-term production of agricultural crops. This land possesses optimal soil quality, growing season, and moisture supply required to produce sustained high yields. Land must have been used for irrigated crop production four years prior to the mapping date.

Farmland of Statewide Importance

Similar to Prime Farmland, this land has a good combination of physical and chemical features capable of sustaining long-term production of agricultural crops. This land has minor shortcomings, such as a decreased ability to store soil moisture and greater slopes in comparison to Prime Farmland. Land must have been used for irrigated crop production four years prior to the mapping date.

Unique Farmland

This land tends to have decreased quality soils used for production of the state's leading agricultural crops. It is generally irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. This land is used for specific, high-economic-value crop production, such as oranges, olives, avocadoes, rice, grapes, or cut flowers. Land must have been used for crop production four years prior to the mapping date.

Farmland of Local Importance

Each county's board of supervisors, with additional assistance from a local advisory committee, determines important land to the local agricultural economy. The County Board of Supervisors has designated producing lands that would meet the standard criteria for Prime Farmland or Farmland of Statewide Importance, but are not irrigated, as being of "Local Importance."

Grazing Land

This land consists of existing vegetation that is suitable for livestock grazing. This particular 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.

Urban and Built-Up Land

The land is generally occupied by structures consisting of a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, and sewage treatment and water control structures.

Other Land

This category includes land that is excluded from other mapping categories. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas unsuitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines or borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land greater than 40 acres and surrounded on all sides by urban development is mapped as Other Land.

Land Committed to Non-Agricultural Use

This optional designation is an overlay to the standard farmland categories described above. It represents existing farmland and grazing land, and vacant areas with a permanent commitment for development. Examples of this category include an area undergoing permanent infrastructure installation or for which bonds or assessments have been issued for public utilities. Such lands represent planning areas where there are commitments for future nonagricultural development that are not reversible by a city council or board of supervisors' majority vote.

California Land Conservation Act (Williamson Act)

The Williamson Act provides tax incentives to retain prime agricultural land and open space in agricultural use, which subsequently slows its conversion to urban development. The Williamson Act requires a 10-year contract between the County of Los Angeles and landowners who enter into contracts with local government for long-term use restrictions on qualifying agricultural and open space land. In accordance with the contract, the land must be taxed based on its agricultural use rather than its full market value. The overall purpose of the Williamson Act is to protect agricultural lands and open space.

California Land Evaluation Site Assessment Model

The California Land Evaluation Site Assessment Model ("LESA") was developed by the federal Natural Resources Conservation Service to assist state and local officials with making sound decisions regarding land use. LESA was subsequently adapted by the California Department of Conservation for use in California. LESA analyzes soil resource quality, project size, water resource availability, surrounding protected resource lands, and surrounding agricultural lands; the model output is a numerical rating. LESA includes a numeric threshold for determining significance under CEQA of impacts on conversion of mapped farmland to non-agricultural uses.

California Public Resources Code and Government Code

California Public Resources Code Section 12220(g) defines forest land as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

California Public Resources Code Section 4526 defines timberland as "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees."

Government Code Section 51104(g) defines "timberland production zones," ("TPZ") as "an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses."

Fire and Resource Assessment Project

Pursuant to State CEQA Guidelines Appendix G, in determining whether impacts to forest resources, including timberland, are significant environmental effects, the California Department of Forestry and Fire Protection compiles inventories of the state's forest land in the Forest and Range Assessment Project (renamed Fire and Resource Assessment Project, or "FRAP") and the Forest Legacy Assessment project.

Local Regulation

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with these policies, including any related to agriculture and forestry resources, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

Los Angeles County Code Title 22

Chapter 22.24 Agricultural Zones of Title 22 outlines the purpose, use restrictions, and general regulation of agricultural uses.

5.2.3 Existing Conditions

Agricultural and Farmland

The FMMP portrays that the nearest designated agricultural land of any classification is more than 11 miles to the northwest.[78] The nearest Agricultural Resource Area designated by the County 2035 County General Plan is more than 15 miles to the north.[79]

Williamson Act Contracts

Williamson Act preserves are portrayed in the California Williamson Act Contract Land map by the CDC Division of Land Resource Protection. The only Williamson Act Contract Lands in the County are located on Catalina Island and held by the Catalina Island Conservancy for open space and recreational purposes.[80]

Timberland

The FRAP shows the nearest timberland reserve to be in the Angeles National Forest several miles northeast of the project parcel.[81] The Forest Legacy Assessment project is generally

[78] Source: California Department of Conservation, DOC Maps: Agriculture. Available at: https://maps.conservation.ca.gov/agriculture/.
[79] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip
[80] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[81] Source: California Department of Forestry and Fire Protection: California's Forests and Rangelands 2017 Assessment, page 44. Available at: https://frap.fire.ca.gov/media/3180/assessment2017.pdf.

implemented through individual state Forest Action Plans.[82] A Forest Action Plan is a generic designation for California's FRAP.

5.2.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.2-1**: 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 5.2-2**: Conflict with existing zoning for agricultural use, or a Williamson Act contract

- **Threshold 5.2-3**: 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 5.2-4**: Result in the loss of forest land or conversion of forest land to non-forest use

- **Threshold 5.2-5**: 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

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.2-6**: Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.
  - For purposes of analysis in this EIR, prime agricultural land in the County includes the land referenced in Threshold 5.2-1 and County-designated Agricultural Resource Areas.

5.2.5 Impact Analysis

Methodology

[82] Source: United States Forest Service: Forest Legacy Program Implementation Guidelines, page 15. Available at: https://www.fs.usda.gov/sites/default/files/fs_media/fs_document/15541-forest-service-legacy-program-508.pdf.

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to agricultural and forestry resources first identifies whether any class of agricultural or forestry resources is affected by the project. These include farmland or agricultural land officially designated by the state or County, or any forestland or timberland officially designated by the state and zoned to permit commercial harvest.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

There are no standard conditions or regulatory compliance measures specifically relied upon in this area of analysis.

Impact Discussion

- **Threshold 5.2-1**: 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 5.2-6**: Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land

The project would be expected to result in no impacts under these thresholds from the conversion of any farmland or agricultural land.

General and Project-specific Analysis

The 2035 County General Plan EIR stated that "conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to buildout of the [2035 County General Plan] would be a potentially significant impact in the Antelope Valley Area Planning Area and Santa Monica Mountains Planning Area. In the remaining nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is located], impacts would be less than significant."[83] As attributed in Section 5.2.3, no farmland or agricultural land is found on or in the vicinity of the project parcel.

- **Threshold 5.2-2**: Conflict with existing zoning for agricultural use, or a Williamson Act contract

The project would be expected to result in no adverse impacts from conflict with a Williamson Act contract or existing zoning for agricultural use.

General and Project-specific Analysis

[83] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "implementation of the [2035 County General Plan] would not involve rezoning of farmland and impacts regarding conversion of mapped farmland to non-agricultural uses would be less than significant."[84] Allowable uses within the R-1-10000 zone in the County do not include commercial agriculture. As attributed in Section 5.2.3, no ARAs or Williamson Act Contract Lands are found on or in the vicinity of the project parcel.

- **Threshold 5.2-3**: 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))

The project would be expected to result in no adverse impacts from rezoning or conflict with the existing zoning of forest land.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[t]he Los Angeles County Zoning Code does not contain zones specifically for forest use or production of forest resources….As the County has no existing zoning specifically designating forest use, implementation of the [2035 County General Plan] would not conflict with existing zoning for forest land or timberland. No impact would occur."[85] Allowable uses within the R-1-10000 zone in the County do not include the growing and harvesting of forest land, timberland, or timberland zoned Timberland Production.

- **Threshold 5.2-4**: Result in the loss of forest land or conversion of forest land to non-forest use

The project would be expected to result in no adverse impacts from the loss or conversion of forest land to non-forest use and less than significant impacts to any forestry resources.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting and measures formulated in the Biological Resources section of the 2035 County General Plan EIR, stating that "[f]orests in Los Angeles County are limited to narrow formations along creeks and other watercourses and the highest elevations of the San Gabriel Mountains….These plant communities would be protected by existing regulations, including Sections 1600 *et seq.* of the California Fish and Game Code. Mitigation measures set forth in Section 5.4 of this DEIR would reduce impacts to these natural communities from

[84] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[85] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

projects approved under the [2035 County General Plan]."[86] While mitigation measures in Section 5.4 were formulated to encompass a range of more impactful subsequent activities, standard compensatory provisions of the Oak Tree Ordinance are sufficient to ensure that no reduction in oak resources will occur because of the project. The project has also been conditioned with those applicable measures of Section 5.4 of the 2035 Los Angeles County General Plan EIR ("GPEIR") as the standard approach to feasible avoidance and minimization.

Additional Project-specific Analysis

As permitted uses of the project parcel do not include the growing and harvesting of forest land, timberland, or timberland zoned Timberland Production, the project would not result in the loss of these resources. Construction of the project would require the removal of one coast live oak tree; however, in accordance with the Oak Tree Ordinance, at least two coast live oak trees would be planted after its removal. More oak trees would also be planted to further expand the number of oak trees on the project parcel.

- **Threshold 5.2-5**: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use

The project would be expected to result in no adverse impacts to farmland or forest land from indirect effects or other changes in the existing environment.

General and Project-specific Analysis

The 2035 County General Plan EIR stated that "[b]uildout of the [2035 County General Plan] based on the existing Antelope Valley Area Plan in the Antelope Valley Planning Area and on the existing Santa Clarita Valley Area Plan in the Santa Clarita Planning Area would have a significant indirect impact on conversion of mapped Important Farmland to nonagricultural use due to pressure to convert farmland to non-agricultural uses and related incompatibilities between agricultural and urban uses. Such indirect impacts would be less than significant in the other nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is sited.]"[87] As attributed in Section 5.2.3, no farmland or agricultural land is found on or in the vicinity of the project parcel, and no indirect effects to farmland or agricultural land are reasonably anticipated. Similarly, because the project parcel and surrounding residential neighborhood does not contain any designated forest land, no indirect effects to forest land are reasonably anticipated.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

[86] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[87] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-35. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

The project site is not zoned to permit agriculture or forestry resource usage and does not impact any agriculture or forestry resource.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to agriculture and forestry would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "substantial adverse cumulative impacts to forest land, or zoning for forest use, are unlikely. Almost all of the forests in Los Angeles County are in the high-elevation parts of the [County]…Cumulative projects…would result in significant cumulative impacts related to conversion of mapped Important Farmland to non-agricultural uses; both indirectly and directly."[88] However, the proposed project does not entail any impact to mapped Important Farmland and therefore transcends the finding of unavoidable significance.

Past projects have not impacted any agricultural or forestry resources in the area so designated in modern times, which the proposed project also would not impact.

Other closely related present and future projects would be expected to be consistent with zoning and land use designation prohibiting such usage and therefore would not affect these resources to any extent.

[88] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.2-36. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.3 Air Quality

5.3.1 Introduction

This section of the EIR evaluates the project's potential impacts to air quality, including a comparison of the expected mobile and point source emissions of criteria air pollutants from construction and operation of the project against regional and localized thresholds adopted by the South Coast Air Quality Management District ("SCAQMD") as generally applicable to projects in this air basin.

5.3.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Ambient air quality standards ("AAQS") have been adopted at state and federal levels permitting certain concentrations of criteria air pollutants. In addition, both California and the United States regulate the release of toxic air contaminants ("TACs"). The metropolitan portions of Los Angeles County, in which the project is sited, are within the South Coast Air Basin ("SCAB"). Land use in the SCAB is subject to the rules and regulations imposed by the SCAQMD, as well as the California AAQS adopted by the California Air Resources Board ("CARB") and National AAQS adopted by the United States Environmental Protection Agency.

Federal and State Regulation

State Air Resources Board

Under California law, the State Air Resources Board ("SARB") is charged with developing the state implementation plan and overseeing its enforcement. (Health & Safety Code ("H&SC"), Sections 39602, 41502-41505). SARB establishes ambient air quality standards to protect public health for each air basin in the state. (H&SC Section 39606(a)). While SARB is responsible for regulating vehicular pollution throughout the state, regulation of nonvehicular emissions is assigned to local and regional air pollution control districts. (H&SC 39002). The Legislature has created five regional districts, including the SCAQMD. (2 Manaster & Selmi, Cal. Environmental Law and Land Use Practice (2012 ed.) § 40.51, pp. 40-86, 40-87 (rel. 47-9/2007).

South Coast Air Quality Management District

Like all regional districts, the SCAQMD is required to "adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards in all areas affected by emission sources under their jurisdiction, and shall enforce all applicable provisions of state and federal law." (H&SC Section 40001(a)). SARB monitors district compliance with air quality standards and, in the case of ozone and carbon monoxide pollution, classifies districts as in attainment of those standards or in moderate, serious, severe, or extreme nonattainment. (H&SC Sections 40918, 40919, 40920, 40920.5, 40921.5). The nonattainment classifications trigger increasingly stringent requirements on air quality districts to control pollution. (H&SC Sections 40918, 40919, 40920, 40920.5.)

The SCAQMD is California's largest air pollution control district. Its jurisdiction, the SCAB, covers all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties, and has some of the worst smog in the United States. The District was created in 1976 by the Lewis-Presley Air Quality Management Act (H&SC Sections 40400 *et seq*.), which observed in its findings that the "South Coast Air Basin is a unique geographical entity not reflected by political boundaries" and that the Basin has "critical air pollution problem[s]." (Stats. 1976, ch. 324, Section 5, p. 893; former Section 40402(a) and (b)). The 1976 act required the District to adopt an air quality management plan to achieve and maintain the state and federal air quality standards by 1979 and to regularly review and revise the plan thereafter. (H&SC Sections 40460, 40463(a)). The SCAQMD's plan constitutes the "federally required state implementation plan for the South Coast Air Basin." (H&SC Section 40460(d)).

Ambient Air Quality Standards

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

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

Both California and the federal government have established regional, health-based AAQS establishing permitted concentrations for seven air pollutants.[89] These pollutants are ozone ("O_3"), coarse inhalable particulate matter ("PM_{10}"), fine inhalable particulate matter ("$PM_{2.5}$"), carbon monoxide ("CO"), nitrogen dioxide ("NO_2"), sulfur dioxide ("SO_2"), and lead ("Pb"). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

Air Pollutants of Concern

[89] Source: California Air Resources Board: Ambient Air Quality Standards. Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards.

Criteria Air Pollutants[90]

The pollutants emitted into the ambient air by stationary and mobile sources contribute to increases in the concentrations governed by AAQS and are regulated by federal and state law. Air pollutants are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide ("CO"), volatile organic compounds ("VOC"), nitrogen oxides ("NOx") including NO_2, sulfur dioxide ("SO_2"), coarse inhalable particulate matter ("PM_{10}"), fine inhalable particulate matter ("$PM_{2.5}$"), and lead ("Pb") are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that they directly contribute to concentrations for which AAQS have been established. VOC and NOx are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. O_3 and NO_2 are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is provided below.

Carbon monoxide is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.

Volatile organic compounds are comprised primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources of VOCs include evaporative emissions associated with paints and solvents, asphalt paving, and household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of O_3, the SCAQMD has established a regional significance threshold for this pollutant.

Nitrogen oxides are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NOx are nitric oxide ("NO") and nitrogen dioxide ("NO_2"). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_2 produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NOx. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term

[90] Source: South Coast Air Quality Management District: Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. Available at: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4.

NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma.

Sulfur Dioxide a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates ("SO_4") in the atmosphere, together these pollutants are referred to as sulfur oxides ("SOx"). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from five minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing.) At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics.

Suspended Particulate Matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The USEPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM10 to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates, have human health implications as they may initiate or facilitate biological processes that may lead to adverse effects to the heart, lung, and other organs. However, the USEPA or CARB have yet to adopt AAQS to regulate the even smaller fractions of PM. Diesel particulate matter is classified by CARB as a carcinogen. Particulate matter can also cause environmental effects such as visibility impairment, environmental damage, and aesthetic damage.

Ozone is commonly referred to as "smog" and is a gas that is formed when VOCs and NOx, both byproducts of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems,

including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation, including forest trees and plants during the growing season.

Lead is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the USEPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the USEPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.

Toxic Air Contaminants

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

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

has established formal control measures for 11 TACs that are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings. By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs. Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

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

In 2000, SCAQMD conducted a study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,400 in a million. The largest contributor to this risk was diesel exhaust, accounting for 71 percent of the air toxics risk. In 2008, SCAQMD conducted its third update to its study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in one million. The largest contributor to this risk was diesel exhaust, accounting for approximately 84 percent of the air toxics risk in the SCAB.

Local Regulation

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with these policies, including any related to air quality, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.3.3 Existing Conditions

Regional Characteristics

The SCAB incorporates approximately 12,000 square miles within four counties – including all of Orange County, most of Los Angeles and Riverside Counties, and the western portion of San Bernardino County – and some portions of what was previously known as the Southeast Desert Air Basin.[91] The distinctive climate of the SCAB is determined by its terrain and geographical location. The SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around its remaining perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds.

The vertical dispersion of air pollutants in the Los Angeles portions of the SCAB is hampered by the presence of persistent temperature inversions. High-pressure systems, such as the semi-permanent high-pressure zone, regularly occur within the SCAB. Usually the high-pressure zones are characterized by an upper layer of dry air that warms as it descends, restricting the mobility in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog. The atmospheric pollution potential of an area is largely dependent on winds, atmospheric stability, solar radiation, and terrain. The combination of low-wind speeds and low inversions produces the greatest concentration of air pollutants.

2016 Air Quality Management Plan

SCAQMD is the agency responsible for assuring that the National and California AAQS are attained and maintained in the SCAB.[92] SCAQMD is responsible for preparing the air quality management plan ("AQMP") for the SCAB in coordination with the Southern California Association of Governments ("SCAG"). Since 1979, a number of AQMPs have been prepared.

The 2016 AQMP[93] employs the most up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources, and area sources. It also addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models.

SCAB Nonattainment Areas

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified as attainment or

[91] Source: California Environmental Protection Agency Air Resources Board: South Coast Air Basin Map. Available at: https://www.arb.ca.gov/msprog/onroad/porttruck/maps/scabc7map.pdf.
[92] Source: South Coast Air Quality Management District: About. Available at: http://www.aqmd.gov/nav/about.
[93] Source: South Coast Air Quality Management District: Final 2016 Air Quality Management Plan. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.

nonattainment areas for particular pollutants, depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme. The attainment status for the SCAB according to State[94] and Federal[95] thresholds is provided by SCAQMD[96] and shows several air pollutants in nonattainment status, including ozone, PM_{10}, and $PM_{2.5}$.

The project is located in SCAB Subregion 8, which is monitored from the South Wilson Avenue station approximately four miles to the southeast of the project.[97] The criteria pollutants monitored at this station include O_3, CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$. In 2017, the station reflected the same attainment statuses published basin-wide.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The CARB has identified the following groups as being the most likely to be affected by air pollution: children under 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. Noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time.

Within a 500-foot radius of the project, 52 single-family residences have been identified as sensitive receptors (see Figure 4-4: Existing Land Use). Additional single-family residences are located in the surrounding community. There are no schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, or retirement homes located within 500 feet of the project.

5.3.4 Significance Criteria

State CEQA Guidelines Appendix G

[94] Source: California Air Resources Board: California Ambient Air Quality Standards. Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards.
[95] Source: United States Environmental Protection Agency, National Ambient Air Quality Standards Table. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table.
[96] Source: South Coast Air Quality Management District: National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. Available at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf.
[97] Source: California Air Resources Board: Quality Assurance Air Monitoring Site Information for Pasadena. Available at: https://www.arb.ca.gov/qaweb/site.php?s_arb_code=70088.

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.3-1**: Conflict with or obstruct implementation of the applicable air quality plan
  - For purposes of analysis in this EIR, the applicable air quality plan is the 2016 SCAQMD Air Quality Management Plan.

- **Threshold 5.3-2**: 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
    - For purposes of analysis in this EIR, a cumulatively considerable net increase of a criteria pollutant exceeds the regional or localized significance threshold established by the SCAQMD in the SCAQMD CEQA Air Quality Handbook,[98] which are formulated to identify cumulative considerability. *See Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 932-4 (upholding use of SCAQMD significance thresholds to assess cumulative considerability); State CEQA Guidelines Appendix G, p. 315 ("Where available, the significance criteria established by the applicable air quality management distict or air pollution control district may be relied upon to make [this] determination.")

The SCAQMD has established regional thresholds of significance for VOC, NOx, CO, SOx. PM_{10}, $PM_{2.5}$, and Pb, attributed in Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds.

The SCAQMD identifies localized significance thresholds ("LSTs") for emissions of NOx, CO, PM_{10}, and $PM_{2.5}$ generated at a project parcel that could expose sensitive receptors to substantial concentrations of criteria air pollutants.[99,100] Offsite mobile-source emissions are not included in the LST analysis. LSTs represent the maximum mass-rate emissions from a project no greater than five acres in size that would not be expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, as attributed in Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds. These were developed based on the ambient concentrations of that pollutant for each Source Receptor Area and distance to the nearest sensitive receptor.

- **Threshold 5.3-3**: Expose sensitive receptors to substantial pollutant concentrations

[98] Source: South Coast Air Quality Management District: CEQA Air Quality Handbook. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993).
[99] Source: South Coast Air Quality Management District: Final Localized Significant Threshold Methodology. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2.
[100] Source: South Coast Air Quality Management District: Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf?sfvrsn=2.

- For purposes of analysis in this EIR, a substantial pollutant concentration is any level of criteria pollutant that exceeds the localized significance threshold established by the SCAQMD in the SCAQMD CEQA Air Quality Handbook,[101] or a CO hotspot. *See* State CEQA Guidelines Appendix G, p. 315 ("Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make [this] determination.")

A CO hotspot is a pocket exceeding the one-hour CO standard of 20 ppm or the eight-hour CO standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. CO hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour, or 24,000 vehicles per hour where vertical and/or horizontal air does not mix, in order to generate a CO hotspot.[102]

- **Threshold 5.3-4**: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people
  - For purposes of analysis in this EIR, an odor is as defined in the SCAQMD CEQA Air Quality Handbook[103] as any concentration in air of a substance detectable to a reference human olfactory capacity of sufficient intensity that it would require dilution of one part of air containing the substance with more than 10 parts of carbon-filtered air lacking the substance in order to render the substance non-detectable to that reference human olfactory capacity. See also State CEQA Guidelines Appendix G, p. 315 ("Where available, the significance criteria established by the applicable air quality management distict or air pollution control district may be relied upon to make [this] determination.")

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.3-5**: Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.

[101] Source: South Coast Air Quality Management District: CEQA Air Quality Handbook. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993).
[102] Source: Bay Area Air Quality Management District: CEQA Air Quality Guidelines, page 3-3. Available at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines%20May%202011.ashx?la=en.
[103] Source: South Coast Air Quality Management District: CEQA Air Quality Handbook. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993).

- For purposes of analysis in this EIR, this threshold is defined as in Thresholds 5.3-2 and 5.3-3.

5.3.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to air quality for the project is determined by evaluating the mass-rate emissions projections of the construction and operational phases of the project against regional and localized thresholds that identify a cumulatively considerable effect as significant in the SCAQMD. The analysis in this EIR is consistent with guidance contained in the SCAQMD CEQA Air Quality Handbook ("Handbook"), which provides Lead Agencies with standards, methodologies and procedures for conducting air quality analyses. This guidance includes the Localized Significance Threshold Methodology for CEQA Evaluations, as well as the Particulate Matter ("PM") 2.5 Significance Thresholds and Calculation Methodology. In accordance with the Handbook, inputs to these analyses were derived using the California Emissions Estimator Model ("CalEEMod"), Version 2016.3.2. In accordance with the Handbook, inputs to this model were in turn based on the construction schedule and equipment list provided by the Applicant where such information was known (*see* Table 3-1: Expected Construction Equipment and Trips) or using CalEEMod program defaults where such information was not known or abstracted. In addition, the project's parameters and estimated emissions were compared against the SCAQMD's Sample Construction Scenarios for Projects Less than Five Acres in Size,[104] specifically the sample 1-acre project,[105] which does not exceed any localized or regional threshold. Calculations supporting this analysis are provided in Section 11 Appendix C. The proposed project is not considered a sensitive land use and would not be expected to generate substantial quantities of TACs that would require permitting by the SCAQMD, and therefore an evaluation of TACs was not conducted. Government Health and Safety Code requires this analysis only of "facilities" that "manufacture, formulate, use, or release toxic air chemicals."

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-AQ-1: It is mandatory for all construction projects in this air basin to comply with SCAQMD Rule 403 for fugitive dust. Applicable Rule 403 control requirements include mechanical stabilization of soil and backfill, maintenance of effective cover over exposed areas, application of water in sufficient quantities to prevent the generation of visible dust plumes, and reestablishing ground cover as quickly as possible. Construction personnel will comply with Rule 403 to avoid impacts to regional $PM_{2.5}$ and PM_{10}. Additionally, construction personnel will properly maintain all construction equipment and stop work if there are high winds greater

[104] Source: South Coast Air Quality Management District: Sample Construction Scenarios for Projects Less than Five Acres in Size. Available at: http://www.aqmd.gov/docs/default-source/default-document-library/templates/finalreport.pdf.
[105] Source: South Coast Air Quality Management District: 1-acre Sample Project. Available at: http://www.aqmd.gov/docs/default-source/default-document-library/templates/appa1_acre.xls.

than 15 mph for clearing, earth moving, and excavation or greater than 25 mph for grading.

RCM-AQ-2: It is mandatory for all construction projects in California to comply with CARB Rule 2485 limiting the idling of any diesel truck to five minutes.

RCM-AQ-3: It is mandatory for all construction projects in this air basin to comply with SCAQMD Rule 1113 limiting the permitted VOC concentration of architectural coatings.

RCM-AQ-4: It is mandatory for all construction projects in this air basin to comply with SCAQMD Rule 402 prohibiting the emission of contaminants that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public.

Impact Discussion

- **Threshold 5.3-1**: Conflict with or obstruct implementation of the applicable air quality plan

The project would be expected to result in no adverse impacts from conflict with or obstruction of the 2016 SCAQMD AQMP.

General and Project-specific Analysis

The 2035 County General Plan EIR stated that "SCAQMD consider(s) a project consistent with the air quality management plan if it is consistent with the existing land use plan."[106] As the AQMP is based upon the expected overall level of development in the region, a project that is in conformance with a jurisdiction's adopted plans, forecasts and programs and consistent with population, housing, employment and land use plans and forecasts, would not conflict with the local AQMP. The proposed project is consistent with the 2035 County General Plan and Altadena Community Plan. (*See* Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis).

- **Threshold 5.3-2**: 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
- **Threshold 5.3-5**: Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations

[106] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

The project would be expected to result in no adverse impacts under these thresholds from violation of any air quality standard and/or cumulatively considerable increase of any criteria air pollutant, and less than significant impacts from the emission of criteria air pollutants.

General Analysis

The 2035 County General Plan EIR formulated General Plan Mitigation Measure ("GPMM")-AQ-1 with several Best Management Practices for incorporation in projects that "have the potential to exceed the applicable Air Quality Management District (AQMD) adopted thresholds of significance,"[107] though the effect was found to be significant and unavoidable because "due to the magnitude of emissions generated by future construction activities associated with the buildout of the [2035 County General Plan], no mitigation measures are available that would reduce impacts below SCAQMD's…thresholds."[108] As attributed in Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds, Table 5-2: Project Operation-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds and Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds, the project does not have the potential to exceed these thresholds, and so transcends this mitigation measure and the associated finding of unavoidable significance.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with criteria air pollutant emissions, and by transcending its mitigation, the proposed project is consistent with the analysis of the 2035 County General Plan EIR.

Additional Project-specific Analysis

Pursuant to the SCAQMD, "[i]f a proposed project is five acres or less and does not require additional construction activities such as major cut-and-fill, or excavation for sub-grade levels or parking, or demolition of a structure taller than 50 feet, the Lead Agency can use the applicable sample construction scenario to represent the emissions and impacts from the proposed project instead of preparing a project-specific construction air quality analysis."[109] The sample 1-acre project does not exceed these thresholds, and the project would be expected to be uniformly less impactful than the sample, which is a structure of 40,000 square feet (approximately one acre) with associated mechanized demolition, grading and paving that are not required of the project. Therefore, the project would not be expected to exceed any air quality significance threshold, and project-specific emissions projections are not required by CEQA. Nevertheless, this conclusion may be substantiated with further evidence.

Temporary construction activity emissions would occur during the construction stage of the project. Generally, the primary source of NOx, CO, and SOx emissions is the operation of

[107] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-47. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[108] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[109] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/docs/default-source/default-document-library/templates/finalreport.pdf.

construction equipment. The primary sources of particulate matter (PM_{10} and $PM_{2.5}$) emissions are activities that disturb the soil, such as grading and excavation, road construction, and demolition. The primary source of VOC emissions is the application of architectural coating.

The project's short-term construction-related emissions for CO, VOC, NOx, SOx, $PM_{2.5}$ and PM_{10} are well below SCAQMD thresholds. (*See* Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds and Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds,). The project would require limited operation of construction equipment. Dust emissions on site would be generated during grading but given the small extent and manner of grading by hand, these emissions would not be expected to be substantial, and any disturbed soil areas would be appropriately managed pursuant to RCM-AQ-1, as for any grading in the air basin. Pursuant to RCM-AQ-3, the project would be required to make use of low-VOC fluids and coatings. The project would not be expected to generate any CO hotspots because the threshold for significance far exceeds all of the trips required to construct the project.

Therefore, estimated short-term, construction-related emissions would be expected to be less than significant for all categories of pollutants.

Long-term operational emissions sources would include vehicular exhaust from daily traffic, energy consumption, site and landscape maintenance, and incidental emissions from use of a variety of residential products and equipment such as grills. The majority of these emissions are associated with the addition of vehicular traffic, which however would not be confined to a localized vicinity.

The project's short-term construction-related emissions for CO, VOC, NOx, SOx, $PM_{2.5}$ and PM_{10} would be well below SCAQMD thresholds. (*See* Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds and Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds,). In addition, the project would be expected to create fewer than typical operational emissions due to the lack of any combustion equipment in the all-electric, net-zero design, with provisions for the use of electric vehicles.

Therefore, estimated long-term, operation-related emissions would be expected to be less than significant for all categories of pollutants.

Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds[110]

	VOC/ROG (lb./day)	NOx (lb./day)	CO (lb./day)	SOx (lb./day)	PM_{10} (lb./day)	$PM_{2.5}$ (lb./day)	Lead (lb./day)
Site Preparation	<<1	<<1	<<1	<<1	<<1	<<1	<<1
Grading	<<1	<<1	<<1	<<1	<<1	<<1	<<1

[110] Source: CalEEMod simulation using CalEEMod.2016.3.2. See Section 11 Appendix C.

Building Construction	<<1	<4	<4	<<1	<<1	<<1	<<1
Architectural Coating	<<1	<<1	<<1	<<1	<<1	<<1	<<1
Regional Significance Thresholds[111]	75	100	550	150	150	55	3
Exceeds Threshold	No	No	No	No	No	No	No

Table 5-2: Project Operation-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds[112]

	VOC/ROG (lb./day)	**NOx (lb./day)**	**CO (lb./day)**	**SOx (lb./day)**	**PM_{10} (lb./day)**	**$PM_{2.5}$ (lb./day)**	**Lead (lb./day)**
Operational Emissions	<<1	<<1	<<1	<<1	<<1	<<1	<<1
Regional Significance Threshold[113]	55	55	550	150	150	55	3
Exceeds Threshold	No	No	No	No	No	No	No

Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds[114,115]

	NOx (lb./day)	**CO (lb./day)**	**PM_{10} (lb./day)**	**$PM_{2.5}$ (lb./day)**
Maximum Emissions	<4	<4	<<1	<<1
Localized Significance Threshold	69 (92)	535 (563)	4 (4)	3 (3)

[111] Source: South Coast Air Quality Management District: Regional Significance Thresholds. Available at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.
[112] Source: CalEEMod simulation using CalEEMod.2016.3.2. See Section 11 Appendix C.
[113] Source: South Coast Air Quality Management District: Regional Significance Thresholds. Available at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.
[114] Source: South Coast Air Quality Management District: Localized Significance Thresholds. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.
[115] Note: Analysis uses minimum receptor distance for minimum site area of one acre, though the disturbed area of the project parcel would be expected to be less than 0.1 acre. The project is located on the boundary of the West San Gabriel Valley and San Gabriel Mountains source receptor areas. (www3.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx). The West San Gabriel Valley figures are provided pursuant to http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/sra-city-table.xls?sfvrsn=2, along with an average in parentheses to more accurately reflect this boundary condition.

Exceeds Threshold	No	No	No	No
Operational Emissions	<<1	<<1	<<1	<<1
Localized Significance Threshold	69 (92)	535 (563)	1 (1)	1 (1)
Exceeds Threshold	No	No	No	No

- **Threshold 5.3-3**: Expose sensitive receptors to substantial pollutant concentrations
- **Threshold 5.3-5**: Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations

The project would be expected to result in no adverse impacts under these thresholds from exposure of any sensitive receptor to a substantial pollutant concentration.

General and Project-specific Analysis

The 2035 County General Plan EIR formulated GPMM-AQ-2 and GPMM-AQ-3 to limit exposure of sensitive receptors, though the effect was found to be significant and unavoidable because "localized emissions of criteria air pollutants could exceed the SCAQMD…regional significance thresholds because of the scale of development activity associated with buildout of the [2035 County General Plan]."[116] As attributed in Table 5-1: Project Construction-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds, Table 5-2: Project Operation-Related Pollutant Emissions Evaluated Against Regional Significance Thresholds, and Table 5-3: Project Pollutant Emissions Evaluated Against Localized Significance Thresholds, the project does not have the potential to exceed these thresholds during construction or operation and therefore does not have the potential to expose sensitive receptors to substantial pollutant concentrations. The project therefore transcends the associated finding of unavoidable significance.

GPMM-AQ-2 levies requirements on new industrial or warehousing land uses that both "1) have the potential to generate 40 or more diesel trucks per day and 2) are located within 1,000 feet of a sensitive land use (e.g. residential, schools, hospitals, nursing homes)." The proposed project is a single-family home that would not be expected to generate any sustained large truck trips. Long-term operational impacts would not be expected to entail this number of diesel truck trips. In addition, the project would not entail any industrial or warehousing land uses. Therefore, the proposed project complies with this mitigation measure by transcending it.

GPMM-AQ-3 requires applicants for sensitive land uses to submit a health risk assessment prior to any discretionary project approvals where the project was sited "within the following distances as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, from these facilities: Industrial facilities within 1000 feet; Distribution centers (40 or more trucks per day) within 1,000 feet; Major transportation projects (50,000 or more vehicles per day) within 1,000 feet; Dry cleaners using perchloroethylene within 500 feet;

[116] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Gasoline dispensing facilities within 300 feet," concluding that "[GPMM-AQ-3] would ensure that placement of sensitive receptors near major sources of air pollution would achieve the incremental risk thresholds established by SCAQMD…and [this impact] would be less than significant." The project is not sited within the specified distances of these sources of pollution. Therefore, the proposed project complies with this mitigation measure by transcending it.

- **Threshold 5.3-4**: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

The project would be expected to result in no adverse impacts from creating objectionable odors affecting a substantial number of people, and less than significant impacts from the creation of any localized odors.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting after incorporation of GPMM-AQ-4, which states that "[i]f it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required… Facilities that have the potential to generate nuisance odors include but are not limited to: Wastewater treatment plant; Composting, greenwaste, or recycling facilities; Fiberglass manufacturing facilities; Painting/coating operations; Large-capacity coffee roaster; Food-processing facilities."[117] *See also* the 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 2035 County General Plan EIR concluded that "[GPMM-AQ-4] would ensure that odor impacts are minimized and facilities would comply with SCAQMD…Rule 402. [This impact] would be less than significant."[118] The project is a single-family home that does not share the potential of the example projects to generate intense or objectionable odors, or distribute those odors to a substantial number of people. Pursuant to RCM-AQ-4, the project would comply with SCAQMD Rule 402. Construction-related odor emissions from diesel-burning vehicles and construction processes would be expected to be temporary and intermittent in nature and result in concentrations that would be expected to diffuse below the level of detection for nearby sensitive receptors. Short-term construction-related odors would be expected to cease upon the drying or hardening of the odor-producing substances. On-site temporary sanitary facilities and trash receptacles would be expected to be maintained in compliance with manufacturer instructions and/or according to a schedule ensuring odor control.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

[117] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-50. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[118] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Short-term construction emissions would include the on-site generation of dust and equipment exhaust, and off-site emissions from construction workers commuting to the site. Long-term emission sources associated with the single-family home would include vehicular exhaust from daily traffic (10 or fewer vehicle trips per day), energy consumption, site and landscape maintenance, and incidental emissions from typical residential products and equipment such as grills. Neither short-term (construction) nor long-term (operational) emissions would approach SCAQMD recommended regional or localized significance thresholds.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to air quality would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "construction emissions associated with future development pursuant to the [2035 County General Plan] would be significant" irrespective of feasible mitigation and that "the [2035 County General Plan's] contribution to cumulative operational air quality impacts would be significant."[119] Nevertheless, the proposed project is subject to SCAQMD regulations that limit the air quality impacts of projects in the County, and transcends both the scope of the mitigation proposed by the 2035 County General Plan EIR and its finding of unavoidable significance.

Past projects have contributed to nonattainment status in the SCAB for several criteria pollutants. The project therefore had the potential to create an incremental effect that was cumulatively considerable. However, the project would not be expected to exceed either the localized or regional significance thresholds identified by the SCAQMD to delineate a cumulatively considerable effect from emission of criteria air pollutants, which were formulated for use in a significance determination that is inherently aligned with assessment of cumulative considerability at both localized and regional scale.

[119] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.3-45. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Other closely related present and future projects would be expected to generate criteria pollutant emissions that also fall well below thresholds established in the SCAQMD and would have been anticipated by the plans and projections in the County General Plan and Air Quality Management Plan.

5.4 Biological Resources

5.4.1 Introduction

This section of the EIR evaluates the project's potential impacts to biological resources, which are constituents of the plant, animal, and fungus kingdoms and their associated habitats. This analysis includes a catalogue of the resources present or possibly present on the project parcel, assessment of the existing quality of those resources, the extent to which the resource is considered to be sensitive and/or constitute a significant environmental effect if impacted, the manner in which the project impacts the resource, and the management of this interaction.

5.4.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 ("FESA") defines an "endangered" species as "any species which is in danger of extinction throughout all or a significant portion of its range." A "threatened" species is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. As defined in Section 3(18) of the FESA, to "take" is to: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." In addition, the U.S. Fish and Wildlife Service ("USFWS"), through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the FESA if there is a federal nexus, or pursuant to Section 10 of the FESA.

If the USFWS determines that impacts to a species would likely occur, alternatives and measures must be identified, including, but not limited to, avoidance, minimization and purchase of suitable off-site habitat, as well as monitoring and funding for the maintenance of the site. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. "Critical habitat" is defined in Section 3(5A) of the FESA as: the specific areas within the geographic area, occupied by the species at the time it was listed, which contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection. Critical habitat may also include areas that were not occupied by the species at the time of listing but are essential to its conservation." Critical habitat designations affect only federal agency actions or federally funded or permitted activities.

Critical habitat designations do not affect activities by private landowners if there is no federal "nexus" - that is, no federal funding or authorization.

The status of federally listed species is assigned by USFWS as one of the following:
- Federally Endangered ("FE")
- Federally Threatened ("FT")
- Federally Proposed as Endangered ("FPE")
- Federally Proposed as Threatened ("FPT")
- Federally Proposed for Delisting ("FPD")
- Federal Candidate for a Proposed Species ("FC")

Migratory Bird Treaty Act

The Migratory Bird Treaty Act ("MBTA") protects individuals as well as any parts, nests, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.) and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

Federal Clean Water Act, Section 404

Section 404 of the Clean Water Act ("CWA") regulates the discharge of dredged or fill material into Waters of the U.S. and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Implementing regulations for the CWA define Waters of the U.S. 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." The permit review process entails an assessment of potentially adverse impacts to U.S. Army Corps of Engineers ("USACE") jurisdictional Waters of the United States.

Over the years, the USACE 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 these Waters of the U.S. will be regulated.

On January 15, 2003, the USACE and USEPA issued a Joint Memorandum to provide clarifying guidance regarding the United States Supreme Court ruling in the *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*, No. 99-1178 (January 9, 2001) ("the SWANCC ruling"), (Federal Register: Vol. 68, No. 10.). This ruling held that the CWA does not give the federal government regulatory authority over non-navigable, isolated, intra-

state waters. As a result of this decision, some previously regulated depressional areas such as mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes, natural ponds, and vernal pools, which are not hydrologically connected to other intra- or inter-state "waters of the U.S.," were no longer regulated by the USACE.

Significant modification occurred on June 5, 2007, subsequently updated in December 2008, when the USACE and the U.S. Environmental Protection Agency ("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 of 1899. 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 U.S. 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*").

The *Rapanos* case outlines the conditions and criteria used by the USACE to assess and claim jurisdiction over non-isolated, 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 Traditional Navigable Water ("TNW")." 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. For drainage features that do not meet the significant nexus criteria, a significant nexus determination is provided by the USACE to the USEPA for the final determination of federal jurisdiction. In response to *Rapanos*, the USACE and USEPA updated their instructions to aid field staff in completing the Jurisdictional Determination form.[120]

On June 29, 2015, the USEPA and the USACE adopted a revised definition of "Waters of the United States," generally expanding those features that were deemed to conform to the term.[121]

In 2019, the USEPA again proposed revisions to the definition of a Waters of the United States ("WOTUS") regulated under the Federal Clean Water Act. The proposed definition would clarify six classes of jurisdictional features, including traditional navigable waters, non-ephemeral tributaries, certain ditches, certain lakes and ponds, impoundments of other waters as defined, and features adjacent to other waters as defined that possess a non-ephemeral surface water connection.[122] Any features not conforming to this definition would be non-jurisdictional.

[120] Source: United States Army Corps of Engineers: U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. Available at: https://www.nap.usace.army.mil/Portals/39/docs/regulatory/jd/jd_guidebook_051207final.pdf.
[121] Source: United States Federal Register. Available at: https://www.federalregister.gov/documents/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states.
[122] Source: United States Environmental Protection Agency: Revised Definition of ''Waters of the United States.'' Available at: https://www.epa.gov/sites/production/files/2019-02/documents/revised_definition_of_waters_of_the_united_states.pdf.

On April 21, 2020, the EPA and Department of the Army published a final rule in the Federal Register to update the definition of WOTUS.[123] The rule explicitly excludes "ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools."

On August 30, 2021, the U.S. District Court for the District of Arizona ordered the vacating and remanding of the Navigable Waters Protection Rule in the case of *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*.[124] In light of this order, the agencies have halted implementation of the Navigable Waters Protection Rule ("NWPR") nationwide and are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice.

As of November 18, 2021, the agencies propose to put back into place the pre-2015 definition of "waters of the United States," updated to reflect consideration of Supreme Court decisions. This familiar approach would support a stable implementation of "waters of the United States" while the agencies continue to consult with states, tribes, local governments, and a broad array of stakeholders in both the current implementation and future regulatory actions.

On January 24, 2022, the United States Supreme Court granted review of *Sackett v. U.S. EPA* (No. 21-454) to consider whether the Ninth Circuit Court of Appeals set forth the proper test for determining whether wetlands constitute "waters of the United States" under the federal Clean Water Act. (33 U.S.C. § 1362(7).) Sackett urges the United States Supreme Court to adopt the four-member plurality in *Rapanos*, which would allow regulation of wetlands only when they have a continuous surface water connection to regulated waters of the United States. Oral arguments were heard on October 3, 2022. On May 25, 2023, a five-member majority of the United States Supreme Court again revised the definition of a "waters of the United States" to that definition earlier urged by the four-member minority in the 2008 *Rapanos* decision – any body of water with a "continuous surface connection" to a navigable waterway serving as a channel for interstate commerce.

The definitions of "Waters of the United States" are set forth in Code of Federal Regulations, Title 40, Chapter I, Subchapter D, part 120, Section 120.2.[125] They read in pertinent part that "[e]phemeral features, including ephemeral streams, swales, gullies, rills, and pools" are "non-jurisdictional waters."

Federal Clean Water Act, Section 401

The mission of the RWQCB is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the state's waters, recognizing local differences

[123] Source: United States Federal Register: The Navigable Waters Protection Rule: Definition of "Waters of the United States". Available at: https://www.federalregister.gov/documents/2020/04/21/2020-02500/the-navigable-waters-protection-rule-definition-of-waters-of-the-united-states.
[124] Source: United States Environmental Protection Agency. Available at: https://www.epa.gov/wotus/current-implementation-waters-united-states.
[125] Source: National Archives, Code of Federal Regulations. Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-120/section-120.2.

in climate, topography, geology, and hydrology. The California RWQCB is also responsible for implementing compliance not only with state codes such as the California Water Code, but also some federal acts such as Section 401 of the CWA. Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the state shall provide the federal permitting agency with a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal CWA. As such, before the USACE will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification ("WQC") from the RWQCB. The RWQCB regulates "discharging waste, or proposing to discharge waste, within any region that could affect "waters of the state" (Water Code Section 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act, which defines RWQCB jurisdictional "waters of the state" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)).

With the exception of isolated waters and wetlands, most discharges of fill to waters of the state are also subject to a CWA Section 404 permit. If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of Waste Discharge Requirements ("WDR") under the Porter-Cologne Water Quality Control Act. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of WDR's. However, projects that obtain a Section 401 WQC are simultaneously enrolled in a statewide general WDR. Processing of Section 401 WQC's generally requires submittal of 1) a construction storm water pollution prevention plan ("SWPPP"), 2) a final water quality technical report that demonstrates that post-construction storm water Best Management Practices ("BMPs") comply with the local design standards for municipal storm drain permits (MS4 permits) implemented by the State Water Resources Control Board effective January 1, 2011, and 3) a conceptual Habitat Mitigation and Monitoring Plan to compensate for permanent impacts to RWQCB waters, if any. In addition to submittal of a draft CEQA document, a WQC application typically requires a discussion of avoidance and minimization of impacts to RWQCB jurisdictional resources, and efforts to protect beneficial uses as defined by the local RWQCB basin plan for the project. The RWQCB cannot issue a Section 401 WQC until the project CEQA document is certified by the Lead Agency.

State Regulation

State of California Fish and Game Code, Sections 2050 et seq. - California Endangered Species Act

The California Endangered Species Act ("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."

California 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 required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."

Candidate species are defined 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."

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating that "no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided. Under the CESA, "take" is defined as, "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

According to the California Department of Fish and Wildlife, the following listings denote those species that have been designated as "sensitive":[126]

- State Listed – Endangered ("SE")
- State Listed – Threatened ("ST")
- State Listed – Rare ("SR")
- Federally Listed – Endangered ("FE")
- Federally Listed – Threatened ("FT")

Pursuant to Fish and Game Code Section 2062, an "endangered" species is defined 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."

Pursuant to Fish and Game Code Section 2067, a "threatened" species is defined 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."

[126] Source: California Department of Fish and Wildlife: State and Federally Listed Endangered, Threatened, and Rare Plants of California, September 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.

Pursuant to Fish and Game Code Section 1901, a species is "rare" when "although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens."

The following designation denotes "candidate" species that could be designated as "sensitive":

- State Candidate for Listing ("SC")

Pursuant to Fish and Game Code Section 2068, a "candidate" species is defined 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."

The following designation denotes species that have been designated to have "special status" apart from those that are listed as endangered, threatened or rare, or candidate for listing for one of these designations:

- California Species of Special Concern ("SSC")
- Any other species conforming to the criteria in State CEQA Guidelines Section 15380, as determined by the CDFW through their inclusion in the "Special Vascular Plants, Bryophytes and Lichens List"[127] or "Special Animals List."[128]

The California Endangered Species Act does not provide statutory protection for SSC or other unlisted species, and these species are not considered to be "sensitive" or "candidate." However, they are considered during the CEQA environmental review process as "special status" species.

The following designation denotes a species that is at risk of becoming "special status" but is not currently:

- California Watch List ("WL")

Such species do not yet meet criteria for special status or were previously designated but no longer warrant special status. However, monitoring by the CDFW is indicated to establish whether the criteria will be met in the future. Watch list species are not considered to be "sensitive," "candidate," or "special status" species and need not be addressed during the CEQA environmental review process.

State of California Fish and Game Code, Sections 3511, 4700, 5050, and 5515 – State Fully Protected Species

The State classifies certain animals as Fully Protected ("FP") in Section 3511 of the State Fish and Game Code. This classification was the state's initial effort in the 1960s to identify and

[127] Source: California Department of Fish and Wildlife: Special Vascular Plants, Byrophytes, and Lichens List, September 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.
[128] Source: California Department of Fish and Wildlife: Special Animals List, July 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline.

provide additional protection to certain species that were rare or faced possible extinction. Lists were made for fish, mammals, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or federal ESAs. Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code state that Fully Protected species (birds, mammals, fish, reptiles, amphibians) or parts thereof may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

State of California Fish and Game Code, Section 2800-2835 – Natural Community Conservation Planning Act of 1991, as Amended

The Natural Community Conservation Planning Act of 1991, as amended in 2003, established the Natural Community Conservation Planning ("NCCP") program for the protection and perpetuation of the State's biological diversity. The CDFW established the program in order to conserve natural communities at the ecosystem level while accommodating compatible land use. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The CDFW provides support, direction, and guidance to participants in order to ensure that NCCPs are consistent with the CESA.

State of California Fish and Game Code, Section 3503/3503.5/3513

Section 3503 of the California Fish and Game Code states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3513 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

State of California Fish and Game Code, Section 4150

Section 4150 of the California Fish and Game Code states that "[a]ll mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals, are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission."

State of California Fish and Game Code, Sections 1900-1913 – Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The Native

Plant Protection Act provides limitations that no person would import into the State—or take, possess, or sell within the State—any rare or endangered native plant, except in compliance with provisions of the Native Plant Protection Act. Where individual landowners have been notified by the CDFW that rare or native plants are growing on their land, the landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

State of California Fish and Game Code, Section 1602

Streambeds and other drainages that occur within the unincorporated areas are subject to regulation by the CDFW. Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will 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 to notify the CDFW of the proposed project. In the course of this notification process, the CDFW will review the proposed project as it affects streambed habitats within the project area. The CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

State of California Code of Regulations, Sections 250 and 251.1

Section 250 of the California Fish and Game Code states that "[e]xcept as otherwise authorized in these regulations or in the Fish and Game Code, resident game birds, game mammals and furbearing mammals may not be taken at any time." Section 251.1 of the California Fish and Game Code states that "[e]xcept as otherwise authorized in these regulations or in the Fish and Game Code, no person shall harass, herd or drive any game or nongame bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering. This section does not apply to a landowner or tenant who drives or herds birds or mammals for the purpose of preventing damage to private or public property, including aquaculture and agriculture crops." Activities that result in the take or harassment of a nongame mammal may also be considered in violation of this code.

Porter-Cologne Water Quality Control Act

If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of Waste Discharge Requirements under the Porter-Cologne Water Quality Control Act for discharges of materials other than community sewer system discharges governed by an NPDES permit.

Local Regulation

Significant Ecological Areas

The County's Significant Ecological Area ("SEA") Program began in 1980 with the adoption of SEAs as Special Management Areas in the County General Plan. The objective of the SEA

Program is to preserve the genetic and physical ecological diversity of Los Angeles County by designing biological resource areas capable of sustaining themselves into the future. The SEA designation is given to land that contains biological resources and includes undisturbed or lightly disturbed habitats that support valuable and threatened species and linkages and corridors to promote species movement.

SEAs are not wilderness preserves, and much of the land within SEAs is privately held, used for public recreation or abuts developed areas. The SEA Program is intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible with the long-term survival of the SEAs. The County regulates development within the SEAs with the SEA Conditional Use Permit process.

Hillside Management Areas

The County of Los Angeles Hillside Management Area ("HMA") Ordinance applies to all unincorporated areas of Los Angeles County that contain terrain with a natural slope of 25 percent or greater. The goal of the ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character. Locating development outside of HMAs is encouraged to the greatest extent feasible. Where avoidance is not feasible, development of HMAs is encouraged to be sited downslope to minimize visual impacts, and use flatter areas to the greatest extent feasible to minimize grading. Non-exempt development is required to choose from a menu of options of sensitive hillside design techniques, with satisfaction of a certain number in each category establishing successful compatibility.

Oak Tree Ordinance

The County Oak Tree Ordinance (County Code Sections 22.56.2050, *et seq*.) applies to all unincorporated areas. The Oak Tree Ordinance requires that a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus that is 25 inches or more in circumference (8 inches in diameter) as measured 4.5 feet above mean natural grade, or in the case of an oak with more than one trunk, 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 (i.e. diameter at breast height), or (b) any tree that has been provided as a replacement tree, without first obtaining an oak tree permit substantiating certain findings.

Oak Woodlands Conservation Act and Oak Woodlands Conservation Management Plan

As described in the County's Oak Woodlands Conservation Management Plan Part I ("Voluntary Oak Woodlands Conservation Strategy for Los Angeles County"), "The Oak Woodlands Conservation Act (2001) created the Oak Woodlands Conservation Program administered by the Wildlife Conservation Board. The specific legislation focuses these efforts on the following:
1. Support and encourage voluntary, long-term private stewardship and conservation of California oak woodlands by offering landowners financial incentives to protect and promote biologically functional oak woodland;

2. Provide incentives to protect and encourage farming and ranching operations that are operated in a manner that protect and promotes healthy oak woodland;
3. Provide incentives for protection of oak trees providing superior wildlife values on private land; and
4. Encourage planning that is consistent with oak woodlands preservation."

Part II of the Plan established recommendations for a variety of further actions subject to evaluation by Regional Planning and "normal public review and/or hearing processes." Most of these recommendations have not been implemented, and no public review and/or hearing processes have occurred for any of these recommendations. Part II contains suggested, qualitative guidance as it concerns CEQA analysis, which has, however, not been adopted into the County CEQA Guidelines. These include Section V.2 (addressing CEQA evaluation of oak woodlands conversion and providing recommendations regarding thresholds of significance and impact magnitude evaluation); Section V.3 (providing recommendations regarding cumulative impact evaluation); Section V.7 (providing recommendations for restoration mitigation); and Section V.8 (providing recommendations for successful mitigation monitoring strategies).

Oak Woodlands Conservation Management Plan Guide

The Guide was a supplementary effort to the Plan Part I ("Voluntary Oak Woodlands Conservation Strategy for Los Angeles County") and II ("Planning and Implementation Elements of the Oak Woodlands Conservation Management Plan"). The Guide lays out a process intended to determine on a case-by-case basis, using reasonable judgment of qualitative criteria applied at Regional Planning's discretion, when to apply the mitigating provisions of CEQA Section 21083.4.

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with these policies, including any related to biological resources, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

Other Framework

California Native Plant Society Rank

The California Native Plant Society ("CNPS") is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, and endangered vascular plant species of California. The list has served as a potential candidate list for listing as Threatened and Endangered by CDFW.

CNPS has developed five categories of rarity, referred to as California Rare Plant Ranks ("CRPRs"), of which CRPRs 1A, 1B, 2A, 2B, and 3 are defined as "sensitive":

- CRPR 1A: Presumed Extirpated in California and either Rare or Extinct elsewhere.
- CRPR 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.
- CRPR 2A: Presumed Extirpated in California, but more common elsewhere.
- CRPR 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- CRPR 3: Plants of problematic taxonomy about which more information is needed, but that most likely conform to the criteria for listing as rare, threatened or endangered.

Like the California Watch List species, plants with a CRPR rating of 4 are subject to monitoring by the CNPS to determine whether they may become designated as "sensitive" in the future. Watch list species are not considered to be "sensitive," "candidate," or "special status" species.

- CRPR 4 Plants of limited distribution – a watch list.

Some constituents of the CNPR watch list include native plants that are available as nursery stock and encountered in nearby residential landscaping, including matilija poppy, monkeyflower species, and morning glory species.

The CNPS appends CRPR categorizations with "threat ranks" added as a decimal code after the CRPR (e.g., CRPR 1B.1). The threat codes are defined as follows:

- .1 – Most pressured (over 80% of occurrences estimated to be threatened in the future);
- .2 – Moderately pressured (20 – 80% of occurrences estimated to be threatened in the future);
- .3 – Least pressured (<20% of occurrences estimated to be threatened in the future).

NatureServe Conservation Rank

In addition to designations for individual species, rankings are also applied to plant "communities," or "associations," or "alliances," or "taxon" of two or more species. The California Natural Diversity Database ("CNDDB") uses a ranking methodology originally developed by The Nature Conservancy and now maintained by NatureServe. It includes a Global rank ("G-rank"), describing the rank for a given taxon over its entire distribution, and a State rank ("S-rank"), describing the rank for the taxon over its state distribution. For subspecies and varieties, there is also a "T" rank describing the global rank for the infraspecific taxon. Procedurally, state programs such as the CNDDB develop the State ranks. The Global ranks are determined collaboratively among the Heritage Programs for the states/provinces containing the species. NatureServe then checks for consistency and logical errors at the national level. Because the units of conservation may include non-taxonomic biological entities such as populations or ecological communities, NatureServe refers to the targets of biological conservation as elements rather than taxa.

An element rank is assigned using standard criteria and rank definitions. This standardization makes the ranks comparable between organisms and across political boundaries. NatureServe has developed a "rank calculator" to help increase repeatability and transparency of the ranking process. The three main categories that are taken into consideration when assigning an element

rank are rarity, threats, and trends. Within these three categories, various factors are considered, including:

- Range extent, area of occupancy, population size, total number of occurrences, environmental specificity and number of good occurrences (ranked A or B).
- Overall threat impact as well as intrinsic vulnerability (if threats are unknown).
- Long-term and short-term trends.

The criteria used to assign State rank from S1 to S5 are as follows:[129]

- SX: Presumed Extirpated - Species or ecosystem is believed to be extirpated from the jurisdiction (i.e., nation, or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. Equivalent to "Regionally Extinct" in IUCN Red List terminology.
- SH: Possibly Extirpated - Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.
- S1: Critically Imperiled - At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- S2: Imperiled - At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- S3: Vulnerable - At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- S4: Apparently Secure - At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors
- S5: Secure - At very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.

According to the CDFW, "Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA."[130]

5.4.3 Existing Conditions

Sensitive Plant Communities and Designated Species

[129] Source: NatureServe. Available at: http://help.natureserve.org/biotics/Content/Record_Management/Element_Files/Element_Ranking/ERANK_Assigned_Rank.htm.
[130] Source: California Department of Fish and Wildlife: Sensitive Natural Communities. Available at: https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive%20natural%20communities.

The methods used to inventory the existing biological resources on the project parcel include literature review by qualified professionals, field surveys by qualified professionals, aerial photography, and relevant policy and planning documents. The literature review included information available in biological references[131,132,133,134,135] and relevant lists and databases pertaining to the status and known occurrences of resources designated for analysis under CEQA, including the following:

- California Natural Diversity Database ("CNDDB") for the 7.5' USGS Pasadena quadrangle and eight surrounding quadrangles[136];
- California Native Plant Society ("CNPS") Inventory of Rare and Endangered Vascular Plants of California report for the 7.5' USGS Pasadena quadrangle[137] and eight surrounding quadrangles[138];
- Biogeographic Information and Observation System ("BIOS") Mapper for Critical and Predicted Habitat[139];
- Critical Habitat Mapper for Threatened and Endangered Species[140];
- Wildlife Service Information for Planning and Consultation ("IPAC")[141];
- National Wetlands Inventory Wetlands Mapper[142];
- List of Special Vascular Plants, Bryophytes, and Lichens[143];
- List of Vegetation Alliances and Associations (Natural Communities List)[144]; and
- Special Animals List.[145]

[131] Baldwin B.W. et al. (eds.). 2012. The Jepson Manual – Vascular Plants of California. University of California Press.
[132] Sawyer, Keeler-Wolf, and Evens. 2009. A Manual of California Vegetation. Second Edition. California Native Plant Society.
[133] Reid, F.A. 2006. A Field Guide to Mammals of North America, Fourth Edition. Houghton Mifflin.
[134] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin.
[135] Skinner, M.W. and B.M. Pavlik, eds. 1994. California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California. Sacramento, CA: California Native Plant Society.
[136] Source: California Department of Fish and Wildlife: California Natural Diversity Database. Available at: https://www.wildlife.ca.gov/Data/CNDDB.
[137] Source: California Native Plant Society: Plant List for Pasadena Quadrangle. Available at: http://www.rareplants.cnps.org/result.html?adv=t&quad=3411822.
[138] Source: California Native Plant Society: Plant List for Nine Quadrangles Surrounding Pasadena Quadrangle Available at: http://www.rareplants.cnps.org/result.html?adv=t&quad=3411833:3411832:3411831:3411823:3411821:3411813:3411812:3411811.
[139] Source: California Department of Fish and Wildlife: Biogeographic Information and Observation System. Available at: https://apps.wildlife.ca.gov/bios/.
[140] Source: United States Fish and Wildlife Service: USFWS Threatened & Endangered Species Active Critical Habitat Report. Available at: https://ecos.fws.gov/ecp/report/table/critical-habitat.html.
[141] Source: United States Fish and Wildlife Service: Information for Planning and Consultation. Available at: https://ecos.fws.gov/ipac/.
[142] Source: United States Fish and Wildlife Service: National Wetlands Inventory. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.
[143] Source: California Department of Fish and Wildlife: Special Vascular Plants, Bryophytes, and Lichens List, September, 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383.
[144] Source: California Department of Fish and Wildlife: California Natural Community List, September 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[145] Source: California Department of Fish and Wildlife: Special Animals List, July 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline.

Table 5-4: Field Surveys of Project Parcel

Date	Purpose	Personnel
03/28/24	Biological Resources Assessment Survey	Brandon Lotts, biologist
11/1/18	Oak Tree Survey	Scott McAllaster, arborist
5/29/18	Biological Resources Assessment Survey	Bruce Eilerts, biologist
4/14/16	Oak Tree Survey	Scott McAllaster, arborist
5/10/14	Oak Tree Survey	Scott McAllaster, arborist

Two plant communities exist on the project parcel (*see* Biological Resources Assessment Report in Section 11 Appendix D). Coast Live Oak Woodlands has a state rarity of S4,[146] indicating apparent security. California Sagebrush Scrub has a state rarity rank of S5, indicating security. While oak trees and oak woodlands are afforded protections under the Oak Tree Ordinance and County General Plan, with a focus on impact minimization and adequate compensatory mitigation to ensure no net reduction in extent, they are not designated as a "sensitive" community in any duly adopted state or local plan. The un-adopted Part II of the County's Oak Woodlands Conservation Management Plan ("Planning and Implementation Elements of the Oak Woodlands Conservation Management Plan") states that "[t]here is currently no oak species occurring within Los Angeles County that is considered a special status species by CDFG. The valley oak and the Engelmann oak are considered by the County to be locally sensitive species."[147] No other oak species naturally occurring within the County are described in the County's Oak Woodlands Conservation Management Plan as "sensitive," "candidate" or "special-status." As such, no sensitive, candidate or special-status plant communities exist on the project parcel, as identified by local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

The proposed project is not located within the boundaries of any land designated or proposed for designation as critical habitat for any plant or animal species pursuant to the Federal or California Endangered Species Acts ("ESAs"), and there are no expected permit requirements pursuant to Section 10(a) of the federal ESA or Section 2081 of the State Fish and Game Code. (*See* Biological Resources Assessment Report in Section 11 Appendix D).

Though no critical habitat for any species is present on the project parcel, a process of probability filtering begins with the designated ("sensitive," "candidate" or "special-status") species with recorded occurrences in some part of the USGS 7.5-minute quadrangle in which the project is sited, or one of the nine adjacent USGS 7.5-minute quadrangles. From this list, reported occurrences within five miles are culled, which encompasses the regional, sub-regional and landscape scale habitat linkages and resource areas near the project parcel, including all of the Millard Canyon watershed; all of the Altadena Foothills and Arroyos SEA extending into the

[146] Source: California Department of Fish and Wildlife: California Natural Community List. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[147] Source: County Department of Regional Planning: County Oak Woodlands Conservation Management Plan, page 70. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.

Angeles National Forest and San Gabriel Mountains hub; all of the San Rafael Hills; and portions of the Verdugo Mountains SEA. From these, records are further distinguished for the extent to which they would be expected to diverge from present habitat conditions, considering effects from development and lifecycle time constants, for which a reported occurrence within the past 50 years is deemed to be an adequately inclusive cutoff for purposes of likelihood assessment. (Compare to the 20-year threat scope used by the California Department of Fish and Wildlife).[148] Together, these criteria for evaluating the potential for occurrence of a sensitive species are enumerated in Table 5-5: Criteria for Evaluating Potential Encounter of Designated Species.

Table 5-5: Criteria for Evaluating Potential Encounter of Designated Species

Potential	Criteria
None	Project habitat is not characteristic of this species to any plausible extent, and the probability for encounter is reasonably presumed to be negligible.
Low	Project habitat is of low quality for this species due to conflict with one or more characteristic attributes of quality habitat, or no natural occurrences are reported.
Moderate	Project habitat is of moderate quality for this species due to at least partial consistency with all characteristic attributes of quality habitat, and reported natural occurrences (excepting those designated as "extirpated" or pre-dating development of the habitat) for this species exist within five miles of the project parcel.
High	Species or sign directly observed during a qualified survey in the past ten years, either in connection with this project or another nearby project located within a home range of high-quality habitat for the species that is contiguous with the corresponding habitat area on the project parcel.

Using these criteria, species potential anywhere on the project parcel is addressed in describing existing environmental conditions. However, to facilitate subsequent analysis, this description distinguishes between that habitat which is directly affected by the project in the footprint of development and other habitat on the project parcel outside this footprint.

CNDDB-mapped record occurrences for all possibly extant species within five miles are mapped in the Biological Resources Assessment Report in Section 11 Appendix D. Each sensitive, candidate, or special status species with some record occurrence (regardless of the date of occurrence) in the Pasadena USGS 7.5-minute quadrangle and nine surrounding quadrangles is also addressed for its habitat potential on the project parcel in

[148] Source: California Department of Fish and Wildlife, Sensitive Natural Communities description. Available at: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities.

Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited, Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in Which the Project is Sited, Table 5-8: CNPS-Mapped Sensitive Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited, and Table 5-9: Additional CNPS-Mapped Sensitive Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in which the Project is Sited,.

Given the existence of some species with a non-negligible potential for encounter, a qualified biologist performed a reconnaissance level site survey to establish whether these species were present. This survey did not find on the project parcel any occurrence or sign of the designated species listed in Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited, Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in Which the Project is Sited, Table 5-8: CNPS-Mapped Sensitive Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited', and Table 5-9: Additional CNPS-Mapped Sensitive Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in which the Project is Sited'.

While the reconnaissance survey was reasonably dispositive of the presence of designated plant species and some animal species, the biologist determined that some species would nevertheless be expected to retain potential for encounter due to characteristic fluidity of movement and/or low detectability during any single survey. (*See* again Biological Resources Assessment Report in Section 11 Appendix D).

Protocol-level surveys as part of the Arroyo Seco Canyon Project occurred within one mile of the project parcel in 2013 and 2019, including in habitat communities similar to those found on the project parcel.[149] As to special-status wildlife species, the reported outcome of those protocol level surveys was that "[o]ne special-status wildlife species, yellow warbler (*Setophaga petechia*), was observed during the surveys in the Study Area. Four other species were recently observed during previous studies for the Project or adjacent projects: California newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondii*), southern California legless lizard (*Anniella stebbinsi*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*)."

[149] Source: City of Pasadena: Arroyo Seco Canyon Project Biological Resources Technical Report. Available at: https://ww5.cityofpasadena.net/water-and-power/wp-content/uploads/sites/54/2020/06/App-D_Biological-Resources-Tech-Report-2020.pdf.

Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited[150]

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
Plants			
Nevin's barberry (*Berberis nevinii*)	FE, SE, 1B.1	Preferred habitats include sandy and gravelly areas along margins of dry washes in the foothills of the Transverse and Peninsular Ranges below 2,000 feet in chaparral, coastal sage, cismontane woodland, and riparian scrub communities.[151] No USFWS-designated critical habitat near project parcel. Records indicate one reported occurrence within five miles of project parcel within the past 50 years. However, the record is annotated as "Transplant Outside of Native Habitat/Range."	Low potential along sandy, gravelly margins of canyon bottom given lack of reported natural occurrences. No potential in habitat affected by project footprint of development.
slender-horned spineflower (*Dodecahema leptoceras*)	FE, SE, 1B.1	Preferred habitats include flood deposited terraces and washes in chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub) at elevations between 600 and 2,000 feet.[152] No USFWS-designated critical habitat near project parcel. Records indicate no natural occurrences within five miles of project parcel within the past 50 years (last reported in 1922).	Low potential along sandy, gravelly margins of canyon bottom.
Birds			
least Bell's vireo (*Vireo bellii pusillus*)	FE, SE	Preferred habitats include lowland riparian woodlands, breeding in willow thickets and other dense, low riparian growth in lowlands and the lower portions of canyons, generally along permanent or semi-permanent streams. Migratory species present in spring/summer breeding season.[153] Nearest USFWS-designated critical habitat is in the Santa Clara River watershed over 30 miles northwest of project parcel. However, records indicate	Moderate nesting potential in riparian habitat near canyon bottom, with associated upland foraging. No nesting potential in habitat affected by project footprint of development.

[150] Source: California Department of Fish and Wildlife: California Natural Diversity Database. Available at: https://www.wildlife.ca.gov/Data/CNDDB.
[151] Source: California Department of Fish and Wildlife: Nevin's Barberry. Available at: https://www.wildlife.ca.gov/Conservation/Plants/Endangered/Berberis-nevinii.
[152] Source: California Department of Fish and Wildlife: Slender-horned Spineflower. Available at: https://www.wildlife.ca.gov/Conservation/Plants/Endangered/Dodecahema-leptoceras.
[153] Source: California Department of Fish and Wildlife: Species Accounts - Birds. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84008&inline.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
		one reported natural occurrence within five miles of project parcel in the last 50 years.	
burrowing owl (*Athene cunicularia*)	SSC	Preferred habitats include treeless grasslands with burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation. Special concern priority is the breeding season.[154] Records indicate no reported natural occurrences within five miles of project parcel within the past 50 years (last reported in 1895).	No potential on project parcel given lack of surrogate burrows or grasslands.
American peregrine falcon (*Falco peregrinus anatum*)	FP	Preferred habitats contain nesting sites on ledges of large cliff faces and mountains but can include sites in wetlands, woodlands, forested habitats, cities and agricultural areas.[155] Records indicate one reported natural occurrence within five miles of project parcel in the last 50 years.	No nesting potential on project parcel given disturbances and lack of preferred cliff face or elevated sites. Moderate potential for species to forage over the project site.
Amphibians			
southern mountain yellow-legged frog (*Rana muscosa*)	FE, SE	Preferred habitats include rocky, steep grade stream courses with sloping banks and rocks or vegetation to the water's edge; always encountered within a few feet of water.[156] Nearest USFWS-designated critical habitat over 10 miles northeast of project. Nearest extant populations are in Devil's Canyon more than 10 miles to the northeast of the project parcel. Records indicate no reported natural occurrences within five miles of project parcel within the past 50 years (last reported in 1936). The latest USFWS recovery plan for the San Gabriel populations identifies that the Arroyo Seco watershed as neither occupied habitat nor a potential reestablishment area.[157]	No potential in canyon bottom given lack of extant population or retained surface water year-round. No potential in habitat affected by project footprint of development.

[154] Source: California Department of Fish and Wildlife: Species Accounts – Burrowing Owl. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10405.
[155] Source: California Department of Fish and Wildlife: American Peregrine Falcon. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3826.
[156] Source: California Department of Fish and Wildlife: Mountain Yellow-legged Frog. Available at: https://www.wildlife.ca.gov/Regions/6/Amphibians/Mountain-Yellow-legged-Frog.
[157] Source: United States Fish and Wildlife Service: Draft Recovery Plan for the Southern California Distinct Population Segment of the Mountain Yellow-legged Frog (2018). Available at: https://ecos.fws.gov/docs/recovery_plan/RPI_Draft%20MYLF%20RP_2.pdf.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
Coast Range newt (*Taricha torosa*)	SSC	Preferred habitats are near streams in valley-foothill hardwood, coastal scrub and mixed chaparral, but is also known from annual grassland.[158] Records indicate at least one reported natural occurrence within five miles of project within the past 50 years.	High potential in riparian habitat of canyon bottom given detection in recent protocol surveys in the Arroyo Seco. Moderate potential in habitat affected by project footprint of development.
western spadefoot (*Spea hammondii*)	SSC	Preferred habitats are open areas with sandy or gravelly soils, including grasslands, chaparral, and sandy washes. Breeds in ponds, streams, and rain pools that do not contain bullfrogs and fish, which prey on tadpoles.	Moderate potential in canyon bottom and adjacent chaparral. Low potential in habitat affected by project footprint of development.
Mammals			
western mastiff bat (*Eumops perotis californicus*)	SSC	Preferred habitat includes extensive open space areas with abundant roost locations provided by crevices in rock outcrops and buildings with a vertical drop of ten or more feet.[159] Records indicate reported natural occurrences within five miles of project within the past 50 years (though last reported in 1972).	No roosting potential on project parcel due to lack of creviced rock outcrops with vertical drops. Moderate potential for species to forage at night in air above project parcel.
pallid bat (*Antrozous pallidus*)	SSC	Preferred habitats include rocky outcrops, cliffs and crevices with access to open habitats for foraging.[160] Records indicate no reported natural occurrences within five miles of project parcel within the past 50 years.	No roosting potential on project parcel given lack of cliffs or creviced rock outcrops. Moderate potential for species to forage at night above parcel.
western yellow bat (*Lasiurus xanthinus*)	SSC	Preferred habitats include palm oases, desert washes and riparian habitats.[161] Records indicate one reported natural occurrence within five miles of project parcel within the past 50 years.	Low roosting potential in unaffected riparian habitat in canyon bottom. Moderate potential for species to forage above project parcel.
southern grasshopper mouse (*Onychomys torridus ramona*)	SSC	Preferred habitats include alkali desert scrub, uncommon in valley foothill and	No potential on project parcel given lack of preferred alkali desert scrub habitats.

[158] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – California Newt. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1428.
[159] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Western Mastiff Bat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2357.
[160] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Pallid Bat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2349.
[161] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Western Yellow Bat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2343.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
		montane riparian environments.[162] Records indicate no reported natural occurrences within five miles of project parcel within the past 50 years.	
Reptiles			
southern California legless lizard (*Anniella stebbinsi*)	SSC	Preferred habitats include coastal dune, valley-foothill, chaparral, and coastal scrub, with sandy or loose organic soils or where there is plenty of leaf litter. This species is secretive and does not take habitat near disturbance.[163] Records indicate at least one natural occurrence within five miles of project parcel within the past 50 years.	High potential in leaf litter adjacent to canyon bottom away from roadway disturbance given detection in recent protocol surveys in the Arroyo Seco. Low potential in habitat affected by project footprint of development given roadway disturbance.
western pond turtle (*Emys marmorata*)	SSC	Preferred habitats include permanent or nearly permanent streams and lakes.[164] Records indicate one reported natural occurrence within five miles of project within the past 50 years (though the last was in 1971).	No potential on project parcel given lack of permanent streams, lakes, or spring-fed portions of same.
coast horned lizard (*Phrynosoma blainvillii*)	SSC	Preferred habitats include open country, especially sandy areas, washes, flood plains and wind-blown deposits where it can both sun and bury itself to modulate temperature.[165] Records indicate one reported natural occurrence within five miles of project within the past 50 years (though the last was in 1972).	Low potential in sandy margins of canyon bottom. No potential in habitat affected by project footprint of development.
Invertebrates			
Crotch's Bumble Bee (*Bombus crotchii*)		Preferred habitats include open grasslands, shrublands, and chaparral.	Moderate potential on project parcel given presence of chaparral.

[162] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Southern Grasshopper Mouse. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2513.
[163] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – California Legless Lizard. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2733.
[164] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Western Pond Turtle. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2657.
[165] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System –Coast Horned Lizard. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=17641.

Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in Which the Project is Sited[166]

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
Plants			
Gambel's water cress (*Nasturtium gambelii*)	FE, ST, 1B.1	Preferred habitats include coastal/inland wetland/marsh. The last known remaining wild population occurs at Vandenburg Air Force Base.[167] No USFWS-designated critical habitat near project. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no wetland/marsh).
marsh sandwort (*Arenaria paludicola*)	FE, SE, 1B.1	Preferred habitats include marshes, swamps and areas that are wet year-round. The last known remaining wild population occurs at Oso Flaco Lake in San Luis Obispo County.[168] No USFWS-designated critical habitat near project. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no marsh/swamp).
Braunton's milk-vetch (*Astragalus brauntonii*)	FE, 1B.1	Preferred habitats include recent burns or disturbed areas, usually sandstone with carbonate layers in closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland at elevations between sea level and 2,000 feet.[169] Nearest USFWS-designated critical habitat over 10 miles to the east. Records indicate	No potential on project parcel given lack of preferred sandstone or carbonate layers.

[166] Source: California Department of Fish and Wildlife: California Natural Diversity Database. Available at: https://www.wildlife.ca.gov/Data/CNDDB.
[167] Source: California Department of Fish and Wildlife: Gambel's Water Cress. Available at: https://www.wildlife.ca.gov/Conservation/Plants/Endangered/Nasturtium-gambelii.
[168] Source: California Department of Fish and Wildlife: Marsh Sandwort. Available at: https://www.wildlife.ca.gov/Conservation/Plants/Endangered/Arenaria-paludicola.
[169] Source: California Native Plant Society: Braunton's milk-vetch. Available at: http://www.rareplants.cnps.org/detail/296.html.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
		reported natural occurrences within the past 50 years.	
San Fernando Valley spineflower (*Chorizanthe parryi var. fernandina*)	SE, 1B.1	Preferred habitats include sandy soils in upland coastal sage scrub and valley and foothill grassland at elevations between 500 and 4,000 feet.[170] No CHWR predicted habitat near project. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel, as species was historically limited to San Fernando and Santa Clarita valleys.
Birds			
southwestern willow flycatcher (*Empidonax traillii extimus*)	FE, SE	Preferred habitats include riparian woodland along streams and in meadows with saturated soil and dense vegetation. Migratory species present in spring/summer breeding season.[171] Nearest USFWS-designated critical habitat is in the Big Tujunga Creek watershed over 10 miles northwest of project parcel. Records indicate no reported natural occurrences within the past 50 years (last reported in 1906).	Moderate nesting potential in riparian habitat near canyon bottom, with associated upland foraging. Low nesting potential in habitat affected by project footprint of development.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, SE	Preferred habitats include dense, large tracts of riparian woodlands with well-developed understories with willows near water's edge.[172] No USFWS-designated critical habitat near project site. Records indicate no reported natural occurrences within the past 50 years.	No potential in canyon bottom given intermittent nature of stream and lack of willows. No potential in habitat affected by project footprint of development.
coastal California gnatcatcher	FT, SSC	Preferred habitats include low, dense coastal scrub habitat in	Low potential on project parcel given lack of

[170] Source: California Native Plant Society: San Fernando Valley Spineflower. Available at: http://www.rareplants.cnps.org/detail/472.html.
[171] Source: California Department of Fish and Wildlife: Species Accounts - Birds. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84008&inline.
[172] Source: California Department of Fish and Wildlife: Species Accounts - Birds. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84008&inline.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
(*Polioptila californica californica*)		arid washes, on mesas, and on slopes of coastal hills.[173] No USFWS-designated critical habitat near project site. Records indicate reported natural occurrences within the past 50 years.	extensive coastal scrub habitat.
yellow rail (*Coturnicops noveboracensis*)	SSC	Preferred habitats include densely vegetated marshes.[174] Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no marshes).
Fish			
Santa Ana sucker (*Catostomus santaanae*)	FT	Preferred habitats include perennial streams with gravel or rubble substrate.[175] Records indicate reported natural occurrences only in the perennial Big Tujunga Creek.	No potential on project parcel (no fish-bearing or perennial streams).
Santa Ana Speckled dace (*Rhinichthys osculus ssp. 3*)	SSC	Preferred habitats include perennial streams fed by cool springs.[176] Records indicate reported natural occurrences only in the perennial Big Tujunga Creek.	No potential on project parcel (no fish-bearing or perennial streams).
arroyo chub (*Gila orcuttii*)	SSC	Preferred habitats include shallow coastal streams and pools.[177] Records indicate reported natural occurrences only in the perennial Big Tujunga Creek.	No potential on project parcel (no fish-bearing or perennial streams).
Amphibians			

[173] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – California Gnatcatcher. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2235.
[174] Source: California Department of Fish and Wildlife: Species Accounts – Yellow Rail. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10396.
[175] Source: United States Fish and Wildlife Service: Draft Recovery Plan for the Santa Ana Sucker. Available at: https://www.govinfo.gov/content/pkg/GOVPUB-I49-PURL-gpo71645/pdf/GOVPUB-I49-PURL-gpo71645.pdf.
[176] Source: California Department of Fish and Wildlife: Santa Ana Speckled Dace. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=104372&inline.
[177] Source: California Department of Fish and Wildlife: Arroyo Chub. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=104270.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
Arroyo toad (*Anaxyrus californicus*)	FE, SSC	Preferred habitats include low gradient, medium-to-large streams and rivers with sandy bottoms and perennial flow or intermittent flow with pooling in semi-arid coastal and desert drainages.[178] Nearest USFWS-designated critical habitat in the perennially flowing Big Tujunga Creek over 5 miles north of project parcel. Populations in the Arroyo Seco watershed are believed to be extirpated according to the most recent five-year review.[179] Records indicate reported natural occurrences in the perennial Big Tujunga Creek and its tributaries and the perennial San Gabriel River.	Low potential in canyon bottom given lack of extant population or retained surface water year-round. No potential in habitat affected by project footprint of development
Mammals			
Townsend's big-eared bat (*Corynorhinus townsendii*)	SSC	Preferred habitats include mesic environments. Requires caves, mines, tunnels, or human-made structures for roosting.[180] Records indicate reported natural occurrences within past 50 years.	No potential on project parcel due to lack of roosting habitat and perennial mesic features.
western red bat (*Lasiurus blossevillii*)	SSC	Preferred habitats include grasslands, shrublands, open woodlands and forests. Roosts in trees adjacent to streams and fields, protected from above, open below, and located above dark ground-cover.[181] Records	Moderate potential in trees in and adjacent to riparian canyon bottom. Low potential in habitat affected by project footprint of development.

[178] Source: United States Fish and Wildlife Service: Arroyo Toad Species Report. Available at: https://biologistshandbook.com/wp-content/uploads/2018/01/Arroyo-Toad-Final-Species-Report.pdf.
[179] Source: United States Fish and Wildlife Service: Arroyo Toad 5-Year Review: Summary and Evaluation, page 34. Available at: https://ecos.fws.gov/docs/five_year_review/doc2592.pdf.
[180] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Townsend's Big-eared Bat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2347.
[181] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Western Red Bat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2339.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
		indicate one reported natural occurrence within past 50 years.	
big free-tailed bat (*Nyctinomops macrotis*)	SSC	Preferred habitats include rugged, rocky terrain.[182] Records indicate reported natural occurrences within past 50 years.	No potential on project parcel given lack of rugged, rocky terrain.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	SSC	Preferred habitats include herbaceous and desert-shrub areas and open, early stages of forest and chaparral habitats.[183] Records indicate one reported natural occurrence within past 50 years.	Low potential on project parcel given lack of open chaparral habitat.
south coast marsh vole (*Microtus californicus stephensi*)	SSC	Preferred habitats include tidal marshes, wetlands and associated grasslands in the immediate coastal zone.[184] Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no tidal marshes).
American badger (*Taxidea taxus*)	SSC	Preferred habitats include herbaceous, shrub, and open stages of most habitats with dry, friable soils.[185] Records indicate no reported natural occurrences within past 50 years.	Moderate potential on project parcel given suitable habitat and large home range.
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Preferred habitats include Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush and most desert habitats.[186] Records indicate reported natural	Moderate potential on project parcel in chaparral. Low potential in habitat affected by project footprint of development.

[182] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Big Free-tailed Bat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2355.
[183] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Black-tailed Jackrabbit. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2375.
[184] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – California Vole. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2537.
[185] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – American Badger. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2597.
[186] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Desert Woodrat. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2521.

Species	Status	Habitat Requirements and Records	Potential in Habitat on Project Parcel
		occurrences within past 50 years.	
Reptiles			
California glossy snake (*Arizona elegans occidentalis*)	SSC	Preferred habitats include desert and open, sandy areas with scattered brush, and rocky areas.[187] Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel due to lack of preferred open, sandy habitat.
two-striped gartersnake (*Thamnophis hammondii*)	SSC	Preferred habitats include permanent or semi-permanent bodies of water bordered by dense vegetation.[188] Records indicate reported natural occurrences within past 50 years.	High potential in riparian habitat on project site given detection in recent protocol surveys in the Arroyo Seco. Low potential in habitat affected by project footprint of development given lack of dense vegetation and distance from canyon bottom.
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC	Preferred habitats include washes and other sandy areas with patches of brush and rocks. Records indicate reported natural occurrences within past 50 years.	High potential along sandy, gravelly margins of canyon bottom given detection in recent protocol surveys in the Arroyo Seco. Moderate potential in habitat affected by project footprint of development.

[187] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Glossy Snake. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2763.
[188] Source: California Department of Fish and Wildlife: California Wildlife Habitat Relationships System – Two-striped Gartersnake. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2809.

Table 5-8: CNPS-Mapped Sensitive Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited[189,190]

Species	Status	Habitat Requirements and Records[191]	Potential in Habitat on Project Parcel
southern tarplant (*Centromadia parryi ssp. australis*)	1B.1	Preferred habitats include the margins of marshes and swamps, vernally mesic grassland, and vernal pools. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	No potential on project parcel (no marsh or vernal pools).
smooth tarplant (*Centromadia pungens ssp. laevis*)	1B.1	Preferred habitat includes alkaline soils in chenopod scrub, meadows and seeps, playas, riparian oak woodland, and valley and foothill grassland. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	No potential on project parcel given lack of suitable soils.
Parry's spineflower (*Chorizanthe parryi var. parryi*)	1B.1	Preferred habitat includes sandy or rocky terrain in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	Low potential in more intact habitat on project parcel.
Los Angeles sunflower (*Helianthus nuttallii ssp. parishii*)	1A	Preferred habitat includes coastal salt and freshwater marshes and swamps. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	No potential on project parcel (no marsh or swamp).
mesa horkelia (*Horkelia cuneate var. puberula*)	1B.1	Preferred habitat includes sandy or gravelly maritime chaparral, cismontane woodland or coastal scrub. Records indicate no reported natural occurrences	Low potential in more intact habitat on project parcel

[189] Note: Where not already listed in CNDDB tables.
[190] Source: California Native Plant Society: Rare Plant Program 2017. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: http://www.rareplants.cnps.org.
[191] Source: California Native Plant Society. Available at: http://www.rareplants.cnps.org/.

Species	Status	Habitat Requirements and Records[191]	Potential in Habitat on Project Parcel
		within five miles of project parcel within past 50 years.	
Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*)	1B.1	Preferred habitat includes coastal salt marshes and swamps, playas and vernal pools. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	No potential on project parcel (no marsh or swamp).
San Gabriel linanthus (*Linanthus concinnus*)	1B.2	Preferred habitat includes rocky terrain in chaparral, lower montane coniferous forest and upper montane coniferous forest. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	Low potential in more intact habitat on project parcel.
white rabbit-tobacco (*Pseudognaphalium leucocephalum*)	2B.2	Preferred habitat includes sandy or gravelly terrain in chaparral, cismontane woodland, coastal scrub, and riparian woodland. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	Low potential in more intact habitat on project parcel.
Parish's gooseberry (*Ribes divaricatum var. parishii*)	1A	Preferred habitat includes riparian woodland. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	Low potential in riparian woodland on project parcel. No potential in habitat affected by project footprint of development.
salt spring checkerbloom (*Sidalcea neomexicana*)	2B.2	Preferred habitat includes alkaline soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub and playas. Records indicate no reported natural occurrences within five miles of project parcel within past 50 years.	No potential due to lack of suitable alkaline/salty soils.
Greata's aster (*Symphyotrichum greatae*)	1B.3	Preferred habitat includes broadleafed upland forest, chaparral, cismontane woodland, lower montane	Low potential in more intact habitat on project parcel. No potential in

Species	Status	Habitat Requirements and Records[191]	Potential in Habitat on Project Parcel
		coniferous forest, and riparian woodland. Records indicate one reported natural occurrence within five miles of project parcel within past 50 years.	habitat affected by project footprint of development.

Table 5-9: Additional CNPS-Mapped Sensitive Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in which the Project is Sited[192,193]

Species	Status	Habitat Requirements and Records[194]	Potential on Project Parcel
San Gabriel manzanita (*Arctostaphylos glandulosa ssp. gabrielensis*)	1B.2	Preferred habitat includes rocky chaparral. Records indicate reported natural occurrences within past 50 years.	Low potential on project parcel given lack of rocky habitat.
Ventura marsh milk-vetch (*Astragalus pycnostachyus var. lanosissimus*)	1B.1	Preferred habitat includes coastal dunes, coastal scrub, and the edges of salt or brackish marshes and swamps. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no marsh or swamp).
Parish's brittlescale (*Atriplex parishii*)	1B.1	Preferred habitat includes alkaline chenopod scrub, playas and vernal pools. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no playas or vernal pools).
Davidson's saltscale (*Atriplex serenana var. davidsonii*)	1B.2	Preferred habitat includes alkaline coastal bluff scrub and coastal scrub. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no coastal bluff scrub or alkaline soils).
round-leaved filaree (*California macrophylla*)	1B.2	Preferred habitat includes clay soils in cismontane woodland and valley and foothill grassland. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no clay soils).

[192] Note: Where not already listed in CNDDB tables.
[193] Source: California Native Plant Society, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: http://www.rareplants.cnps.org.
[194] Source: California Native Plant Society. Available at: http://www.rareplants.cnps.org/.

Species	Status	Habitat Requirements and Records[194]	Potential on Project Parcel
slender mariposa lily (*Calochortus clavatus var. gracilis*)	1B.2	Preferred habitat includes chaparral, coastal scrub, and valley and foothill grassland. Records indicate reported natural occurrences within past 50 years.	Low potential in more intact habitat on project parcel.
Palmer's mariposa lily (*Calochortus palmeri var. palmeri*)	1B.2	Preferred habitat includes mesic environments in chaparral, lower montane coniferous forest and meadows and seeps. Records indicate no reported natural occurrences within past 50 years.	Low potential in unaffected riparian habitat on project parcel. No potential in habitat affected by project footprint of development.
intermediate mariposa lily (*Calochortus weedii var. intermedius*)	1B.2	Preferred habitats include rocky, calcareous chaparral, coastal scrub, and valley and foothill grassland. Records indicate reported natural occurrences within past 50 years.	Negligible potential in more intact habitat on project parcel.
lucky morning-glory (*Calystegia felix*)	3.1	Preferred habitats include wetland marshes, meadows and seeps, and riparian scrub. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no marsh or seep).
Lewis' evening-primrose (*Camissoniopsis lewisii*)	3	Preferred habitats include sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, and valley and foothill grassland. Records indicate no reported natural occurrences within past 50 years.	Low potential in more intact habitat on project parcel.
Mt. Gleason paintbrush (*Castilleja gleasoni*)	1B.2	Preferred habitats include granitic chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	No potential on project parcel (project parcel below elevational range of species)
California sawgrass (*Cladium californicum*)	2B.2	Preferred habitats include meadows and seeps, and marshes and swamps. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no marsh or swamp).

Species	Status	Habitat Requirements and Records[194]	Potential on Project Parcel
Peruvian dodder (*Cuscuta obtusiflora var. glandulosa*)	2B.2	Preferred habitats include freshwater marshes and swamps. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no marsh or swamp).
many-stemmed dudleya (*Dudleya multicaulis*)	1B.2	Preferred habitats include clay soils in chaparral, coastal scrub and valley and foothill grassland. Records indicate no reported natural occurrences within past 50 years.	Low potential on project parcel given lack of preferred clay soils.
San Gabriel bedstraw (*Galium grande*)	1B.2	Preferred habitats include broadleafed upland forest, chaparral, cismontane woodland and lower montane coniferous forest. Records indicate reported natural occurrences within past 50 years.	Low potential in more intact habitat on project parcel.
vernal barley (*Hordeum intercedens*)	3.2	Preferred habitats include coastal dunes, coastal scrub, saline flats and depressions in valley and foothill grassland and vernal pools. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (coastal scrub or vernal pools).
California satintail (*Imperata brevifolia*)	2B.1	Preferred habitats include mesic areas in chaparral, coastal scrub, Mojavean desert scrub, alkali meadows and seeps, and riparian scrub. Records indicate one reported natural occurrences within past 50 years.	Low potential in unaffected riparian habitat on project parcel. No potential in habitat affected by project footprint of development.
San Gabriel linanthus (*Linanthus concinnus*)	1B.2	Preferred habitats include rocky openings in chaparral and lower and upper montane coniferous forest. Records indicate reported natural occurrences within past 50 years.	No potential on project parcel (project parcel below elevational range of species)
Orcutt's linanthus (*Linanthus orcutti*)	1B.3	Preferred habitats include openings in chaparral, lower montane coniferous forest and pinyon and juniper woodland.	No potential on project parcel (project parcel outside geographic range of species)

Species	Status	Habitat Requirements and Records[194]	Potential on Project Parcel
		Records indicate no reported natural occurrences within past 50 years.	
Peirson's lupine (*Lupinus peirsonii*)	1B.3	Preferred habitats include gravelly or rocky soil in Joshua tree woodland, lower and upper montane coniferous forest, and pinyon and juniper woodland. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (project parcel outside geographic range of species)
Davidson's bush-mallow (*Malacothamnus davidsonii*)	1B.2	Preferred habitats include chaparral, cismontane woodland, coastal scrub and riparian woodland. Records indicate reported natural occurrences within past 50 years.	Low potential in more intact habitat on project parcel.
prostrate vernal pool navarretia (*Navarretia prostrata*)	1B.1	Preferred habitats include mesic areas in coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no vernal pools)
short-joint beavertail (*Opuntia basilaris var. brachyclada*)	1B.2	Preferred habitats include chaparral, Joshua tree woodland, Mojavean desert scrub and pinyon and juniper woodland. Records indicate one reported natural occurrence within past 50 years.	No potential on project parcel (project parcel outside geographic range of species)
Rock Creek broomrape (*Orobanche valida ssp. valida*)	1B.2	Preferred habitats include granitic areas in chaparral and pinyon and juniper woodland. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (project parcel outside geographic range of species)
Brand's star phacelia (*Phacelia stellaris*)	1B.1	Preferred habitats include coastal dunes and scrub. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no coastal dunes).

Species	Status	Habitat Requirements and Records[194]	Potential on Project Parcel
southern mountains skullcap (*Scutellaria bolanderi ssp. austromontana*)	1B.2	Preferred habitats include mesic areas in chaparral, cismontane woodland, and lower montane coniferous forest. Records indicate no reported natural occurrences within past 50 years.	Low potential in unaffected riparian habitat on project parcel. No potential in habitat affected by project footprint of development.
western bristly scaleseed (*Spermolepis lateriflora*)	2A	Preferred habitats include rocky or sandy soil in Sonoran desert scrub. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no desert scrub).
San Bernardino aster (*Symphyotrichum defoliatum*)	1B.2	Preferred habitats are near ditches, streams and springs. Records indicate no reported natural occurrences within past 50 years.	Low potential in unaffected riparian habitat on project parcel. No potential in habitat affected by project footprint of development.
Sonoran maiden fern (*Thelypteris puberula var. sonorensis*)	2B.2	Preferred habitat includes perennial seeps and streams in meadows. Records indicate no reported natural occurrences within past 50 years.	No potential on project parcel (no perennial seeps or streams).

Wetlands and Riparian Habitat

The proposed project footprint of development would be everywhere more than 150 feet distant from the boundary of any riparian habitat, as designated by the USFWS National Wetlands Inventory.[195] (See Figure 5-9: Wetlands and Riparian Habitat at "Sub-regional" Scale). The USACE also performed a field survey as part of a wetland delineation determination and submitted a letter that the project does not require a Section 404 permit because it would not be expected to impact any jurisdictional waters.[196] (*See* Section 11 Appendix H). Pursuant to that determination, the intermittent feature in Millard Canyon bottom is the only wetland or riparian feature on the project parcel, concurrent with the USFWS National Wetlands Inventory. The feature met the definition adopted ca. 2015 of a waters of the United States because it flows seasonally for periods extending beyond the conduction of surface stormwater runoff, and the

[195] Source: United States Fish and Wildlife Service: National Wetlands Inventory. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

[196] Note: this determination was made in 2018, while an expanded definition of WOTUS was in effect (which remains consistent with CDFW procedures for the identification of features requiring a Lake or Streambed Alteration Agreement). Under this definition, the ephemeral Millard Canyon bottom was deemed a jurisdictional waters. Under the framework in effect on the date of the Notice of Preparation (see above), the Millard Canyon feature would not be jurisdictional. It is not material to this analysis whether the Millard Canyon feature is deemed jurisdictional or non-jurisdictional.

Arroyo Seco is deemed to be a significant nexus to the technically navigable Los Angeles River, extending this designation to the significant tributary of Millard Canyon. However, neither the Arroyo Seco nor the intermittent feature in Millard Canyon meet the definition of a waters of the United States adopted by the United States Supreme Court as of the date of the Notice of Preparation, as these features do not maintain a "continuous surface connection" with the Los Angeles River. As attributed in Section 5.9.3, a drainage swale near the southeast corner of the project footprint facilitating stormwater runoff from a developed upland area of approximately one acre was surveyed by the USACE and did not meet the definition of a waters ca. 2015 because it flows only transiently to drain surface stormwater and contains no riparian habitat established in connection with saturated soil conditions. This determination concurs with the USFWS National Wetlands Inventory and CDFW procedures.

Figure 5-9: Wetlands and Riparian Habitat at "Sub-regional" Scale[197]

[197] Source: United States Fish and Wildlife Service: National Wetlands Inventory. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

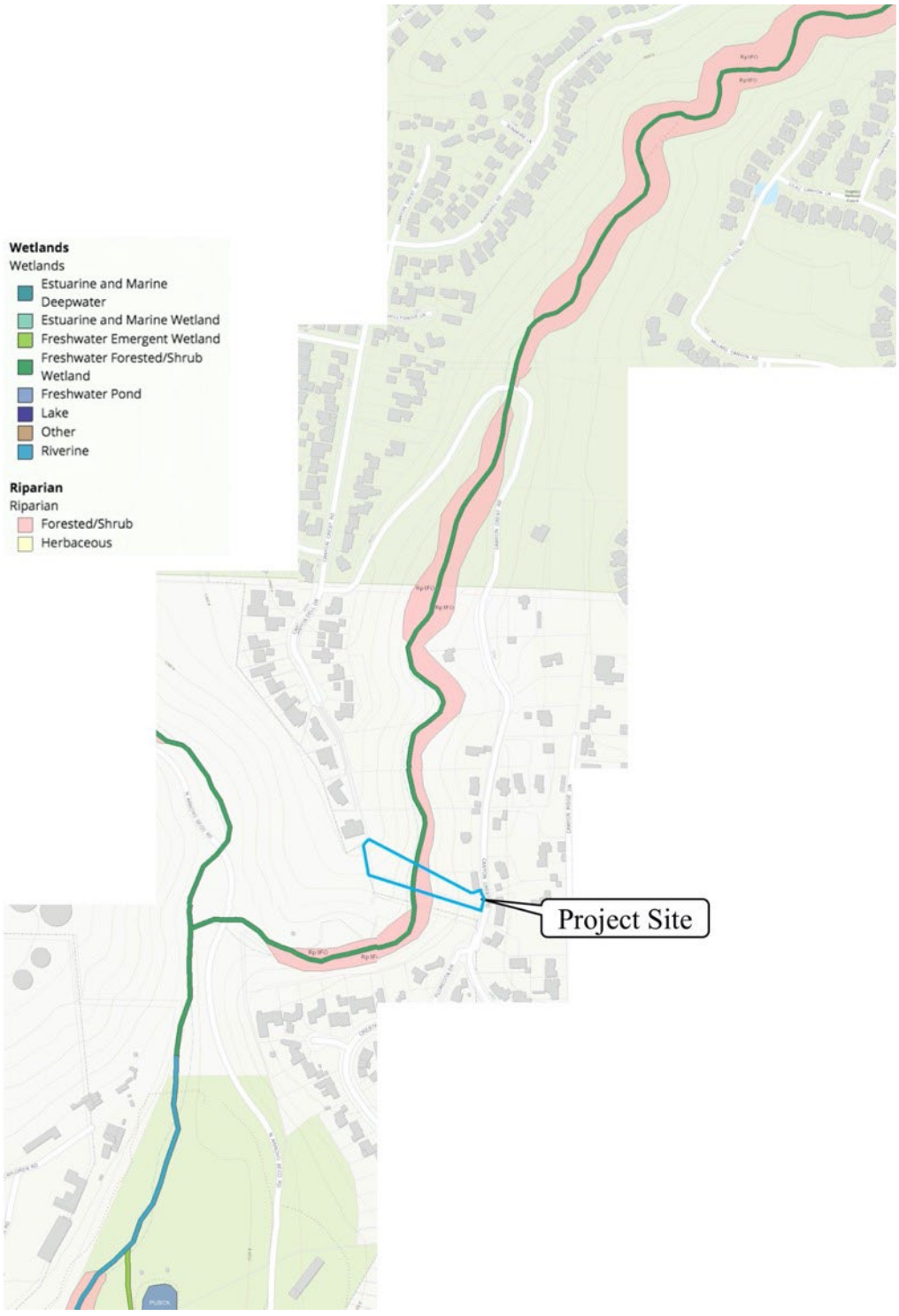

Figure 5-10: Wetlands and Riparian Habitat at "Landscape" Scale[198]

[198] Source: United States Fish and Wildlife Service: National Wetlands Inventory. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

Wildlife Movement

Access of wildlife to water, foraging, breeding, and cover is impeded by urban development and fencing, unsuitable habitat, difficult terrain, or open areas with little vegetative cover. Wildlife movement corridors are physical connections that allow wildlife to move between different habitat areas. These can be critical at a regional, sub-regional and landscape scale. Wildlife movement corridors are necessary not only to access essential resources, but for dispersion and migration, to ensure the mixing of genes between populations, and to allow wildlife to respond and adapt to environmental stress. A "wildlife corridor" typically refers to larger regions of connectivity that facilitate regular movement of multiple species and maintenance of ecological processes at a regional scale but may also be used to describe linkages at the sub-regional and landscape scales. A "wildlife crossing" typically refers to small, narrow areas allowing wildlife to pass through an obstacle or barrier, such as a roadway or area of development, to reach another area of habitat. Wildlife crossings include culverts, drainage pipes, underpasses, tunnels, and, more recently, crossings created specifically for wildlife movement over highways.

The CDFW has created a ranking of quality from 1-5 that "summarizes information on terrestrial connectivity…including the presence of mapped corridors or linkages and the juxtaposition to large, contiguous, natural areas," as part of the Areas of Conservation Emphasis ("ACE") dataset.[199] The information is provided at the resolution of hexagons of 2.5 square miles derived from regional linkage analyses and "Essential Connectivity Areas" mapped by the CDFW as part of the California Essential Habitat Connectivity Project. (*Ibid.*). The proposed project is located in hexagon 56208. The hexagon has a connectivity rank of 2, a natural landscape block rank of 1, a natural landscape block percentage of 2.3%, and a linkage rank of 0, indicating that no linkages were identified.[200] Scores of 1 or 2 for connectivity and natural landscape indicate "low intactness" and a score of 0 for the linkage rank indicates "no corridor mapped."[201]

At a regional scale, the project is not sited within an area designated by the County General Plan as a corridor of wildlife movement or a regional wildlife linkage.[202] The proposed project is not sited within an "Essential Connectivity Area," "Natural Landscape Block," "Natural Area" smaller than 2,000 acres or "Potential Riparian Connection" identified by the CDFW as part of the California Essential Habitat Connectivity Project. The proposed project is not sited within a South Coast Missing Linkages area identified by South Coast Wildlands.

[199] Source: California Department of Fish and Wildlife: ACE Dataset Factsheet Terresterial Connectivity. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=150835&inline.
[200] Source: California Department of Fish and Wildlife: BIOS viewer, Terrestrial Connectivity – ACE layer. Available at: https://apps.wildlife.ca.gov/bios6/.
[201] Source: California Department of Fish and Wildlife: ACE dataset factsheet. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=150835&inline.
[202] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

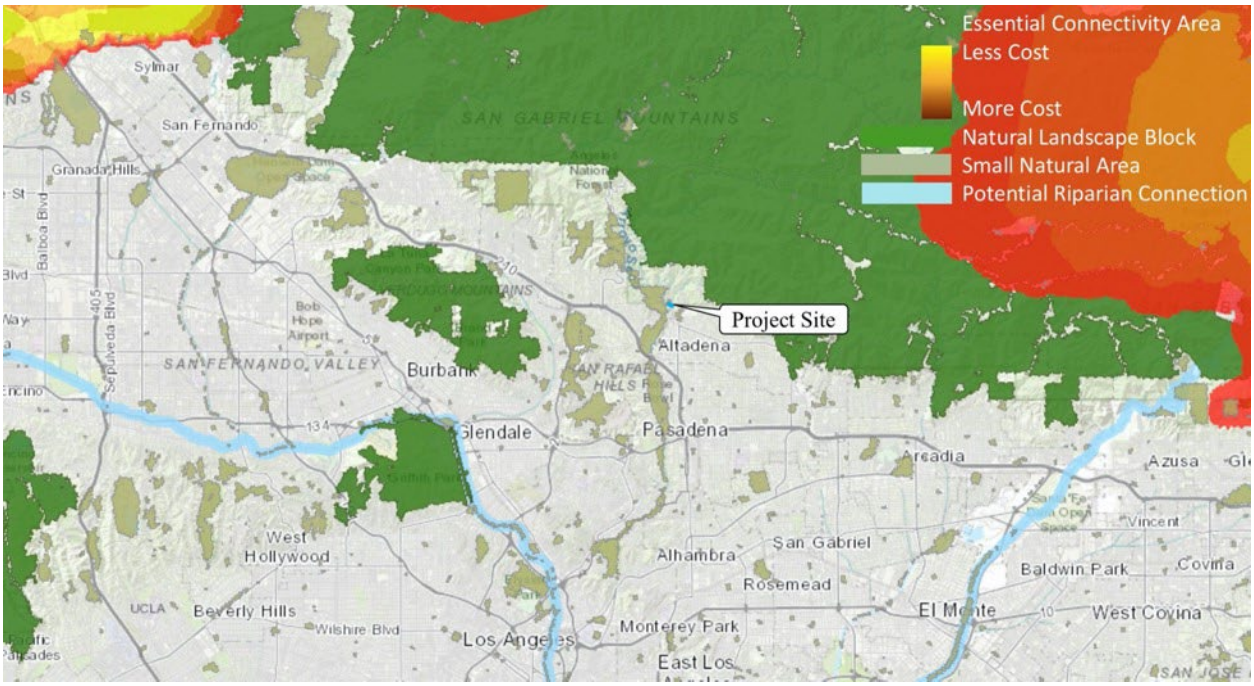

Figure 5-11: California Essential Habitat Connectivity Areas, Natural Landscape Blocks, Small Natural Areas and Potential Riparian Connections[203]

[203] Source: California Department of Fish and Wildlife: BIOS viewer, California Essential Habitat Connectivity Project layer. Available at: https://apps.wildlife.ca.gov/bios6/.*See also* California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18366.

Figure 5-12: South Coast Missing Linkages[204]

At a sub-regional scale, the Angeles National Forest, located approximately 1,000 feet to the north and extending for miles to the east, north and west, is designated as a regional wildlife linkage. The Millard Canyon bottom is one of several canyon passages facilitating movement between the Angeles National Forest regional wildlife linkage and open spaces abutting developed areas to the south and west of the project parcel. Millard Canyon is tributary to the Arroyo Seco, which is part of the Altadena Foothills and Arroyos Significant Ecological Area ("SEA"). This SEA and the Arroyo Seco, including Hahamongna Watershed Park in the City of Pasadena, provide habitat linkage to the San Rafael Hills, which in turn provides some linkage to the Verdugo Mountains SEA with roadway crossings of the CA-2 freeway. Other canyons, trails, fire roads and less developed areas to the north facilitating of wildlife movement are also tributary to the Arroyo Seco Canyon, and Millard Canyon is not considered a sub-regional chokepoint.

At a landscape scale, the Millard Canyon streambed connects the Angeles National Forest to the Arroyo Seco. Wildlife traversing Millard Canyon bottom crosses Canyon Crest Road approximately 1,500 feet north of the project parcel through large drainage culverts or overland, though much of the canyon bottom is fenced along the northern edge of Canyon Crest Road. Portions of Millard Canyon streambed more than one mile to the northeast of the project site burned during the Eaton Fire in 2025. However, the coast live oak woodland community that characterizes the burned portions of Millard Canyon is fire resilient. While these areas have been closed by the United States Forest Service following the Eaton Fire and are reasonably expected

[204] Source: South Coast Wildlands: South coast Missing Linkages: A Wildland Network for the South Coast Ecoregion. Available at: https://apps.wildlife.ca.gov/bios6/.See also: http://www.scwildlands.org/reports/SCMLRegionalReport.pdf.

to remain closed for years, aerial imagery after the Eaton Fire portrays little alteration of canopy cover, and it is reasonable to expect that similar patterns of wildlife usage of Millard Canyon persist after the Eaton Fire. Other canyon linkages to the Arroyo Seco to the north of Millard Canyon, and the Arroyo Seco itself, did not burn during the Eaton Fire.

Other passages between the Angeles National Forest and the Arroyo Seco at a landscape scale include El Prieto Canyon, Fern Canyon, the Brown Mountain Truck Trail, the Fern Truck Trail, and other foot trails. Within the larger Angeles National Forest wildlife linkage, the Arroyo Seco is fed by nearly 20 tributary canyons facilitating wildlife movement, comprising a drainage area above Devil's Gate Dam of 31.9 square miles, or more than 20,000 acres,[205] of which the Millard Canyon tributary watershed comprises approximately 1/10, or approximately 2,000 acres. (*See* Figure 5-21: Millard Canyon Watershed and Figure 5-9: Wetlands and Riparian Habitat at "Sub-regional" Scale).

Wildlife corridors are identified based on cost functions identifying the "permeability" of habitat.[206] Permeability may be considered at a regional, sub-regional and landscape scale depending on the scale of the project. At the landscape or sub-regional scale, a permeability score of 0-100 has been assigned to features such as roadways, slopes and canyon bottoms by researchers of wildlife corridors suitable for preservation in California.[207] A developed area of roads and medium- to high-density, often fenced houses receives a score of 0, corresponding to "absolute non-habitat." While diffuse movement may occur in such developed areas, especially for animals characterized by highly fluid movement, the impediments and disturbances do not for most species facilitate regular or concentrated movement in a corridor. "Ridge-top" and "slope" receive low scores of 20, acknowledging that exposure and difficulty of travel significantly reduce the potential for movement. Scores below 30 are to be "avoided" in the preservation of networks because they have little value as a corridor. Likewise, environments with a distance to a paved road of <50m admit greater disturbance and are graded with a low score of 30, indicating the "lowest value associated with occasional use for non-breeding activities." "Canyon bottom" receives a high score of 80, which is the "lowest score typically associated with successful breeding," and "riparian" the highest score of 100, indicating the "best habitat, highest survival and reproductive success."

The development footprint of the project is everywhere <80ft (~25m) from the road, sited on a slope, and therefore receives a score of 20. The surrounding area to the northeast, east, and south is comprised of medium-density urban development, most of which is fenced and/or obstructed by development, and therefore receives a score of 0. No open space habitat exists in developed areas for thousands of feet to the east and south of the project parcel, and the open spaces to the north and west are more readily accessed through the canyon bottom than they are across any part of the project footprint. As such, the project footprint and adjacent developed area have low permeability scores and would not be expected to comprise any part of an established wildlife corridor with appreciable utility at a landscape or sub-regional scale.

[205] Source: City of Pasadena: Arroyo Seco Master Plan Master EIR. Available at: https://www.cityofpasadena.net/parks-and-rec/arroyo-seco/master-environmental-impact-report-arroyo/.
[206] Source: California Department of Fish and Wildlife, ACE dataset factsheet – Terrestrial Connectivity. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=150835&inline.
[207] Source: Conceptual Steps for Designing Wildlife Corridors. Beier, P., D. Majka and J. Jenness. 2007.

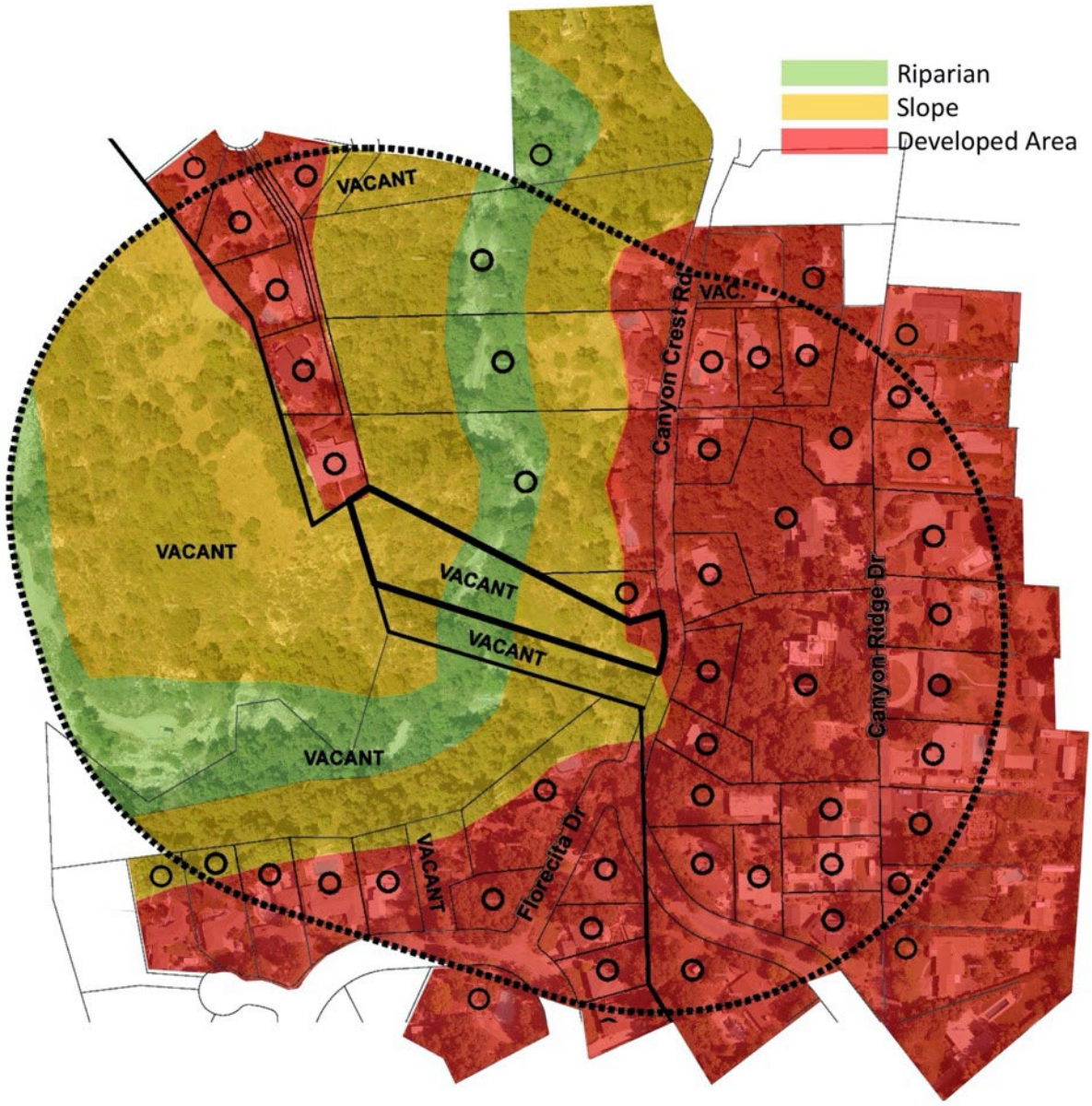

Figure 5-13: Wildlife Permeability at "Landscape" Scale

Oak woodlands

Coast live oak woodlands are comprised of an alliance of *Quercus agrifolia* (coast live oak) and associated shrub- and/or herb-layer native understory species. 48 associated mid- or under- story species are attributed to coast live oak woodlands in the CDFW California Natural Community List.[208] The oak woodlands on the project parcel are associated with California sagebrush scrub. Pursuant to Fish and Game Code Section 1361, " '[o]ak woodlands' means an oak stand with a

[208] Source: California Department of Fish and Wildlife: California Natural Community List, September 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover." An "oak stand" is not defined in the Fish and Game Code, and no minimum quantum of area is included in this definition. Neither are oak trees generally found in alignment with any social boundaries of parcel or jurisdiction. The only non-arbitrary definition of an oak stand is two or more trees, and this is the definition incorporated in the County Oak Woodlands Conservation Management Plan ("Plan") Guide ("Guide").

Oak woodlands are defined in the Guide as two or more oak trees close enough to each other that their projected canopy dripline overlaps when grown by a factor of 10 (i.e. the radius of the canopy is grown by the square root of 10). This relationship implies a canopy cover of at least 10% of any unit area in the stand. The definition in Fish and Game Code Section 1361 is not explicit that the interstitial area between canopy cover is oak woodlands, rather than being confined to the spatial extent of the oak trees themselves, and this area may be as accurately described as belonging to another community. However, the Guide assumes that both the area within the dripline as well as the associated area out to this expanded distance comprises a community of oak woodlands.

Within the state of California, the coast live oak woodlands community has a state rarity rank of S4, indicating apparent security.[209] The United States Forest Service estimated in 2002 a statewide inventory on only Forest Service Lands in California of 6.5 million coast live oak trees, +/- 14.2 percent.[210] Within the County of Los Angeles, the Plan estimates the extent of oak woodlands in the County at 145,000 acres.[211] Of this, 3/4 was believed to be located on public lands, with only 1/4 on private lands. Of this 1/4, much is remnant of buildout to permitted intensities and would be expected to persist pursuant to protections provided by the Oak Tree Ordinance, though long-term maintenance is dependent on natural recruitment or purposeful re-planting by private landowners as mature specimens senesce. At still more targeted resolution, the United States Forest Service estimated in 1999 that more than 2/3 of all coast live oak trees in communities that dominate a 5-acre discrete sample size in the San Gabriel Mountains and foothills are permanently protected on public land.[212]

10 mature oak trees comprising a portion of a stand of coast live oak woodlands exist on the eastern portion of the project parcel at or near street level, although this stand lacks a native understory. Specimens range from approximately 10" to 30" in trunk diameter at breast height. Minimum trunk spacings range from approximately 5' to 20+'. This portion of the stand comprises a canopy area of approximately 6,000 square feet, of which approximately 4,000 square feet, or 0.1 acres, exists on the project parcel. This is considered to be a healthy, natural density of approximately 100 trees/acre, though some spacings exhibit crowding, and canopy is nearly continuous within the stand. According to the Plan, "[s]tands that are dense and

[209] Source: California Department of Fish and Wildlife: California Natural Community List, September 2020. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[210] Source: United States Forest Service: Inventory of Oaks on California's National Forest Lands. Available at: https://www.fs.usda.gov/psw/publications/documents/psw_gtr184/054_Gaman.pdf.
[211] Source: County Department of Regional Planning: County Oak Woodlands Conservation Management Plan, page 43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.
[212] Source: United States Forest Service: Southern California Mountains and Foothills Assessment, page 305. Available at: https://www.fs.fed.us/psw/publications/documents/psw_gtr172/psw_gtr172.pdf.

overstocked with trees that are competing for suitable light, nutrients and water…are often weak and highly susceptible to disease and insect infestations. Conversely, low density stands where individual trees are spread far apart typically have low reproduction rates and may not be sustainable."[213]

10 mature oak trees comprising a portion of a stand of oak woodlands exist in the riparian environment on the project parcel, along with a native understory. When considered along with the other oak trees on the surrounding private parcels, these two communities could comprise a single stand of oak woodlands that numbers in the thousands and extends for thousands of feet in all directions. Specimens range from approximately 10" to 30" in trunk diameter at breast height. Minimum trunk spacings range from approximately 5' to 20+'. This portion of the stand comprises a canopy area of approximately 4,000 square feet, or 0.1 acres.

Pursuant to the Guide, discretionary assessment of the significance of impacts to oak woodlands dovetails existing condition with impact severity. The more intact the oak woodlands, the less impactful an effect may be for it to require any mitigation. Conversely, the more heavily degraded, the greater the impacts must be. The criteria for the existing condition and impact severity contain some descriptions that cannot simultaneously apply. An example is the presence of "non-native landscaping" and "pavement." Thus, it is not expected that every description is satisfied. When an assessment is made, it must be determined which criteria are best satisfied.

Criteria for "severely degraded" oak woodlands in the Guide include: "drastic [alteration] to accommodate residential uses," "natural regeneration is not possible," "soil is compacted…or paved," "wildlife habitat is limited" and "non-native landscaping" is present. As documented in the Oak Tree Report in Section 11 Appendix E, the existing condition has been significantly altered by compaction and the installation of pavement, a history of dumping and regrading by previous owners to augment available parking and storage space; significant pruning for parking, roadway, residence and power line clearance; signs of mechanical damage; and concrete drainage devices impinging on the collars of several trees. Use of the protected zones of affected trees for roadway, parking and other residential uses has prevented natural regeneration. Soil has been compacted by parking and by encroachment of the pavement of Canyon Crest Road and the driveway, patio, slab-on-grade foundation and seepage pit at 3589 Canyon Crest Road. This manner of encroachment is more severe, introducing impervious surfaces in addition to compaction. Together, the existing condition of all but one oak tree encroached by the project is significantly impacted in this way. There is little to no native understory, and non-native species are present in the understory that does exist.

Criteria for a "moderately degraded" oak woodlands in the Guide overlap with those of a "severely degraded" oak woodlands, though the key distinction is whether "natural regeneration is possible." When understory is being used for parking, roadway, driveway and residential structures, has seen significant dumping and re-grading, and has non-native landscaping present, regeneration potential is limited. Moderately degraded oak woodlands are commonly fragmented by development, such that ecosystem services have been compromised. However, regeneration

[213] Source: County Department of Regional Planning: County Oak Woodlands Management Plan, page 30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.

and support of an understory within a periphery of encroachment is viable. The existing impacts to the oak woodlands at the scale affected by the home are more severe than is typical of moderately degraded oak woodlands. The existing condition of the oak woodlands at the scale affected by the project is best described as “severely degraded.”

As the Plan states, assessment must be considered at different spatial scales. While the condition of the oak woodlands at the scale of the stand affected by the Home Project is best described as “severely degraded,” at a landscape scale, encompassing hundreds of feet in all directions, the condition is best described as moderately degraded – fragmented by existing development but capable of regeneration within pockets over much of the area – with individual trees and portions of the woodlands that range from intact to severely degraded.

Figure 5-14: Extent of Oak woodlands at "Landscape" Scale[214]

The Guide suggests that information contained in an oak woodlands report can be used to help document the existing condition of an oak woodlands where it could be significantly impacted, though this information overlaps with that typically contained in an EIR, as well as much of the information in an Oak Tree Report. The "report" is not an analytical document, but is intended as a checklist to ensure that relevant data are post-processed and descriptions provided as inputs to such analysis. In this vein, the locations of this information in this EIR are provided here for reference:

[214] Source: Applicant

- The existing condition, size, density, understory and contextual setting of those oak trees comprising the woodlands on the project parcel and in the surrounding vicinity are as described in this section, the Oak Tree Report included in Section 11 Appendix E and the Biological Resources Assessment Report included in Section 11 Appendix B.
- A categorization of the existing condition of the woodlands on the project parcel is as described in this Section. The existing condition of the woodlands at the scale of the stand affected by the project is best characterized as "severely degraded" according to the discretionary criteria in Table 1 of the Guide. At a landscape scale encompassing at least the entirety of Figure 5-14: Extent of Oak woodlands at "Landscape" Scale, the woodlands range from "severely degraded" to "intact" and is best characterized collectively as "moderately degraded."
- The Oak Tree Report included in Section 11 Appendix E describes the condition of all affected trees, including the presence of insects or disease and the impact of their presence. Pursuant to SC-BIO-1, pests such as shothole borer must be reported to the County Forester for proper disposition, and the project would make use of mulch that is clean of pests and disease.
- The ecosystem services provided by the woodlands impacted by the project are characteristic of suburban residential neighborhoods in the County, in which habitat is fragmented by roads, structures, hardscapes, fences, pools, lawns and other non-native landscaping, utilities, and other forms of development, but retains some of its functions.

Using this information, the impact severity of the project at different spatial scales is evaluated in Section 5.4.5 and would be expected to be less than significant at all spatial scales. The recreational and aesthetic impacts of the project on its site and the woodlands it contains are evaluated in Sections 5.1 and 5.15 and would be expected to be less than significant.

5.4.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.4-1**: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service
  - For purposes of analysis in this EIR, a "candidate" species is as defined in Fish and Game Code Section 2068 as "formally noticed as being under review by the [CDFW] for addition to either the list of endangered species or the list of threatened species, or a species for which the [California Fish and Game] commission has published a notice of proposed regulation to add the species to either list," or a species assigned by the CDFW with a "state listing status" of "candidate sensitive" or "candidate threatened."

  - For purposes of analysis in this EIR, a "sensitive" species is a state or federally listed threatened or endangered species under the FESA or CESA, a species assigned by the CDFW with a NatureServe Conservation Rank between S1 and S3, or a plant with a CNPS rank between 1 and 3 (of any decimal rating).
  - For purposes of analysis in this EIR, a "special status" species is a California Species of Special Concern and any other species conforming to State CEQA Guidelines Section 15380 that has been identified by the CDFW in the "Special Vascular Plants, Bryophytes, and Licens List" and "Special Animals List"

- **Threshold 5.4-2**: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service
  - For purposes of analysis in this EIR, "riparian habitat" is land that has been mapped by the USFWS National Wetlands Inventory as "riparian" and/or land that contains species associated with a riparian setting adjacent to a hydrological feature identified as wetlands by the United States Army Corps of Engineers or their designee in a jurisdictional delineation, or by a trustee agency of California.
  - For purposes of analysis in this EIR, a "sensitive" natural community is a community or association of two or more species that has been designated by the CDFW as "sensitive" with a NatureServe Conservation Rank between S1 and S3.[215]

- **Threshold 5.4-3**: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
  - For purposes of analysis in this EIR, a state or federally protected wetlands is a hydrological feature identified as wetlands in the USFWS National Wetlands Inventory, by the United States Army Corps of Engineers or their designee in a jurisdictional delineation, or by a trustee agency of California.

- **Threshold 5.4-4**: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
  - For purposes of analysis in this EIR, an established wildlife corridor is an area that has been mapped as a "Regional Wildlife Linkage" in the 2035 County General Plan, an "Essential Connectivity Area" by the CDFW, designated as "riparian" by the USFWS National Wetlands Inventory, or otherwise identified as providing permeability, ecological value, and regular usage by wildlife that is similar to these features.

- **Threshold 5.4-5**: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
  - For purposes of analysis in this EIR, local policies protecting biological resources are contained in the Conservation and Natural Resources Element of the 2035 County General Plan attributed in Table 5-11: County General Plan Policy Consistency Analysis

[215] Source: California Department of Fish and Wildlife: Sensitive Natural Communities. Available at: https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive%20natural%20communities.

and those in the Environmental Resources Element of the Altadena Community Plan attributed in Table 5-12: Altadena Community Plan Policy Consistency Analysis.
    - For purposes of analysis in this EIR, local ordinances protecting biological resources include the Significant Ecological Areas Ordinance (County Code, Title 22, Ch. 22.56, Part 1, Section 22.56.215), the County Oak Tree Ordinance (County Code, Title 22, Ch. 22.56, Part 16), the Rural Outdoor Lighting District Ordinance (County Code, Title 22, Ch. 22.44, Part 9) and the Wildflower Reserve Areas Ordinance (County Code, Title 12, Ch. 12.36, Section 12.36.020).

- **Threshold 5.4-6**: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan
    - For purposes of analysis in this EIR, a habitat conservation plan is an agreement between a non-federal party and the USEPA pursuant to section 10(a)(1)(B) of the FESA to conserve the ecosystems upon which listed species depend, ultimately contributing to their recovery
    - For purposes of analysis in this EIR, a Natural Community Conservation Plan is an agreement between a public or private party and the CDFW to identify and provide for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.4-7**: Substantially affect a rare or endangered species of animal or plant or the habitat of the species
    - For purposes of analysis in this EIR, a rare species is a candidate, sensitive, or special status species, as defined in Threshold 5.4-1.
    - For purposes of analysis in this EIR, an endangered species is a state or federally listed threatened or endangered species under the FESA or CESA

- **Threshold 5.4-8**: Interfere substantially with the movement of any resident fish or wildlife species, or migratory fish or wildlife species

- **Threshold 5.4-9**: Substantially diminish habitat for fish, wildlife or plants

Additional Criteria

Significant adverse impacts result from this project, as identified by the Lead Agency as additional criteria pursuant to the discretion afforded it by CEQA, if this project would:

- **Threshold 5.4-10**: Result in a permanent net loss of oak woodlands resources, including trees of the genus *Quercus* and allied native species.

Substantial evidence in support of this criterion exists in 2035 County General Plan Policy C/NR 4.1 to "[p]reserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with no net loss of existing woodlands." See *Schaeffer Land Trust v. San Jose City Council* (1989) 215 Cal.App.3d 612, 624-625 (threshold is supported by substantial evidence when based on standards expressed in governing plan). Under this threshold, permanent loss of the trees and allied species comprising native woodlands resources is regarded as significant. Within this framework, replacement of the resources at a ratio of 1:1 or greater in a setting of equal or superior quality to that removed, along with long-term monitoring of replacements to confirm success, is considered to be sufficient to prevent a net loss associated with a project. Replacement may result in an expansion in overall spatial extent and/or sustainable increase in density where woodlands resources are sparser and/or intermingled with other, more common communities.

Both native oak woodlands and other native woodlands contribute to the character of the County, such that development could contribute to a significant cumulative effect unless each project of any size is responsible for conserving the extent of the resource. The County's Oak Woodlands Conservation Management Plan states that "specific thresholds of significance are not developed in PART 1 of this document," which is the portion of the document that has been adopted by the County Board of Supervisors, on August 23, 2011. The Guide was intended to serve as an aid on a "case-by-case" basis[216] to trigger the mitigation indicated in CEQA Section 21083.4. Because CEQA states that the indicated mitigation is sufficient to "mitigate the significant effect of the conversion of oak woodlands" such that any conforming project "shall be deemed to be in compliance with [CEQA]," the Guide crafted qualitative, inclusive criteria to trigger that mitigation. The Guide was formulated as a discretionary document with criteria that were intended to be evaluated with reasonable judgment. While this EIR also assesses the project using the criteria in the Guide, in the absence of any threshold adopted for general use, an unambiguous, project-specific threshold of significance is declared for the removal of oak woodlands resources, independent of compensation. *See Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 896 (proper under CEQA to develop significance thresholds on a project-by-project basis). The analysis in this EIR does not rely upon the Guide as substantial evidence to support any conclusion.

- **Threshold 5.4-11**: Remove one or more heritage coast live oak trees, as defined in County Code Section 22.174.040(B)(2)(a)(v), or any number of coast live oak trees larger than 8 inches in trunk diameter at breast height (54 inches above the grade) that are together greater than 100 inches in trunk diameter at breast height

Substantial evidence in support of this criterion is derived as follows.

[216] Source: County Department of Regional Planning: Response to Board Motion Regarding Implementation of Oak Woodlands Conservation Management Plan. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/Final_Report_with_Signatures.pdf.

This threshold acknowledges the suitability of considering alternatives to removal of oak woodlands resources at some level of impact. This threshold is consistent with that proposed in the Oak Woodlands Protection Act,[217] a proposed successor act to CEQA Section 21083.4 that would repeal and replace it, which proposed a threshold of significance to trigger its permitting process of 10 or more coast live oak trees 10" in diameter or greater in trunk size at breast height (up to any size). This threshold would also be consistent with the level of impact triggering compensatory mitigation pursuant to CEQA Section 21083.4 in guidance from the University of California Integrated Hardwood Range Management Program ("IHRMP") for the mitigation of oak woodlands impacts ("Planner's Guide"), incorporating input from a range of experts and stakeholders, which treats as less than significant at a site scale of "less than 3 acres" the removal of "less than 10 trees."[218] While more subtle, qualitative significance criteria may be suitable at larger spatial scales with more varied types of impact, an objective, quantifiable screening threshold is suitable to tree removal impacts at a landscape scale, consistent with the IHRMP threshold cited above and other quantified screening thresholds routinely used in CEQA analysis.

This threshold, like that proposed in the Oak Woodlands Protection Act and like the mitigation approach established in CEQA Section 21083.4(b)(2), is referenced to the oak trees that define the presence of oak woodlands, assuming that associated understory would be removed in proportion to the extent of oak tree removal. A lower level of impact would still be expected to be compensated pursuant to the Oak Tree Ordinance and/or project-specific CEQA analysis considering County General Plan policies, which intend that no net loss or conversion of oak resources occurs in the County.

Because heritage oak trees are afforded a special status in County Code Section 22.174.040(B)(2)(a)(v), the threshold is binary as to these resources.

As few as three nearly heritage-sized trees would be considered significant under this threshold. Because the removal of oak trees less than 8" in diameter does not require any discretionary grant of an Oak Tree Permit in the County, such trees are properly outside the scope of a threshold of significance in the County, as they may be removed without any review under CEQA and therefore do not constitute any part of a "project" subject to discretionary approval. "CEQA does not apply…to agency actions that do not entail a decision about whether to approve or disapprove private projects as proposed. *See Lexington Hills Association v. State* (1988) 200 Cal.App.3d 415, 433 (agency's issuance of encroachment permits solely to implement mitigation measures does not constitute "approval" of activities integral to the project)." (Kostka & Zischke, Practice Under the California Environmental Quality Act (2d ed Cal CEB) § 4.11, p. 4-12).

[217] Source: California Legislative Information: AB-2162 Oak Woodlands Protection Act (2015-2016). Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2162.

[218] Source: University of California Integrated Hardwood Range Management Program: Oak Woodland Impact Decision Matrix: A Guide for Planner's to Determine Significant Impacts to Oaks as Required by SB 1334, page 11. Available at: http://ucanr.edu/sites/oakplanner/files/71734.pdf. Note: removal of fewer than 10 trees maps to a "Low" impact that is presumptively less than significant in a moderately or severely degraded oak woodlands like that characterizing an existing residential neighborhood, in the absence of special circumstances.

Because the extent of oak woodlands and canopy coverage is ambiguous when expressed by acreage, a total number of trees removed provides a conclusive metric. Studies of coast live oak stands "showed that they are typically dense, ranging from 100 to over 700 trees per acre (averages for these studies varies from 300-350)…Tree spacing ranged from about 7 to 20 feet (average of 12-13)."[219] This is consistent with the stands of oak woodlands found on the project site and throughout the neighborhood. As the threshold corresponds to three to 12 trees, a typical stand spacing would translate such an impact to a spatial extent that ranges up to approximately 0.1 acres.

Pursuant to State CEQA Guidelines Section 15064.7(c), "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies." While few jurisdictions have recently updated their thresholds to address a removal of oak woodlands independent of Appendix G criteria, a threshold corresponding to approximately 0.1 acres of coast live oak woodlands removal is consistent with the threshold of 0.1 acres adopted in the City of San Diego in 2022[220] for removal of Tier I (including coast live oak woodlands) habitat.[221] This amount is defined in terms of canopy area because the canopy of even a single tree with a modest dripline radius of 15 feet when grown by a factor of 10 would be nearly 0.2 acres. The City of San Diego is within the natural range of coast live oak and possesses urban/wildland interfaces that are similar in nature to that found on the project parcel (itself immediately adjacent to the City of Pasadena) and is therefore a suitable comparison for consideration.

In the context of the existing regulatory framework and its replacement requirements; given the current "apparently secure" spatial extent of existing coast live oak woodlands in California; and given that the majority of oak woodlands in the San Gabriel Mountains and foothills in the vicinity of the project are located on public lands, impacts below this threshold do not merit the consideration of alternatives in an EIR. Such limited impacts would be expected to be characteristic of smaller projects with fewer degrees of design freedom for which alternatives would not be expected to result in marked differences in the level of impact. The Class 4 Categorical Exemption applies to non-sensitive vegetation removal within 30 feet of a structure as great as 10,000 square feet in size in an urbanized area. A single-family residence 9,000 square feet in size would be permitted by right on the project parcel under zoning regulations, corresponding to a total area of vegetation removal of (90+30)*(100+30) = 15,600 sqft., or approximately 0.3 acres. Therefore, an impact of 0.1 acres would be "minor," as a matter of statutory construction, and therefore less than significant. California's Office of Planning and

[219] Source: Pilsbury, Norman H, Joseph, John P. 1991. "Coast Live Oak Thinning Study in the Central Coast of California – Fifth-Year Results." In: Standiford, Richard B., tech. coord. 1991. Proceedings of the symposium on oak woodlands and hardwood rangeland management; October 31 - November 2, 1990; Davis, California. Gen. Tech. Rep. PSW-GTR-126. Berkeley, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; pp. 320-332

[220] Source: City of San Diego: California Environmental Quality Act Significance Determination Thresholds, page 22. Available at: https://www.sandiego.gov/sites/default/files/september_2022_ceqa_thresholds_final.pdf.

[221] Source: City of San Diego: Land Development Manual – Biology Guidelines, page 38. Available at: https://www.sandiego.gov/sites/default/files/legacy/planning/community/pdf/cpc/agendas/attachments/ldcbiologyguidedraft.pdf.

Research has used this approach of deriving an attribute of a class of categorically exempt projects to declare its screening threshold for significant VMT.[222]

In addition, the Conditional Use Permit process required of any mature oak tree encroachment or removal in the County would be expected to mitigate against insensitive uses or configurations of permitted uses. Pursuant to the Oak Tree Ordinance, the Applicant has the burden of demonstrating that "the removal or relocation of the oak tree(s) proposed is necessary[.]" (County Code Section 22.174.060(B)(3)(a)).

5.4.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to biological resources begins by cataloguing the resources present on the site using site surveys, literature review, and evaluation of habitat quality, as well as mediation of extensive pre-existing local, state and federal regulatory framework. The analysis considers methods to minimize impacts, including sustaining those impacts during periods of lesser sensitivity, replacement, avoidance or escape of any sensitive species that are encountered.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

SC-BIO-1: The project shall comply with the standard permit conditions issued by the Fire Department Forestry Division as a part of the County's application of its Oak Tree Ordinance (County Code Section 22.174, *et seq.*), as summarized herein:

- Any removed oak tree shall be replaced in a ratio of at least 2:1, with replacement trees permanently protected thereafter, each of which would require replacement in at least a 1:1 ratio if they failed to establish and maintain the performance standards specified below.
- Trenching, excavation, or clearance of vegetation within the protected zone of an oak tree shall be accomplished by the use of hand tools or small hand-held power tools, with any roots conserved to the extent feasible.
- All encroached and replacement trees shall be maintained free of invasive plants and in consistency with the County publication "Oak Trees: Care and Maintenance," specifying pruning, watering, mulching, monitoring and understory composition requirements.
- For any oak tree on the project site that is not approved for encroachment and monitored pursuant to the Oak Tree Permit,[223] a chain link fence shall be installed around any portion of the protected zone that is accessible from any work area, and no equipment, materials or vehicles may be stored, parked or operated within this fenced area.

[222] Source: California Office of Planning and Research: Technical Advisory on Evaluating Transportation Impacts in CEQA, page 12, fn. 19. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
[223] Note: for this project, no such trees have been identified.

- A licensed consulting arborist shall be retained to oversee all work authorized or required by the Oak Tree Permit.
- The standard Best Management Practices recommended by the consulting arborist in the Oak Tree Report pursuant to County Code Sections 22.56.2090(F)(1)(c)(v) and 22.56.2090(F)(1)(d) shall be implemented, as follows:
    1. All terminal cutting of branches or roots greater than 2" in diameter for encroached trees to remain shall be performed to the following specifications at the direction of the consulting arborist in accordance with the International Society of Arboriculture ANSI 300 standard. Branches shall be cut using the 3-step Shigo method using a reciprocating saw, chainsaw or manual saw with blade sterilized in alcohol. No sealants shall be applied to cuts except as directed by the consulting arborist and/or County Forester. Root cuts shall be made at a branch node wherever feasible using a reciprocating saw, chainsaw or manual saw with blade sterilized in alcohol. As current arboricultural understanding recommends such work be performed when pests and disease are least active and stresses can be compounded in the hottest and driest months of the year as the tree prepares for dormancy, all cutting of roots and branches greater than 2" in diameter for those encroached trees to remain shall be performed to the greatest extent feasible in the months between August and October.
    2. Trenching for utility laterals shall preserve all encountered roots greater than 2" in diameter, with laterals threaded under or around any non-feeder roots to the greatest extent feasible. Preservation of feeder roots is not beneficial, as healthy new feeder roots will quickly in-grow the aerated and enriched backfill. The placement of the laterals within the protected zone of encroached trees should maximize the radial, outward component of travel from the trunk. Laterals shall otherwise be designed to minimize disturbance to the greatest extent feasible, including placement at the minimum depths permitted by code, which are not expected to exceed 12", or less than 1/3 of the range of typical root depths for coast live oak.
    3. Any required over-excavation shall preserve encountered non-feeder roots to the greatest extent feasible, and any preserved roots that would otherwise be exposed to air for longer than one day shall be topped or wrapped with heavy, absorptive, biodegradable fabric (e.g. jute or burlap) within one day of exposure. A mix of compost and loose soil shall be spread within or over the cloth as feasible. Any exposed fabric shall be wetted at intervals appropriate to the season and water year performance at the direction of the consulting arborist, until backfill.

4. Below grade formwork in the protected zone of oak trees to remain shall be of "blind side" construction (installed without need of access behind the formwork) to minimize over-excavation to the greatest extent feasible. Fence posts shall be founded on narrow helical/screw piles, at locations first confirmed to be free of larger roots by hand digging.
5. The consulting arborist shall recommend and the Applicant shall adhere to a supplemental irrigation program for encroached and replacement trees before, during and after construction, as appropriate to the season and water year performance to avoid rot and fungus while providing for the health of the tree. Supplemental irrigation should avoid extended intervals of continuous wetting and generally be confined to soaker hoses near the dripline.
6. The driveway shall be permeable to air and water and constructed with a design that is equivalent or better in compaction reduction performance to the GeoTerra Tree Root Protection system by Presto Geosystems, which has been tested as equivalent in compaction reduction performance to 10-12" of gravel.
7. To minimize compaction, a layer of wood mulch free of pests or disease 4-6" deep shall be placed over any area that may be used for equipment staging or parking, along with rigid sheeting to further reduce loads and mitigate against rutting. These areas are expected to be those relatively flat portions of the site at or above approximately 1342' in elevation. The rigid sheeting layer may be either (or both) a compaction mitigation system equivalent or better in performance to the GeoTerra Tree Root Protection system by Presto Geosystems or a ¾" sheet of plywood or similarly performing engineered wood product with glue rated for exterior usage and tolerance to wetting (but not pressure-treated or otherwise impregnated with substances that may leach when wetted). The mulch and rigid sheeting shall be maintained and replaced if needed throughout construction, at the direction of the consulting arborist. Coarse fir bark nuggets would not degrade over the construction interval and are recommended.
8. The mulch installed prior to commencing construction shall be retained after construction completes. As the mulch breaks down, the soil will be enriched, and accompanying biological activity will further help to remedy the existing soil compaction. Natural leaf litter shall be retained to the greatest extent feasible.
9. The runoff from washout of any tools or equipment, including those for concrete, paint and similar fluids, shall be disposed in the sewer system for proper wastewater treatment. Prior to the

viability of sewer disposal on-site, containerized washout stations and off-site transport shall be used. Under no circumstances shall such runoff infiltrate the protected zone of any tree to remain.

10. Any tree trunk located within five feet of any construction activity shall be protected from mechanical damage prior to that activity to the satisfaction of the consulting arborist and/or County Forester. Such protection may include, but is not limited to, fencing or other physical barrier no less than 4' tall, or a "girdle" comprised of dimensional lumber aligned lengthwise with the trunk, strung together edge to edge around the exposed circumference of the tree. In the unexpected event that any mechanical damage occurs, the wound shall be smoothed with a sharp, alcohol-sterilized chisel to promote healing.
11. Combustion exhaust shall not be permitted within five feet of the live tissue of trees to remain, and idling of combustion equipment in the vicinity of trees shall be minimized to the greatest extent feasible.
12. The Applicant shall be responsible for coordinating the supervision of these project conditions and any other direction by the consulting arborist and/or County Forester that may arise from unanticipated circumstances. Such supervision shall include at a minimum the following visits from the consulting arborist: (1) one site visit before grading commences and after protective BMPs are installed; (2) two site visits spaced during pruning and excavation; (3) annual site visits during the pendency of construction to assess whether any alterations in tree management would be warranted and to confirm protective BMPs remain intact and effective.

- All encroached and replacement trees shall be monitored by the County Fire Department Forestry Division, according to the following standards. If the requisite number of replacements fail to establish, this monitoring shall also apply to subsequent replacements.
    1. On-site replacement coast live oak plantings shall be from a local heritage tree seed source by sprouted acorn or seedling grown in a container no greater than 5 gallons. A cluster shall consist of three vertices forming an equilateral triangle of 3' leg, with each vertex including five sprouted acorns spaced by at least six inches, and at most one container. Only the most vigorous planting at each vertex shall be permitted to survive two years, and only the most vigorous specimen in a cluster shall be permitted to mature beyond the monitoring period. Each cluster shall therefore constitute one replacement tree for purposes of implementing a specific replacement ratio. Plantings shall be established at a density of no greater than

100 clusters per acre, in the months of November, December or January. Plantings shall be shaded to ensure a mixed light environment, which may include the use of existing vegetation, native nurse shrubs, treeshelter, or other screening. Plantings shall be protected against browsing at all times by the use of treeshelter or 24-gauge hardware cloth tubes. Supplemental irrigation by deep-watering shall be provided once for every two dry months in the first two years after planting.

2. Monitoring shall occur in years two, four and seven after planting, at which point the required number of replacement trees shall be greater than 1" in trunk diameter; free of supplemental irrigation beyond that needed, if any, to approximate average annual rainfall; and otherwise healthy and well-established, as determined by the County Fire Department Forestry Division and/or County Department of Regional Planning Biologist using criteria from the most current edition of the International Society of Arboriculture "Guide for Plant Appraisal." In the unexpected event that this criterion is not met, or if additional replacements are required, biennial inspections shall be extended until such time as the required number of replacement oak trees are well-established according to these criteria. The Applicant shall be made liable for the payment of any additional fees to confirm compliance.
3. The Applicant shall provide to Regional Planning a memorandum serving to record progress towards achievement of these performance goals by the end of calendar years two, four and seven after the winter of initial planting, and biennially thereafter in the unexpected event that additional inspections are required. The memorandum shall include the precise final location of all clusters on a project site plan, as well as a contextual picture of each cluster to facilitate inspection.

RCM-BIO-1: The project shall comply with state and federal laws protecting nesting and roosting birds and mammals, including but not limited to California Fish and Game Code Sections 1600-1603, 3503 and 3503.5, 3511, 4700, 5050, 5515, 4150 and 4152, the Migratory Bird Treaty Act, Section 10 of the FESA, Article 3 of the CESA, and any associated standard consultation and permitting requirements.

RCM-BIO-2: The project's landscaping shall comply with the County's Drought Tolerant Landscaping Ordinance, specifically incorporating native species that are suited to oak woodland. Wherever possible, these should be chosen from the list and citations included in the County's Oak Trees: Care and Maintenance Guide but should in any event be drought-tolerant native plants with compatible irrigation requirements. Irrigation of these species shall be used only to establish the

plantings and sustain them as needed through drought or adversity. The introduction of invasive ornamental species is prohibited.

RCM-BIO-3: The project shall comply with California Code of Regulations, Title 14, Section 650 to receive a Scientific Collecting Permit prior to capture, temporary possession, or relocation of wildlife to avoid harm or mortality in connection with otherwise lawful activities.

PDF-BIO-1: The Applicant proposes that expanded oak resources on the project parcel be permanently protected in-kind by exercising the discretion afforded by County Code Section 22.174.070(A)(6)(a) with a replacement ratio of 4:1.

PDF-BIO-2: The Applicant proposes that in order to help rehabilitate the severely degraded existing condition of the oak woodlands at the eastern portion of the project parcel, and pursuant to the recommendation of the project consulting arborist, after construction completes, the existing compacted area of the project parcel near street grade (1342' above msl or greater) will be deep root aerated using one of the recommended methods discussed in the project Oak Tree Report. Oak-compatible plantings, rock, or other oak-compatible landscaping features, as determined by the project consulting arborist, will be placed to preclude vehicular passage in any critical root zone (extending out to five trunk diameters) on the project parcel accessible from Canyon Crest Road.

PDF-BIO-3: The Applicant proposes that in order to help rehabilitate the severely degraded existing condition of the oak woodlands at the eastern portion of the project parcel, and pursuant to the recommendation of the project's consulting arborist, the layer of fill dumped by previous owners in the protected zones of all encroached trees will be removed by hand after construction completes, unless and until oak tree roots are encountered. Where an existing drainage device impinges on any collar, the concrete will be carefully chiseled and extricated. Should any wound result, it will be chiseled clean to promote healing.

Impact Discussion

- **Threshold 5.4-1**: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service
- **Threshold 5.4-2**: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service
- **Threshold 5.4-3**: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- **Threshold 5.4-7**: Substantially affect a rare or endangered species of animal or plant or the habitat of the species

- **Threshold 5.4-9**: Substantially diminish habitat for fish, wildlife or plants

The project would be expected to result in no adverse impacts under these thresholds from substantial effects to designated (federally or state listed or otherwise established as sensitive, special status or candidate for listing) species and communities, and less than significant effects on any biota or their habitat, including wetlands.

General Analysis

The 2035 County General Plan EIR analyzed that indirect effects on sensitive species from the loss of common habitat expected at the scale of buildout of all future development governed by the 2035 County General Plan was significant and unavoidable because "[a]lthough direct impacts to special status species would be mitigated, there is no mitigation provided for the indirect impacts to special status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the [2035 County General Plan] would result in the overall reduction of habitat and resources to support special status species. Thus, due to the loss of common habitats capable of supporting special status species and diminished resource availability, impacts to special status species and associated habitat remain significant and unavoidable at the general plan level."[224] Distinguishing between mitigable, localized impacts to designated species/habitat and cumulative impacts from immitigable reductions in common habitat at the density of complete buildout, the 2035 County General Plan EIR formulated GPMM-BIO-1 and GPMM-BIO-2, stating that "[GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and wetlands." While the impact of the loss of common habitat is significant at the scale of the 358,931 additional residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it is not significant at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance. The project must comply with all applicable regulatory requirements and standard conditions. The project is consistent with all 2035 County General Plan policies, including those related to conservation and natural resources. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

GPMM-BIO-1 stipulates that a "qualified biologi[st]" shall perform one "general survey…conducted to characterize the project parcel" and determine at their discretion the need for more focused, protocol-level surveys, and using that survey, a "biological resources assessment" including "site location, literature sources, methodology, timing of survey(s), vegetation map, site photographs, and descriptions of biological resources on-site" shall be prepared.[225] As documented in Section 11, Appendix D, a qualified biologist has performed a survey and generated a conforming Biological Resources Assessment Report. Section 5.4.3 of

[224] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 6-3. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[225] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.4-122. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

this EIR contains further catalogue of biological resources on the project parcel. As documented in Section 11, Appendix D, no occurrence of designated species was detected, and no protocol-level surveys were recommended. Where no high-quality habitat is affected by a project and a single reconnaissance-level field survey finds no presence of sensitive species, a protocol-level biological survey is not required. *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1396. The project implements GPMM-BIO-1 in the information contained in this EIR.

GPMM-BIO-2 stipulates that "[i]f there is potential for direct impacts to special status species with implementation of construction activities," pre-construction surveys by a qualified biologist would "ensure avoidance, relocation, or safe escape of special status species from the construction activities. If special status species are found to be nesting, brooding, denning, etc.…on-site during the pre-construction survey…construction activity shall be halted until offspring…are able to escape the site or be safely relocated."[226] Because no reported resources exist on the project site, any specific avoidance measures or performance standards for avoidance tailored to a specific resource would be impractical or infeasible to enumerate. (State CEQA Guidelines Section 15126.4(a)(1)(B)). As such, MM-BIO-1 further reduces the already low potential for any impacts to designated species from incidental take during construction. Any grading and vegetation disturbance or removal must be performed outside of the bird nesting season. (*See* Section 11 Appendix D). In addition, a pre-construction sweep by a qualified biologist would confirm that no other designated species are present immediately prior to construction and provide "avoidance, relocation, or safe escape" in the unexpected event that any species are encountered, in accordance with RCM-BIO-3. Therefore, the project implements GPMM-BIO-2.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with designated species or communities and their habitat, and in implementing its generally applicable mitigation, the proposed project is consistent with the analysis of the 2035 County General Plan EIR.

Additional Project-specific Analysis

The removal of one oak tree and the limited number of native and non-native plants in the project footprint of development adjacent to a residential street in a residential neighborhood would not be expected to result in a substantial change to the extent of habitat for any candidate, sensitive, or special status plant or animal species at a regional, sub-regional or landscape scale. Less than 5% of the project parcel, or less than 2,000 square feet, would be developed with the building footprint and driveway. The project would not remove any high-quality habitat for any designated species. (*See* the Biological Resources Assessment Report in Section 11 Appendix D;

[226] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle; Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles; Table 5-8: CNPS-Mapped Sensitive Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited,; and Table 5-9: Additional CNPS-Mapped Sensitive Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in which the Project is Sited,). The project parcel does not contain any natural community designated as sensitive by the California Department of Fish and Wildlife or any local plan.

The removal of two or fewer non-heritage trees is considered sufficient in the County CEQA Environmental Document Reporting Procedures and Guidelines to constitute a "minor land use alteration" subject to a Class 4 categorical exemption from CEQA that would not, by definition, be expected to have a significant effect on wildlife habitat. The removal of trees in connection with one single-family residence is also subject to a Class 3 categorical exemption in any setting. The existing conditions in this developed residential neighborhood are already characterized by residential noise, light, and incidental emissions that may affect wildlife and reduce the quality of habitat on and adjacent to the project parcel. The project would not be expected to substantially increase these impacts above the baseline created by these existing residences. The Applicant would be expected to comply with all applicable laws protecting threatened or endangered species and prohibiting "take" of these species.

Riparian Plant, Bird, Fish, and Amphibian Species

Pursuant to the Biological Resources Assessment Report in Section 11 Appendix D, designated species were analyzed to have potential to exist in riparian habitat on the project parcel, including riparian bird and amphibian species. On the project parcel, only the intermittent feature in the Millard Canyon bottom provides riparian habitat. (*See* Section 11 Appendix H). The proposed project is sited to avoid this riparian habitat that is more than 150 feet downslope from the most downslope edge of the development footprint. Without more, the project's impacts to riparian species would be expected to be less than significant. *See Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 261 (impacts to listed riparian bird species are properly less than significant when impacts to their wetland habitat are less than significant).

Given this distance, noise, light, vibration and dust generation during construction and operation would not be expected to substantially alter the existing condition, which is characterized by disturbances from similar residential uses at similar distances. (*See* Figure 5-20: Proximity of Existing Single-Family Residences to Millard Canyon Bottom). As attributed in Section 5.6, the project would be conditioned with Best Management Practices conventional to hillside construction that limit vectors for physical disturbance of the canyon bottom from effects propagating down the slope.

Pursuant to RCM-BIO-1, the project must comply with the Migratory Bird Treaty Act ("MBTA"), making it illegal to destroy a migratory bird nest that has eggs or chicks in it or if there are young birds that are still dependent on the nest for survival. In complying with the MBTA, the project's impacts to the sensitive migratory bird species with some potential to occur on the project parcel would be expected to be less than significant.

In addition, MM-BIO-1 has been formulated to fulfill generally applicable 2035 General Plan EIR measures, further reducing the potential for impacts to riparian bird species with a pre-construction sweep by a qualified biologist for nests and implementation of appropriate avoidance measures if found, in the unexpected event that habitat removal must occur during the nesting season and a nest becomes established between the time of survey and the time of impact.

Other Plant Species

Pursuant to the Biological Resources Assessment Report in Section 11 Appendix D, no designated non-riparian plant species were observed during a site survey. Within the less than approximately 2,000 square foot footprint of development, one oak tree would be removed, along with a small number of non-sensitive native and non-native plant species. This footprint is sparsely vegetated at the herb and shrub layers. (See Figure 4-2: Project Site Photographs). Impacts to the oak trees that are present in the footprint of development are analyzed under Threshold 5.4-10 and would be expected to be less than significant. Pursuant to RCM-BIO-1, the project must comply with Section 1908 of the California Fish and Game Code, making it illegal to "take" any rare or endangered plant. In complying with these regulations and with the consultation requirements of the CESA and FESA, the project's impacts to designated plant species would be expected to be less than significant. *See also Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1276 (requirement to consult with the USFWS and/or CDFW if listed species are encountered, and obtain permits pursuant to the FESA and/or CESA with measures typically required by these agencies to manage a project's interaction with these listed species, adequately mitigates impacts to less than significant); *accord Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 945-7.

In addition, MM-BIO-1 has been formulated to fulfill generally applicable 2035 General Plan EIR measures, further reducing the potential for impacts to designated non-riparian plant species with a pre-construction sweep by a qualified biologist, in the unexpected event that any designated plant species become established in the project footprint of development between the time of survey and the time of impact.

Other Bird Species

Pursuant to the Biological Resources Assessment Report in Section 11 Appendix D, no designated non-riparian bird species were observed during a site survey. Resident bird species use habitat throughout the year, while other species, including most of the sensitive species reported in the Pasadena quadrangle, are migratory and present only during the nesting season. The proposed project would not not impact any high-quality habitat for sensitive bird species. (*See*

Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle, Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles). Pursuant to RCM-BIO-1, the project must comply with Section 3503, 3503.5 and 3513 of the California Fish and Game Code, making it illegal to "take" any bird, raptor, or migratory bird. In complying with these regulations and with the consultation requirements of the CESA and FESA, the project's impacts to designated non-riparian bird species would be expected to be less than significant.

In addition, MM-BIO-1 has been formulated to fulfill generally applicable 2035 General Plan EIR measures, further reducing the potential for impacts to riparian bird species with a pre-construction sweep by a qualified biologist and implementation of appropriate avoidance measures if encountered, in the unexpected event that habitat removal must occur during the nesting season and a nest becomes established between the time of survey and the time of impact.

Mammal Species

Pursuant to the Biological Resources Assessment Report in Section 11 Appendix D, no designated mammals were observed during a site survey. The project would not impact any high-quality mammal habitat. (*See*

Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle, Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles). While the coast live oak trees in the stand affected by the project provide habitat for bats in any cavities that may be present, the trees are sited adjacent to a roadway and residences generating noise disturbances that reduce habitat value for sensitive bat species. As of April 2020,[227] mountain lion (*Puma concolor*) is a CESA candidate species. Mountain lions are known to travel widely in the San Gabriel Mountains and have been photographed in the Millard Canyon bottom, usually at night. Mountain lions would be expected to be a transient species on the project site in the canyon bottom during hunting and movement between Hahamongna basin and the San Gabriel Mountains. The species would not be expected to have a natal den near the project site, since denning mountain lions avoid roads and stay at a distance of at least 600 meters from human disturbance. This transient usage of the canyon bottom would not be substantially affected by the proposed project.

Pursuant to RCM-BIO-1, the project must comply with Section 250 of the California Fish and Game Code, making it illegal to "take" any furbearing mammal. In complying with these regulations and with the consultation requirements of the CESA and FESA, the project's impacts to designated mammal species would be expected to be less than significant.

In addition, MM-BIO-1 has been formulated to fulfill generally applicable 2035 General Plan EIR measures, further reducing the potential for impacts to designated mammals with a pre-construction sweep by a qualified biologist and implementation of appropriate avoidance measures if encountered, in the unexpected event that habitat removal must occur during the breeding season and a roost or burrow becomes established between the time of survey and the time of impact.

Reptile Species

Pursuant to the Biological Resources Assessment Report in Section 11 Appendix D, no designated reptile species were observed during a site survey. The project would not impact any high-quality reptile habitat and would be expected to have a less than significant impact on any reptile species. (*See*

[227] Source: California Department of Fish and Wildlife. Available at: https://wildlife.ca.gov/Conservation/Mammals/Mountain-Lion/FAQ.

Table 5-6: CNDDB-Mapped Designated Species Occurrences in the USGS 7.5-Minute Quadrangle in which the Project is Sited and Table 5-7: Additional CNDDB-Mapped Designated Species Occurrences in the Nine USGS 7.5-Minute Quadrangles Surrounding the Quadrangle in Which the Project is Sited).

In addition, MM-BIO-1 has been formulated to fulfill generally applicable 2035 General Plan EIR measures, further reducing the potential for impacts to designated reptiles with a pre-construction sweep by a qualified biologist and implementation of appropriate avoidance measures if encountered, in the unexpected event that any specimen not already inclined to escape disturbance became established between the time of survey and the time of impact.
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- **Threshold 5.4-4**: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- **Threshold 5.4-8**: Interfere with the movement of any resident fish or wildlife species, or migratory fish or wildlife species

The project would be expected to result in no adverse impacts under these thresholds from substantial interference with any established wildlife corridor or native wildlife nursery site, and less than significant impacts on any wildlife movement.

General Analysis

The 2035 County General Plan EIR found this impact to be significant and unavoidable because "buildout of the [2035 County General Plan] will impact regional wildlife linkages and may impact nursery sites."[228] Notwithstanding this finding of significance where development occurred in wildlife linkages and nursery sites, the 2035 County General Plan EIR formulated GPMM-BIO-3 as feasible mitigation to reduce impacts to less than significant where the interaction of development with these resources could be mediated.

GPMM-BIO-3 stipulates that "[wildlife] corridors shall not be entirely closed by any development" and where "wildlife corridors and wildlife nursery sites" are impacted, mitigation may include "native landscaping to provide cover on the corridor" or "preservation by deed in perpetuity for another comparable…site."[229] The proposed project's footprint of development is not located in a regional wildlife corridor and does not contain an identified nursery site and therefore transcends this mitigation measure and the finding of unavoidable significance.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with wildlife corridors or native nursery sites, and by transcending its mitigation, the proposed project is consistent with the analysis of the 2035 County General Plan EIR.

[228] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.4-124. n Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[229] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Additional Project-specific Analysis

As attributed in Section 5.4.3, the canyon bottom on the western portion of the project parcel is an active wildlife corridor between parts of the San Gabriel Mountains and the Arroyo Seco and Hahamongna Watershed park. However, the project is sited more than 150 feet from this corridor, and standard conditions including RCM-GEO-1, RCM-GEO-2 and SC-LU-1, preclude the project from substantially impacting this corridor with physical or hydrological effects propagating down the hillside. Noise, light and incidental emissions from construction and operation of the project would not be expected to substantially alter the existing conditions, which are also characterized by these impacts from dozens of similar residences at similar offsets from the canyon bottom. (*See* Figure 5-20: Proximity of Existing Single-Family Residences to Millard Canyon Bottom). The planting of replacement trees adjacent to the riparian corridor and hillside above would in time provide additional cover and screening of the canyon bottom from the impacts of existing development and traffic along Canyon Crest Road, as well as those of the project.

As attributed in Section 5.4.3 and in the Biological Resources Assessment Report in Section 11 Appendix D, the footprint of development of the proposed project itself possesses a low permeability score for wildlife movement and facilitates movement only to developed, predominantly fenced residential areas to the east and south that do not contain open natural spaces or high-quality habitat. As such, the footprint would not be expected to intersect any established wildlife corridor. In addition, the proposed project does not incorporate any permanent fencing along the frontage or in any location not currently obstructed, nor any hardscape or other obstructions outside the footprint of the home, retaining wildlife permeability that is superior to the other homes in the vicinity.

- **Threshold 5.4-5**: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- **Threshold 5.4-6**: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

The project would be expected to result in no adverse impacts under these thresholds from conflict with any policy, ordinance or plan affecting biological resources.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant."[230] As attributed in Table 5-14: Oak Tree Permit Findings Analysis, the project would not conflict with the Oak Tree Ordinance. No other County ordinances with the purpose of directly protecting biological resources are identified as being applicable to the project. As attributed in Table 5-11:

[230] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis, the project would not conflict with any local policies protecting biological resources.

Within the County, the three adopted habitat conservation plans are the Desert Renewable Energy Conservation Plan Natural Communities Conservation Plan/Habitat Conservation Plan ("NCCP"/"HCP"), the Palos Verdes Peninsula NCCP/HCP, and the West Mojave Plan HCP.[231] In addition, the USFWS Conservation Plan and Agreements Database[232] also includes the Newhall Farm Seasonal Crossings Habitat Conservation Plan. The proposed project is not sited within any of these adopted habitat conservation plans and would therefore not conflict with them. There are no California Regional Conservation Plans in the County.[233]

Within the non-coastal areas of the County, the Significant Ecological Area ("SEA") Ordinance (County Code Section 22.102, *et seq*.) is the mechanism by which areas "that contain irreplaceable biological resources" are designated and afforded additional protections to help mediate the interaction with development according to land use designation. The proposed home is not sited within an SEA. An SEA has been designated for the western portion of the project parcel, outside of the project footprint of development. (*See* Figure 3-6: Proposed Project Site Plan).

The proposed project is exempt from the SEA Ordinance pursuant to County Code Section 22.102.040(I), (L), and/or (P) because the only "development," as defined in the SEA Ordinance, proposed to occur within the SEA on the project parcel is the planting of SEA Native Trees (whether required under Title 22, as for this project, or as a project design feature acknowledging their aesthetic and ecological quality, as is also characteristic of this project).

The County has exercised its discretion to maintain the pre-existing fuel modification activities for the parcel within the SEA, and not to expand these activities to any extent. The relevant statute for new development concerns the controlling fuel modification plan requirements, pursuant to County Code Title 32, Section 4908.1 "Fuel Modification Plan in Fire Hazard Severity Zones". In pertinent part, the statute requires that "[e]very fuel modification plan shall be reviewed by the Forestry Division of the Fire Department for defensible space, fire safety, and compliance with Sections 325.2.1, 325.2.2, 325.10, and 503.2.1 of this code, the Fire Department's fuel modification guidelines, and California Code of Regulations, Title 14, Division 1.5, Chapter 7, subchapter 2."

- Section 325.2.1 of Title 32 levies certain fuel modification requirements within 30 feet of a structure, not to exceed 100 feet, at the discretion of the Agency between 30 and 100 feet.
- Section 325.2.2 of Title 32 provides for Agency discretion to extend the requirements of 325.2.1, not to exceed 200 feet, at the discretion of the Agency between 30 and 200 feet.

[231] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.10-4 - 5.10-5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[232] Source: United States Fish and Wildlife Service: Conservation Plans by Type and U.S. FWS Region. Available at: https://ecos.fws.gov/ecp/report/conservation-plans-type-region/.
[233] Source: California Department of Fish and Wildlife: California Natural Community Conservation Plans, April 2019. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

- Sections 325.10 and 503.2.1 of Title 32 provides for Agency authority to remove fuel adjacent to public roadways.
- The Fire Department's fuel modification guidelines are advisory in nature and concern the intentional introduction of plant species as part of a landscape plan. As such, they do not control pre-existing vegetation. Such guidelines would be pertinent in the event the Applicant were to seek an SEA permit for non-exempt plantings within the SEA.
- California Code of Regulations, Title 14, Division 1.5, Chapter 7, subchapter 2 references in pertinent part the requirements of Title 14. Natural Resources Division 1.5. Department of Forestry and Fire Protection Chapter 7. Fire Protection Subchapter 3. Fire Hazard, which provides for a primary 30-foot buffer from a structure with more strenuous requirements, and a 100-foot buffer consistent with healthy native vegetation of appropriate density. This statute also explicitly references that "alternative practices" that provide for "the same practical effects" may be adopted at the discretion of the Agency.

The pre-existing fuel modification activities are sufficient to comply with these regulations and maintain fire safety. In practice, these activities have extended westward approximately 200 feet from the eastern frontage of the parcel (see Figure 3-6: Proposed Project Site Plan), or greater than 100 feet from the westernmost portion of the proposed structure, at the direction of the agents of the County Agricultural Commissioner charged with maintaining fire safety on vacant parcels within the County. This pre-existing activity exceeds the quantified guidelines in state and local statutes as they apply to the proposed project. Moreover, even were this not true, the County maintains discretion to find the pre-existing extent of fuel modification activities sufficient, in light of the relatively lesser density of vegetation on the eastern slope of the project parcel compared to other parcels in the vicinity; the presence of a large cactus firebreak below the structure; and the highly fire-resistant and firebreaking characteristics of the proposed structure.

Pursuant to County Code Section 22.102.030(B), the SEA Ordinance only applies to "activities that meet the definition of development herein where occurring within all areas designated in the General Plan and related maps as SEAs." Because the project footprint of development, including the structure, driveway (given the lack of any associated hardscape or grading outside the footprint of the structure), and construction staging would occur entirely outside the bounds of any mapped SEA, the SEA Ordinance would not apply to these proposed project elements. Because the only activity within the SEA would be exempt, no SEA review is required to approve this project, and the proposed project is not bound to any SEA Design Guidelines. Nevertheless, satisfaction of the Ordinance findings and its Design Guidelines is analyzed as additional substantial evidence of the compatibility of the design, in Section 5.10.5.

Impacts within SEAs are delineated into ministerial and discretionary approval processes. Ministerial review, as described in Section 22.102.060 of the SEA Ordinance, is designated for impacts that are minor in nature, determinate as less than significant, and therefore not subject to CEQA. This includes a development footprint of "no more than 20,000 square feet" within the SEA (County Code Section 22.102.060(A)(1)), where compliance with the SEA Design Guidelines can be established, and open space preservation proportionate to the development footprint within the SEA is implemented. While the proposed project would not be expected to entail any non-exempt SEA "development," as defined in County Code Section 22.14, and would

neither remove nor encroach upon any tree located within the SEA, non-exempt alterations (including residential development and fuel modification) over an area smaller than 20,000 square feet (approximately the entire downslope area beneath the project footprint of development), would be considered minor. As attributed in Section 5.6.5, standard and typical Best Management Practices to constrain construction impacts would be expected to prevent substantial alterations within this area. On the project parcel, the immediate boundary of the SEA is characterized by the presence of a large stand of non-native, non-sensitive prickly pear cactus and little to no native vegetation.

- **Threshold 5.4-10**: Result in a permanent net loss of oak woodlands resources, including specimens of the genus *Quercus* and allied native species.

The project would be expected to result in no permanent net loss of oak woodlands resources.

Project-specific Analysis

The project would require the removal of one oak tree and no other native trees or native understory, within a residential neighborhood, adjacent to a roadway and existing residences. Pursuant to SC-BIO-1, the oak tree must be replaced in a ratio of at least 2:1, and these replacement plantings would be permanently protected from the date of planting by the Oak Tree Ordinance, requiring replacement in a ratio of at least 1:1 should these replacements be removed in the future, at any size. Because County Code Section 22.174.070(A)(6)(a) specifies a ratio of "at least" 2:1, affording discretion to adopt a higher ratio, the Applicant has requested that because of the aesthetic and ecological value oak trees afford the project parcel and surroundings, replacement plantings be required in a ratio of 4:1 under Title 22, as a project design feature.

Coast live oak is favored for use in replacement and rehabilitation projects throughout its range.[234,235]. As attributed below, sources document the capacity of coast live oak tree plantings to succeed long-term in quality habitat when measures are taken to help sustain plantings during their more sensitive early years into a more resilient adolescence, and thence to maturity. The common California sagebrush scrub community, in association with coast live oak woodlands as an herb and shrub layer, is also resilient in natural recruitment and survival, as evidenced by its widespread unaided dominance in the San Gabriel mountains foothills and elsewhere. As such, the logical focus of any analysis of eventual success expanding an association of coast live oak woodlands and California sagebrush scrub is the survival of the oak trees into maturity. Documentation of restoration attempts over decades is relatively sparse, reflecting the advent of CEQA reporting in the 1970's, and limited migration of pre-internet records. Beginning in 1979

[234] Source: Goldner, Bernard H. 1984. Riparian restoration efforts associated with structurally modified flood control channels. In: Warner, Richard E.; Hendrix, Kathleen M., eds. California riparian systems: Ecology, conservation, and productive management: Proceedings of the conference; 1981 September 17-19; Davis, CA. Berkeley, CA: University of California Press: 445-451. [5852]

[235] Source: Howald, Ann M.; D'Antonio, Carla. 1990. Designing a monitoring program for a native plant community revegetation project. In: Hughes, H. Glenn; Bonnicksen, Thomas M., eds. Restoration '89: the new management challenge: Proceedings, 1st annual meeting of the Society for Ecological Restoration; 1989 January 16-20; Oakland, CA. Madison, WI: The University of Wisconsin Arboretum, Society for Ecological Restoration: 182-193. [14694]

and proceeding thereafter on five- to seven-year spacing, symposia on California oak woodlands have provided some of the most rigorous reported data.[236] Beginning with the fifth symposium, papers under the topic "Regeneration and Restoration" have been reported. Some CEQA reporting has also yielded rigorous data.

The Oak Woodland Habitat Revegetation/Mitigation Program for the Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project in Arcadia,[237] approximately seven miles to the east of the proposed project at a similar elevation and climate in the San Gabriel mountains foothills, removed approximately 11 acres of native vegetation, including coast live oak woodlands comprised of 177 individual coast live oak trees, in order to expand the sediment retention capacity of existing facilities. The project created 5.5 acres of oak woodland mitigation in areas completely comprised of fill slopes. All vegetation was installed by 2015 and site monitoring has proceeded through a most recent report in 2021.[238] The Oak Tree Assessment for 2021 documented that of the more than 400 individual acorns established and shepherded to adolescence using methods similar to those required for the proposed project, at year six, fewer than 50 had failed to establish, comporting with the CDFW target success criteria of 80% of the plantings. Hundreds of coast live oaks ranged in trunk diameter up to 4.75" and height up to 17', with a mean trunk diameter of approximately 2.1" and a mean height of nearly 9'. The CDFW was partner to this project, agreeing with the viability of the project, its adequacy under CEQA and with a performance-based end to monitoring should criteria be achieved after seven years. Preferences for conservation over replacement are based in part on the common use of lower quality replacement planting areas, which may include graded slopes, volumes hydrologically disrupted by retaining features, landscaped or fragmented areas, or areas that do not qualify as "restoration" of woodlands that could have or did naturally succeed in the past.[239] While projects like this one, related to foothill debris basins and sediment removal, are such an example, the Santa Anita project is on track to meet its goals of re-establishing a foothill oak woodlands community.

A study reported in the proceedings of the Fifth Symposium on Oak Woodlands[240] created 33 experimental plots of 50 meters by 50 meters in Santa Barbara, focusing on causes for failure of seedling recruitment naturally in settings that were suited to coast live oak woodlands and

[236] Source: University of California. Oak Symposia Series. Available at: https://oaks.cnr.berkeley.edu/oak-symposium-series/
[237] Source: County Department of Public Works. Oak Woodland Habitat Revegetation/Mitigation Program for the Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project. Available at: https://dpw.lacounty.gov/wrd/Projects/SAHMP/files/Final_OWHRMP_051214.pdf
[238] Source: County Department of Public Works. Sixth Annual Monitoring Report for the Oak Woodland Habitat Revegetation/Mitigation Program for the Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project. Available at: https://dpw.lacounty.gov/wrd/Projects/SAHMP/files/Sixth_Annual_Monitoring_Report_2021.pdf
[239] Source: County Department of Regional Planning: County of Los Angeles Oak Woodlands Conservation Management Plan, page 93. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.
[240] Source: Tyler, CM., Mahall, B.E., Davis, F.W., Hall, M., 2002. Factors limiting recruitment in valley and coast live oak. In: Standiford, R.B., et al. (Eds.), Proceedings of the Fifth Symposium on Oak Woodlands: Oaks in California's Changing Landscape. Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture, pp. 565-572. Available at: https://www.fs.usda.gov/psw/publications/documents/psw_gtr184/psw_gtr184.pdf.

savannah. The study found, in pertinent part, that: "[s]eed predation and herbivory by small mammals are a significant "bottleneck" to oak seedling recruitment on the landscape scale" as well as "lack of late winter rainfall". When protected from rodent herbivory and provided adequate winter water, coast live oak cohorts of several hundred plantings in the benign planting year of 1997-1998 survived at rates of slightly above 70% through one year and sightly below 70% through four years. The results and discussion noted variability in rainfall and other conditions in the first planting year had an outsized effect on eventual survivorship, given the lack of any artificial irrigation.

A study reported in the proceedings of the Seventh Symposium on Oak Woodlands[241] looked at long-term success with "minimum-input" care in central California of valley oak plantings, a species native to Los Angeles County with similar range and habitat requirements to coast live oak. Through 25 years, plantings established in 1989 survived at a rate of 74%, with individual specimens as large as 16 inches in diameter at breast height, and an average of more than five inches in diameter at breast height and 130 square feet of canopy coverage.

The Oak Habitat Restoration Project in Walnut Creek in central California reported in the proceedings of the Fifth Symposium on Oak Woodlands [242] has had good success with direct plantings of coast live oak acorns with appropriate tree protections. An average of one in three acorns were found to sprout to seedlings, and approximately 60% of sites planted with three acorns were found to have a healthy seedling at one year. Of these, approximately half the seedlings, or 30% of the original planting sites, evidenced long-term self-sustainability by the five-year mark. Through 20 years, approximately 700 healthy adult oaks survived at 2500 planting sites, or approximately 28%.[243]

Similar performance on the project as proposed, with similar methods of establishment to these reported efforts, would reasonably be expected and result in at least one sapling at each vertex, and after culling, one strong specimen at each cluster at the seven-year mark. As is also implied by a seven-year monitoring period in CEQA Section 21083.4, oaks vigorous at seven years would reasonably be expected to sustain into maturity in this quality setting. Long-term, these trees would reasonably be expected to naturally recruit in this quality setting, as the other oak trees in the vicinity did to maintain a population into modern times, replacing in senescence into the foreseeable future.[244]

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[241] Source: Bernhardt, Elizabeth. 2014. Long-Term Performance of Minimum-Input Oak Restoration Plantings. In: Proceedings of the seventh California oak symposium: managing oak woodlands in a dynamic world (Gen. Tech. Rep. PSW-GTR-251). Berkeley, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Available at: https://www.fs.usda.gov/psw/publications/documents/psw_gtr251/psw_gtr251_397.pdf.

[242] Source: Kraetsch, Ralph. 2002. Ten years of oak restoration in city of Walnut Creek Open Spaces. In: Standiford, Richard B.; McCreary, Douglas; Purcell, Kathryn L., technical coordinators. Proceedings of the 5th symposium on oak woodlands: oaks in California's changing landscape; 2001 October 22-25; San Diego, CA. Gen. Tech. Rep. PSW-GTR-184. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station: 581-590. [42349]. Available at: https://www.fs.usda.gov/psw/publications/documents/psw_gtr184/050_Kraetsch.pdf.

[243] Source: Walnut Creek Open Space Foundation. Celebrating Walnut Creek's 20 Years of Oak Habitat Restoration. Available at: https://wcosf.org/newsletters/2011winterspringnewsletter.pdf.

[244] Note: The circumstances in *Save Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665 ("Agoura Knoll") may be distinguished in this analysis. Specifically, at p. 701, that decision notes that "the

As evidenced in available data, results of any particular oak woodlands restoration effort are likely idiosyncratic with site quality and conditions until woodlands trees reach the point in their lifecycle when they become resilient, along with uncontrollable natural conditions thereafter that would precipitate decline of an "ideal" naturally established analogue, such as fire, drought, and long-term effects of climate change. Summarizing, two factors are reasonable to expect as determinative of success replacing oak woodlands resources: 1.) the historic physical suitability of the planting environment to the long-term success of naturally recruited oak trees and associated understory (accounting for quality of annual temperature profiles, soil, sunlight, seasonal rainfall, drainage, microclimate, etc.) and 2.) the ability of oak trees and any associated understory to survive childhood sensitivity into a more robust adolescence that can reasonably be expected to sustain through maturity in the quality setting. The flourishing of coast live oak at elevations from canyon bottom to ridge top throughout Millard Canyon evidence that the replacement planting areas in the SEA on the project parcel would reasonably be expected to provide the first factor of success. Every planting would be nearer to a riparian environment than the single tree removed, and further removed from existing development, with greater potential long-term ecological utility. The replacement plantings for the project would be placed in areas that would have supported oak trees in decades and centuries past, adjacent to existing, naturally established oak trees and higher quality riparian habitat, with a native understory. As documented in Appendix E, the soils throughout the project site are ideal for coast live oak trees, comprised of a surface layer of rich, sandy, well-draining alluvial terrace underlain by decomposed granite with reservoir capacity. The methods prescribed to the replacement plantings focus on providing the second factor by: defending against herbivory; providing supplementary water as necessary to the water year, including in the late winter if it is dry; and establishing a competitive recruitment environment in which individual acorns from local heritage coast live oak trees are tested and culled.

Given the lack of a native understory in the woodlands impacted by the proposed project and the quality of the replacement setting, oak tree replacements would be sufficient to ensure that no net conversion of oak woodlands resources occurs in connection with the proposed project. A 2:1 ratio is also referenced as sufficient in the County's Oak Woodlands Conservation Management

Resources Conservation District of the Santa Monica Mountains reported: 'To date, there have been no successful restorations of oak woodlands. It is relatively easy to plant oak trees, but the extensive ecological network and soils that make a forest from those trees has been thus far impossible to recreate.' In its comment letter, CBC similarly stated that '[a]ttempts to recreate oak woodlands as mitigation for other developments are often unsuccessful.'" Preliminarily, conclusory statements attempting to disprove a negative, without more, would not typically be construed as substantial evidence in support of a fair argument of a particular outcome. In this context, actual evidence, as documented in reports or technical literature, that actual restoration attempts in similar quality settings with similar methods had been unsuccessful over time would constitute substantial evidence. As documented herein, substantial evidence of this form supports that there have been expansions and restorations of coast live oak woodlands in California that are successful according to lifecycle expectations at the time of reporting, through at least 25 years. As to whether the Lead Agency carried its burden to provide substantial evidence indicating that restoration efforts would reasonably be expected to be successful, because Agoura Knoll addressed a challenge to a Negative Declaration, the question was not ripe – rather, whether an alternative conclusion could be fairly reached on the evidence available in that particular administrative record. Notwithstanding, should one Lead Agency fail to adequately report information, this does not have any bearing on the existence of that information. As documented in this EIR, substantial evidence supports the conclusion that replacement of coast live oak woodlands resources in a quality setting with appropriate establishment methods would reasonably be expected to be successful.

Plan,[245] which states that the "recommended ratio of replacement should be at least 2:1…consistent with the existing requirements of the Los Angeles County Oak Tree Ordinance." The University of California Integrated Hardwood Range Management Program guidance for the mitigation of oak woodlands impacts,[246] incorporating input from a range of experts and stakeholders, also advises use of a 2:1 ratio for compensation. However, as attributed therein, such a ratio anticipates less than complete long-term success. A ratio of 1:1 of *successful* long-term replacement in a setting of *equal or better* value has been consistently upheld as adequate mitigation under CEQA. *California Natural Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 610-611, 614-626 (1:1 replacement ratio appropriate for sensitive vernal pool habitat); *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 278 [loss of habitat appropriately mitigated by conservation of equivalent habitat at 1:1 ratio].) The Habitat Restoration Plan for the FEIR for the Devil's Gate Dam Sediment Removal Project located approximately one mile southeast of the proposed project documented replacement of coast live oak trees in a 1:1 ratio[247] on-site from 1gal, 5gal, 10gal and 15gal container stock, at 150 plantings per acre with an assumption of partial success in a single initial cohort of plantings at 30-foot centers.[248] The Oak Tree Inventory Report for the project concluded that 15 oak trees in oak woodlands would likely be removed and 24 coast live oak trees in oak woodlands would likely be encroached.[249] Monitoring and maintenance of on-site mitigation areas was required for a minimum of five years, with potential extension through ten years if performance criteria were not met. Judge James C. Chalfant upheld the portions of the FEIR relating to biological resources, including mitigation for impacts to oak trees and oak woodlands, with substantial evidence of the suitability of 1:1 mitigation ratios under Los Angeles Superior Court case #152771.

Larger ratios can correct for partial, probabilistic or un-monitored failure and/or for replacement settings of lesser value. Therefore, 2:1 replacement with a mechanism of establishment that does not credit long-term failures more than constitutes "an appropriate number of trees" in a setting of equal or superior value, and would fulfill the requirements of CEQA Section 21083.4(b)(2)(A), if CEQA Section 21083.4 applied to the proposed project.[250] In addition, as an attribute or feature of the proposed project's use of a small fraction of the site, and given the

[245] Source: County Department of Regional Planning. County of Los Angeles Oak Woodlands Conservation Management Plan, page 94. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.
[246] Source: University of California Integrated Hardwood Range Management Program. Oak Woodland Impact Decision Matrix: A Guide for Planner's to Determine Significant Impacts to Oaks as Required by SB 1334, page ii. Available at: http://ucanr.edu/sites/oakplanner/files/71734.pdf.
[247] Note: See also Appendix L of FEIR for Devil's Gate Dam Sediment Removal Project in the Arroyo Seco, documenting other projects impacting riparian habitat that were approved under Clean Water Act Section 401 permits with 1:1 mitigation ratios. Available at: https://pw.lacounty.gov/wrd/Projects/DevilGate/Recirculated_Portions_of_the_Final_Environmental_Impact_Report.pdf.
[248] Source: County Department of Public Works. Devil's Gate Sediment Removal Project Final Habitat Restoration Plan. Available at: /https://pw.lacounty.gov/swe/devilsgate/docs/DevilsGate-FinalHRP-November2018.pdf.
[249] Source: County Department of Public Works. Devil's Gate Sediment Removal Project Oak Tree Inventory Report. Available at: https://pw.lacounty.gov/swe/devilsgate/docs/BiologicalSurveys/2018/Pre-Construction%20Oak%20Tree%20Inventroy%20Report%20-%20Fall%202018.pdf.
[250] Note: because the project would not reasonably be expected to "result in a conversion of oak woodlands that will have a significant effect on the environment," CEQA Section 21083.4 does not apply to the proposed project.

zoning of the site, most of the existing oak woodlands on the project parcel would be preserved from any possible future development.

Replacement plantings are the common and accepted mitigation for the unavoidable removal of trees. Pursuant to State CEQA Guidelines Section 15370, mitigation, by definition, may consist of actions that have the effect of "compensating for" environmental impacts, rather than avoiding or eliminating the effect altogether. (*See also Topanga Association for a Scenic Community v. County of Los Angeles* (1989) 214 Cal.App.3d 1348, 1359 (contention that the project would cause substantial injury to wildlife habitat in removing 57 mature oak trees "ignores the board's approval of the oak tree permit, the purpose of which is to allow the destruction of oak trees under prescribed circumstances. [Citation.] In approving the permit, the board made findings which showed that the developer met the specified burden of proof for issuance of the permit. [Citation.] The board also imposed conditions which require replacement of the trees to be removed with new trees on a two-to-one ratio and protection of the remaining trees during and after development of the project."); *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 280-283 (upholding EIR removing dozens of coast live oak trees in an urbanized area without mitigation measures because existing regulatory framework provided for replacement)).

The California Department of Fish and Wildlife ("CDFW") has provided current guidance regarding suitable sizes for coast live oak replacement plantings. Wild coast live oak trees face a long and severe summer dry season, which they survive by tapping into the water table using deep roots. Specimens cultivated in pots or boxes experience a rapid loss of vigor in the root system by the time that they must be grown in pots or containers larger than five gallons, and the plants are typically "root-bound" at this point, meaning that the roots are coiled around the inner perimeter of the container, tangled and meshed together, and typically growing sideways (sometimes even upward) rather than being oriented downward for deep growth. The result is that native oak trees in containers larger than five gallons typically fail to develop extensive deep roots after planting, and then they must be supported permanently by heavy irrigation, perish from drought during the summer dry season, or remain permanently stunted and in poor health. The CDFW and USFWS recommends the use of no more than 1-gallon or 5-gallon seedling replacements in greater quantity as a more effective means of ensuring the establishment of an association of woodlands.[251] This recommendation is consistent with studies of the greater establishment success of woody species from direct seeding compared to larger container stock.[252]

Qualitatively, the impacts of the project on the severely degraded stand of oak woodlands on the eastern portion of the project parcel that are affected by the project would be expected to be low according to the discretionary criteria in Table 2 of the Guide, or according to the IHRMP Planner's Guide. The project would not remove a majority of impacted trees; remove any

[251] Source: California Department of Fish and Wildlife and United States Fish and Wildlife Service: Comment Letter on the Draft Combined EIR for the Valley-Ivyglen Subtransmission Line Project and the Alberhill System Project, Riverside County. Available at: http://www.cpuc.ca.gov/environment/info/ene/ivyglen/Docs/Appendix%20M2%20-%20State.pdf.

[252] Source: Young TP, Evans RY (2000) Container stock versus direct seeding for woody species in restoration sites. Combined Proceedings International Plant Propagators' Society 50:577–582.

heritage oak tree; affect any sensitive species of oak tree; remove a substantial native understory; or result in a change in the level of degradation of this stand below "severely degraded," the lowest possible level. The project would not change the character or services of oak woodlands in the vicinity, which is to be interspersed among residences and their appurtenant facilities, including hardscapes, landscaping and fuel modification. Oak tree #7 to be removed received the lowest health of all oak trees, somewhat below average. The removal of oak tree #7 would also permit the maturation of oak trees #8, #9, and #10.

At a landscape scale, encompassing hundreds to thousands of trees over dozens of acres that together average to a moderately degraded existing condition, the impact of the project would also be expected to be low. At this scale, the proposed project is sited amid existing development and would not therefore expand into an undeveloped region or appreciably affect regeneration potential. The project would develop less than 5% of the one-acre project parcel, implicitly preserving and utilizing regeneration potential in the proposed Significant Ecological Area on the project parcel from some alternative design encroaching within the SEA, which has superior ecological value.

Though the project's impacts are expected to be less than significant, a higher ratio of 4:1 adopted pursuant to Title 22 and the Applicant's design intent that the project permanently expand the extent of oak woodlands on the project parcel would also fulfill the statutory requirements of CEQA Section 21083.4(b)(4). The planting of twice as many replacements as constitute "an appropriate number of trees" has been identified by the County as "[an]other mitigation measure"[253] of apparent equivalency to mitigation under CEQA Section 21083.4(b)(2). PDF-BIO-2 and PDF-BIO-3 would also independently satisfy CEQA Section 21083.4(b)(4) by substantially improving conditions degrading at least eight oak trees.

The areas of the replacement plantings are identified on Figure 3-6: Proposed Project Site Plan. Pursuant to SC-BIO-1, the spacing of these plantings would be such as to ensure a net expansion not only in the number of trees, but also the extent of canopy area, once the replacements are established. With or without replacement, the spatial extent of oak woodlands in the area, as defined in the Guide, would remain unchanged, and "mitigation need not account for every square foot of impacted habitat to be adequate. What matters is that the unmitigated impact is no longer significant. [Citation.]" *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233. Moreover, lower replacement ratios are warranted where the existing condition of removed habitat is degraded. *Id*. at 1233 (replacement of 0.41 acres of designated critical habitat for coastal sage scrub at a two-to-one ratio sufficient given its degraded nature). Therefore, the project's 4:1 replacement ratio is more than sufficient to fully compensate for the one tree removal.

Other encroached trees would not be expected to succumb from sustainable marginal impacts. These impacts are discussed in greater depth in the Oak Tree Report in Section 11 Appendix E but can be summarized as follows. Only two of nine encroached trees require any grading or canopy pruning within the dripline, in each case on a single side. No tree requires pruning in

[253] Source: County Oak Woodlands Conservation Management Plan, page 83. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf.

excess of 25%[254], a figure commonly cited as conforming to the ANSI 300 pruning standard for canopy removal in a single year. No permanent impact or root removal would occur within five trunk diameters of any encroached tree.[255] Marginal negative impacts for all trees would occur in 0-30% of the protected zone, figures that include impacts from temporary compaction that would be remediated pursuant to PDF-BIO-2. With its modest grading on an existing slope, the project would not create any dam-like feature for subsurface water to pool and precipitate root rot; substantially alter the pattern of drainage down slope; remove feeder roots in the first three feet of soil in an amount likely to precipitate the decline of any coast live oak, which is tolerant of the required quantities of feeder root removal beyond the critical root zone; or affect any coast live oak tap root or tap root water supply.

However, in the unexpected event that any encroached trees decline from effects attributable to the project, replacements would be required in a 4:1 ratio. The approximately 1.02-acre parcel contains more than 20,000 square feet of area suitable for replacement plantings, and the existing California sagebrush community into which the oak woodlands would expand is neither sensitive nor incompatible, as an established association of canopy and understory layers ("*Quercus agrifolia* / *Artemisia Californica*").[256] Assuming woodlands spacing of 20 feet between plantings, or roughly 100 trees per acre, this would provide space for at least 50 replacement trees, and there would therefore be ample room for on-site restoration to fulfill this requirement, in habitat well suited to the establishment of oak trees, which are otherwise abundant in similar settings in the vicinity. Existing native shrub and herb layer species are present in these areas at densities that would not preclude the establishment of plantings without substantial disturbance but would also serve to augment the ecological value of the woodlands compared to that removed, which lacks a native understory.

Pursuant to SC-BIO-1, the monitoring of replacement trees and all encroached trees by the County Fire Department Forestry Division would be maintained for seven years. Additional project design features enforced as part of the Monitoring Program would also rehabilitate the impacts of compaction and re-grading that contribute to the severe degradation of the oak woodlands impacted. A native oak woodlands understory would also be introduced as part of the project's landscaping.

As such, standard conditions and additional project design features would expand and have a net-positive effect on oak woodlands. Therefore, the project would not be expected to result in a net loss of oak woodlands resources.

- **Threshold 5.4-11**: Remove one or more heritage coast live oak trees, as defined in County Code Section 22.174.040(B)(2)(a)(v), or any number of coast live oak trees larger than 8

[254] No ordinance requirements exist for the pruning of vegetation in close proximity to residential structures. The prevailing practice of fuel modification inspectors in the vicinity is that vegetation not be kept in contact with the wall or roof of a structure, and this practice is assumed to also be characteristic for the proposed project.
[255] *Compare to* the Tree Protection and Preservation Guidelines enacted in 2014 in the adjacent community of La Cañada Flintridge, defining a Tree Protection Zone that prohibits pavement within 2.5 trunk diameters and the root removal within 3.5 trunk diameters. Available at: http://cityoflcf.org/wp-content/uploads/2019/08/Pres_Prevention_Guide.pdf.
[256] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

inches in trunk diameter at breast height (54 inches above the grade) that are together greater than 100 inches in trunk diameter at breast height

The project would be expected to result in less than significant impacts from the removal of oak trees.

Project-specific Analysis

The proposed project would remove a single coast live oak tree of approximately 27 inches in diameter at breast height and would not remove any heritage coast live oak trees. Impacts under this threshold are therefore less than significant.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The removal of a single, non-senstive, non-heritage oak tree from degraded oak woodlands in a residential neighborhood would not be expected to be significant.

Compliance with SC-BIO-1 would ensure that no net conversion of oak woodlands occurs because the one tree that is removed would be replaced and monitored to ensure establishment in a setting of equal or superior ecological value, and any tree that was to decline unexpectedly during the monitoring period would also be replaced in the same manner. Pursuant to PDF-BIO-1, establishing oak trees above and beyond a sufficient replacement ratio would acknowledge beneficial impacts, including the enjoyment of their natural beauty, in planting additional coast live oak trees on the project parcel and protecting them for future owners of the project parcel. Formalizing that the higher replacement ratio is implemented within the framework of Title 22 would leverage an existing mechanism to ensure that the greater number of trees are protected in perpetuity through the years and any changes in ownership of the project parcel, and that they would not qualify as any form of "volunteer" plantings that may be removed later without discretionary review and approval by the County. Nevertheless, the intent of the Applicant is that the trees contribute to the beauty of the site, such that planting of oak trees within the SEA on the project parcel would be exempt from any SEA permitting requirements pursuant to County Code Sections 22.102.040(L) and (P), and would not be expected to introduce any adverse secondary impact within the SEA. The plantings may be established with minimal disturbance to existing vegetation communities, none of which has been identified as sensitive.

No native woodlands understory would be removed, and compliance with RCM-BIO-2 would establish native woodlands understory at the periphery of the woodlands that is impacted. Compliance with SC-BIO-1 would also ensure that the maintenance of the protected zone of existing oak trees conforms with common and typical Best Management Practices and that pruning and any other disturbance of potential habitat would occur during an ecologically appropriate time of year. Compliance with RCM-BIO-1 would provide sufficient protection in the unexpected event that any sensitive species were to be encountered, as for other categorically exempt small projects throughout the County.

The biological resources within the proposed project footprint of development are consistent with what would be expected of a suburban area surrounded by residences that have been designated for low-density residential uses in the Altadena Community Plan and the County General Plan, and by the City of Pasadena. The project parcel does not contain any plant communities designated as sensitive, and the project would not be expected to appreciably affect any wetlands or migratory corridors. The project would not conflict with policies protecting biological resources in the County General Plan or any Habitat Conservation Plans or Natural Community Conservation Plans.

No additional constraints in the form of tailored mitigation measures would be warranted. Nevertheless, additional mitigation has been formulated to fulfill generally applicable 2035 General Plan EIR measures, for the purpose of permitting the project to be approved as a continuation of the 2035 County General Plan project.

Mitigation Measures

MM-BIO-1: The project shall adhere to the avoidance and minimization measures in the project's Biological Resources Assessment Report dated February 2019, as follows:

- Grading and vegetation disturbance or removal during construction of the proposed residence shall be performed to the greatest extent feasible outside of the bird nesting season (February 15–August 31). If grading and vegetation disturbance or removal activities must commence during the bird nesting season, a nesting bird survey shall be performed by a qualified biologist no more than three days prior to the start of such activities. If grading and vegetation disturbance or removal activities commence prior to but continue into the bird nesting season, work shall halt at the start of the nesting season until a nesting bird survey is performed by the qualified biologist. Should any bird nest be discovered within 300 feet (500 for raptors) of the development footprint, construction shall be halted. If grading and vegetation disturbance or removal activities must resume during the nesting season, a 300-foot buffer (500 for raptors) centered on the active nest shall be established to preclude such activities until a qualified biologist has determined that the young are flying well enough to avoid incidental take, or the nest has failed. Narrower protective buffers may be established at the discretion of the project biologist, subject to County approval.
- A qualified biologist shall perform a sweep of the project site no more than one week prior to the start of grading or vegetation disturbance/removal. A qualified biologist shall also identify any animal or nest encountered by the contractor during vegetation disturbance or removal, prior to any take. If any sensitive, candidate or special-status animal species are identified that do not escape of their own volition, or if such a plant is encountered, construction shall halt. The Applicant shall consult with Los Angeles County, the CDFW and/or USFWS, according to the listing, as to avoidance or permitting requirements for further action. Such requirements are expected to include,

but are not limited to, formulation, approval by the CDFW and/or USFWS, and implementation of a salvage and translocation plan by a qualified biologist with a valid California Scientific Collecting Permit to relocate these species to the conserved open area on the project site or to other suitable habitat within the County.

- The removal of native vegetation during construction shall be avoided to the greatest extent feasible, and architectural and landscape design shall preserve native vegetation to the greatest extent feasible.
- During the pre-construction sweep, any other encountered low-mobility animal or native plant with preservation value, as determined by the qualified biologist, shall also be relocated as feasible.
- If tree removal occurs during the bat breeding season (March 1 – August 31), a bat survey shall be performed by a qualified biologist prior to tree removal, which may include direct observations and/or acoustic monitoring using ultrasonic detectors. If a roost is encountered, tree removal shall be halted. If tree removal must resume during the breeding season, a 300-foot buffer centered on the active roost shall be established to preclude such activities until a qualified biologist has determined that the young are flying well enough to avoid incidental take, or the roost has failed.
- The trunk and scaffold branches of any tree removed at any time shall be retained on-site for at least one night prior to further disturbance, including transportation or chipping, in order to provide any roosting bat an opportunity to escape.

Level of Significance After Application of Mitigation Measures

MM-BIO-1 would further reduce impacts already expected to be less than significant by formalizing mechanisms to manage the unexpected encounter of designated species in compliance with RCM-BIO-1. This measure would not be expected to introduce any secondary effects.

Cumulative Impacts

The incremental effects of the project to biological resources would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[a]lthough any direct impacts to special-status species and the loss of sensitive habitats would be mitigated, due to the loss of common habitats and diminished resource availability, impacts to special-status species remain significant at the General Plan level…. For impacts to riparian habitat and sensitive plant communities, mitigation would ensure that unavoidable impacts to sensitive habitat are mitigated 'in-kind'; thus, impacts to sensitive habitat would be considered less than significant…. [I]t is presumed that cumulative

impacts to wildlife movement would be cumulatively significant."[257] However, the proposed project fulfills all generally applicable mitigation conceived as warranted by the 2035 County General Plan EIR and transcends the finding of unavoidable significance from considerable reductions in common habitat and wildlife linkage.

Past projects have contributed to a degraded existing condition from alteration of (1) some sensitive habitat and (2) larger quantities of once intact, non-sensitive habitat that nevertheless provide ecological services for designated species. Therefore, the project had the potential to result in a cumulatively considerable effect if it resulted in substantial reductions in the extent of common habitat and wildlife permeability in the non-sensitive communities marginally affected by the project.

A sufficient, though not a necessary, definition of spatial extent to define a cumulatively considerable reduction in common habitat, including the non-sensitive coast live oak woodlands plant community, can be derived from the definition of small structures in State CEQA Guidelines Section 15303(a) and (c), which are cumulatively inconsiderable by definition. The maximum size of "one single-family residence" permitted by zoning of the project parcel would be 9,000 square feet, agreeing closely with the 10,000 square feet bounding the definition of a "small structure" in an "urbanized area" in the State CEQA Guidelines. Neglecting the typical associated footprint of development of small structures including grading and hardscape, this area would correlate at least with habitat removal in the footprint of such a structure itself. The proposed project's removal of one oak tree and permanent reduction of less than 2,000 square feet of habitat that is presently mostly devoid of vegetation other than that oak tree, and already degraded by proximity to residential uses and a roadway, would not exceed this level of impact.

The proposed project would result in a net expansion of the "apparently secure" oak woodlands community affected into a common and "secure" California sagebrush community. Specifically, the replacement of oak trees in at least a 2:1 ratio in a compatible understory of chaparral would fully compensate for the loss of habitat from the one oak tree removed, and exceeding this sufficient ratio with additional plantings would have a net beneficial effect to the coast live oak woodlands community.

[257] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.4-120. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.5 Cultural and Tribal Cultural Resources

5.5.1 Introduction

This section of the EIR evaluates the project's potential impacts to cultural and tribal cultural resources. These include places, objects, and settlements of archaeological, paleontological, or historical value. This evaluation includes an assessment of whether an alteration of any identified cultural or tribal cultural resource would result from implementation of the project, as well as the likelihood of encounter of previously unidentified resources from any disturbance of the project parcel and its grade.

5.5.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Native American lands.

National Historic Preservation Act

The National Historic Preservation Act of 1966 authorized the National Register of Historic Places and coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The National Register of Historic Places includes districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. Section 106 (Protection of Historic Properties) of the National Historic Preservation Act requires federal agencies to consider the effects of their undertakings on historic properties. Section 106 Review refers to the federal review process that is designed to ensure that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, which is an independent federal agency, administers the review process with assistance from State Historic Preservation Offices.

National Register of Historic Places

Developed in 1981, the National Register of Historic Places ("NRHP") is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria.

The NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources. The NRHP is administered by the National Park Service, which is part of the U.S. Department of the Interior.

To be eligible for listing in the NRHP, a resource must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of our history.
- Is associated with the lives of persons significant in our past.
- Embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.
- Has yielded, or may be likely to yield, information important in history or prehistory.
- Ordinarily cemeteries, birthplaces, or graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, and properties that are primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must be 50 years old to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

National Historic Landmarks

The National Historic Landmarks Program, developed in 1982, identifies and designates National Historic Landmarks and encourages the long-range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, fewer than 2,500 historic places bear this national distinction.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Native American tribes.

Secretary of the Interior's Standards for the Treatment of Historic Properties

Evolving from the Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards that were developed in 1976, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings was published in 1995 and codified as 36 CFR 67. Neither technical nor prescriptive, these standards are "intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources." Preservation acknowledges a resource as a document of its history over time and emphasizes stabilization, maintenance, and repair of existing historic fabric. Rehabilitation not only incorporates the retention of features that convey historic character, but also accommodates alterations and additions to facilitate continuing or new uses. Restoration involves the retention and replacement of features from a specific period of significance. Reconstruction, the least used

treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

State Regulation

California Register of Historic Resources

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The California Register of Historic Resources ("CRHR") is the authoritative guide to the state's significant historical and archeological resources. It encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. The CRHR was created to identify resources deemed worthy of preservation on a state level and was modeled closely after the NRHP. The criteria are nearly identical to those of the NRHP but focus upon resources of statewide, rather than national, significance. The CRHR automatically includes resources listed on the NRHP.

To be eligible for listing in the CRHR, a resource must meet at least one of the following criteria:
- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- Associated with the lives of persons important to local, California or national history.
- Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The landmark must also be approved for designation by the county board of supervisors or the city/town council in whose jurisdiction it is; be recommended by the State Historical Resources Commission; and be officially designated by the Director of California State Parks. The resource must meet at least one of these criteria:
- Be the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Be associated with an individual or group having a profound influence on the history of California.
- Be a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

California Public Resources Code and CEQA

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

State CEQA Guidelines Section 15064.5 defines a "historical resource" to include the following:

"(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 *et seq.*).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a Lead Agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the Lead Agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the Lead Agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
(B) Is associated with the lives of persons important in our past;
(C) 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
(D) Has yielded, or may be likely to yield, information important in prehistory or history."

California Health and Safety Code Section 7050.5 requires that if human remains are discovered within the project parcel, disturbance of the site shall halt and remain halted until the coroner has investigated and made recommendations to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact the Native American Heritage Commission ("NAHC") by telephone within 24 hours. PRC Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts.

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

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation ("OHP"). The OHP is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the NAHC. It also requires notification to descendants of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of Historical Interest designated after December 1997 and recommended by the State Historic Resources Commission also are listed in the CRHR. No historical resource may be designated as both a landmark and a point. If a point is subsequently granted status as a landmark, the point designation will be retired.

To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- Be the first, last, only, or most significant of its type within the local geographic region (city or county).
- Be associated with an individual or group having a profound influence on the history of the local area.
- Be a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or
- Be one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

Native American Heritage Commission

Section 5097.91 of the PRC established the Native American Heritage Commission ("NAHC"), whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

Government Code, Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the NAHC." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the SHRC, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

Health and Safety Code, Sections 7050 and 7052

Health and Safety Code, Section 7050.5 declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground-disturbing activities must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Senate Bill 18

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries; religious or ceremonial sites; shrines; burial grounds; prehistoric ruins; archaeological or historic sites; Native American rock art inscriptions; or features of Native American historic, cultural, and sacred sites.

Senate Bill 18 was signed into law in September 2004 and went into effect on March 1, 2005. It placed new requirements on local governments for developments within or near Traditional Tribal Cultural Places ("TTCP"). The law required local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving TTCPs. The Final Tribal Guidelines recommend that the NAHC provide written information as soon as possible but no later than 30 days after being notified to inform the Lead Agency if a proposed project is determined to be in proximity to a TTCP, and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review timeframe. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation, or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If the Lead Agency and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to act.

Per SB 18, a city or county must consult with the NAHC and any appropriate Native American tribe before the adoption, revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention consultation or notice requirements for adoption

or amendment of specific plans, the Final Tribal Guidelines advise that SB 18 requirements extend to specific plans as well, since state planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (Government Code § 65453). In addition, SB 18 provides a new definition of TTCP requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies, or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 amended Civil Code Section 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

California Assembly Bill 52

Assembly Bill ("AB") 52 was signed into law by California State Governor Edmund Gerald "Jerry" Brown, Jr. on September 25, 2014. The act amended PRC Section 5097.94, and added CEQA Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation ("NOP") or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration ("MND") is filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. CEQA Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a Lead Agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

CEQA Section 21080.3.1 requires that within 14 days of a Lead Agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the Lead Agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in CEQA Section 21073) and who have requested in writing to be informed by the Lead Agency (CEQA Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the Lead Agency's formal notification and the Lead Agency must begin consultation within 30 days of receiving the tribe's request for consultation (CEQA Sections 21080.3.1(d) and 21080.3.1(e)).

CEQA Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and

after reasonable effort, concludes that mutual agreement cannot be reached (CEQA Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the Lead Agency, or otherwise failed to engage in the consultation process, or if the Lead Agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the Lead Agency may certify an EIR or adopt an MND (CEQA Section 21082.3(d)(2) and (3)). CEQA Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the Lead Agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the Lead Agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. Confidentiality, does not however apply to data or information that are, or become publicly available, are already in lawful possession of the project applicant before the provision of the information by the California Native American tribe, are independently developed by the project applicant or the project applicant's agents, or are lawfully obtained by the project applicant from a third party that is not the Lead Agency, a California Native American tribe, or another public agency (CEQA Section 21082.3(c)(2)(B)).

Local Regulation

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to cultural and historical resources, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

Los Angeles County Code Title 21 and 22

Under Titles 21 (Subdivisions) and 22 (Planning and Zoning) of the Los Angeles County Code, all zoning ordinances, zone changes, subdivisions, capital improvement plans, and public works projects are required to be consistent with the General Plan, including any projects affecting cultural and historical sites and resources. In addition, the Los Angeles County Historical Landmarks and Records Commission is the acting local legislative body that reviews and recommends cultural heritage resources in the unincorporated areas for inclusion in the State Historic Resources Inventory.

5.5.3 Existing Conditions

Paleontological Resources

The project parcel is underlain by several geological units with little to no paleontological sensitivity. Quartz diorite ("qm") dating from the Cretaceous underlies the project footprint and most of the project parcel and has no potential to yield paleontological resources, as a plutonic igneous rock. All exposed rock outcrops and boulders are of this granitic lithology. Quaternary Alluvium Fan Deposits ("Qal_1") dating from the Holocene, found near the canyon bottom, which overly portions of this diorite, have low potential to yield paleontological resources due to their relatively recent age, high-energy formation/deposition environment and the rarity of fossil occurrences in alluvium deposits in Los Angeles County. Older Quaternary Alluvium Fan Deposits ("Qal_4") dating from the Pleistocene, found on portions of the hillside below the project, have low to moderate potential to yield paleontological resources.

Fill deposited on the project parcel during the construction of Canyon Crest Road and adjacent residences exhibit no potential for the occurrence of significant paleontological resources, due to their recent age and the destructive nature of their origin (i.e. mechanical extraction and deposition, sorting, screening, etc.).

Prehistoric Setting and Tribal Resources

Human habitation in Los Angeles County is known to date to at least approximately 7,000 years B.C. Like nearly all of the San Gabriel Valley, at the time of contact with European explorers, the Millard Canyon and Arroyo Seco area are believed to have been inhabited by the Gabrieliño, or Tongva, tribe of Native Americans. The name "Gabrieliño" identifies those people who came under the control of Mission San Gabriel Arcángel and included the inhabitants of most of current-day Los Angeles and Orange counties and portions of Riverside and San Bernardino counties. Like portions of Altadena and nearly all of the San Gabriel Valley to the west, the project parcel is also located within the Tataviam Historical Tribal Territory (Fernandeño Tataviam Band of Mission Indians).

Historical Setting

Millard Canyon had originally been known by the Mexican residents of the area as Blanco Canyon because of the geology of the canyon walls in some places. Millard established a homesite at the mouth of the canyon in 1862. He was an illegal squatter on the land in Section 5 of Township 1 North, Range 12 West, in which section the project parcel is also located, who is said to have made his income by raising bees and hauling wood to Los Angeles. Millard lived in the canyon until 1872.

The earliest United States Geologic Service topographical map of the area from 1896[258] portrays a route on what would become Canyon Crest Road, along with several structures in what would

[258] Source: United States Geological Survey. Available at: https://ngmdb.usgs.gov/topoview/viewer/#14/34.1938/-118.1363.

become the Meadows neighborhood to the northwest, labeled "Las Casetas." The earliest homes along lower Canyon Crest Road date to the turn of the 20th century. The gravesite of Owen Brown, son of abolitionist John Brown, is located at the northern edge of the Meadows neighborhood, on a local rise known as Little Round Top.

Portions of the remains of a concrete pump house used to pump water from Millard Canyon to developed areas to the east are located on the project parcel near the canyon bottom. However, this infrastructure does not have any historic significance.

Archaeological and Historical Resources

No resources listed in or determined to be eligible for listing in the National Register of Historic Places exist on or near the project parcel. The nearest listed resource is the Twenty-Five Foot Space Simulator at the Jet Propulsion Laboratory nearly one mile to the west of the project parcel.[259] No resources listed in or determined to be eligible for listing in the California Register of Historical Resources exist on or near the project parcel. The nearest listed resource is Scripps Hall in Altadena, more than one mile to the southeast of the project parcel.[260] No known formal or informal cemeteries are found on the project parcel.

No resources designated as historic by the County or any other local register defined in PRC Section 5020.1(k) exist on or near the project parcel. While the County expands on the list designated in the California Register of Historical Resources, the nearest resource so designated is again Scripps Hall in Altadena, more than one mile to the southeast of the project parcel.[261]

The project parcel does not contain previously identified tribal cultural resources in the Native American Heritage Council ("NAHC") Sacred Lands Database.[262] Pursuant to PRC Section 5024.1(g), historical resource surveys are included in the State Historic Resources Inventory. The California Historic Resources Inventory System ("CHRIS") has no record of any cultural resource on the project parcel.[263]

Section 6254.10 of the Government Code specifically exempts from public disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency." In addition, State CEQA Guidelines Section 15120(d) prohibits an EIR from including "information about the location of archaeological sites

[259] Source: National Register of Historic Places. Available at: https://www.nps.gov/subjects/nationalregister/upload/national_register_listed_20200108.xlsx.
[260] Source: California State Parks Office of Historic Preservation: California Historical Resources. Available at: https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=19.
[261] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[262] Source: Native American Heritage Commission, personal communication, September 11, 2017
[263] Source: South Central Coastal Information Center, California State University Fullerton, personal communication, September 11, 2017.

and sacred lands, or any other information that is subject to the disclosure restrictions of Section 6254 of the Government Code [(part of the Public Records Act)]."

As such, known cultural resources in the vicinity of the project parcel are not mapped in this EIR. *See also Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 212. Prehistoric resource surveys in other environmental assessments for larger projects within a half mile of the project parcel have mostly not recovered artifacts, though some finds of chipped or ground stone tools have been recorded[264,265,266]:

- LA-1659: A prehistoric quartzite flake of cultural origin was recorded.
- LA-2098: Manos and a chert flake of cultural origin were recorded.
- CA-LAn-342: Part of a prehistoric village including cogstones and millingstones was recorded but is believed to have been destroyed by residential development.

Other resources that may satisfy one or more of the criteria of State CEQA Guidelines Section 15064.5(3)(A)-(D) have been identified within a half mile of the project parcel. At least two examples of distinctive architecture from the early 20th century exist in the lower Canyon Crest residential neighborhood. (*See* Figure 5-15: Home Built on the Foundation of "Boulder Crest" and Figure 5-16: La Casa Roca).

[264] Source: City of Pasadena: Arroyo Seco Master Plans, page 2-39. Available at: https://www.cityofpasadena.net/parks-and-rec/wp-content/uploads/sites/33/Central-Arroyo-Master-Plan.pdf
[265] Source: Altadena Crest Trail Improvements Cultural Resources Evaluation. (No longer hosted by the County at a public URL).
[266] Source: Arroyo Seco Foundation: Arroyo Seco Canyon Project Cultural Resources Assessment. Available at: http://www.arroyoseco.org/ascp/ismnd/Appendix%20C%20-%20Cultural%20Resources%20Assessment.pdf; Arroyo Seco Canyon Project Initial Study, page 4-48. Available at: http://www.arroyoseco.org/ascp/ismnd/Arroyo%20Seco%20IS-MND%20100814.pdf.

Figure 5-15: Home Built on the Foundation of "Boulder Crest"[267]

[267] Source: Altadena Historical Society.

Figure 5-16: La Casa Roca[268]

[268] Source: Applicant

5.5.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.5-1**: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5

- **Threshold 5.5-2**: Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5

- **Threshold 5.5-3**: Disturb any human remains, including those interred outside of formal cemeteries

- **Threshold 5.5-4**: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  a.) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  b.) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.5-5**: Disrupt or adversely affect prehistoric or historic archaeological sites or a property of historic or cultural significance to a community or ethnic or a social group; or a paleontological site except as part of a scientific study of the site

5.5.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of

significance as it relates to cultural and tribal cultural resources first identifies whether any class of known historic, archeological, tribal cultural or paleontological resource may be affected by the project, as well as mediation of the pre-existing regulatory framework. This includes examination of state and local databases or lists of such resources, including the California Register of Historical Resources, the California Historic Resources Inventory System, and the NAHC Sacred Lands Database. The significance assessment also considers the likelihood of encounter of previously unidentified resources, based on the depth, classification and extent of impact of grading of volumes that may contain such resources, as well as conformance of any known resource to criteria that may render it historic or otherwise of cultural significance.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-CUL-1: If human remains are encountered during excavation activities, all work is required to halt in the immediate vicinity of the discovery and the County Coroner must be notified (California Public Resources Code Section 5097.98). The Coroner is required to determine whether the remains are of forensic interest. If the Coroner, with the aid of an Archaeologist, determines that the remains are prehistoric, s/he is required to contact the Native American Heritage Commission ("NAHC"). The NAHC is responsible for designating the most likely descendant ("MLD"), who is responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the California Health and Safety Code. The MLD is required to make his/her recommendation within 48 hours of being granted access to the site. The MLD's recommendation is required to be followed if feasible and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials (California Health and Safety Code Section 7050.5). If the landowner rejects the MLD's recommendations, the landowner is required to rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (California Public Resources Code Section 5097.98).

Impact Discussion

- **Threshold 5.5-1**: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5

The project would be expected to result in no adverse impacts from any substantial change in the significance of a historical resource.

General Analysis

The 2035 County General Plan EIR formulated GPMM-CUL-1, GPMM-CUL-2 and GPMM-CUL-3 to mitigate for impacts to historical resources, though the effect was found to be significant and unavoidable at the scale of all permitted future development in the County because "limited protection to historic structures…would not ultimately prevent the demolition

of a historic structure if preservation is determined to be infeasible."[269] These mitigation measures are not applicable to the project, and the project parcel contains no historic structures or other known historic or cultural resources. The project therefore transcends this finding of unavoidable significance.

Additional Project-specific Analysis

As attributed in Section 5.5.3, no known historical resources exist on the project parcel. No designated historic resources were identified in the immediate vicinity of the project parcel. In addition, the project is not expected to cause an adverse change in any of the historic or architecturally distinctive single-family homes in the lower Canyon Crest neighborhood, an eclectic neighborhood of many varying architectural styles.

- **Threshold 5.5-2**: Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5
- **Threshold 5.5-5**: Disrupt or adversely affect prehistoric or historic archaeological sites or a property of historic or cultural significance to a community or ethnic or a social group; or a paleontological site except as part of a scientific study of the site

The project would be expected to result in no adverse impacts under these thresholds from any substantial change in the significance of an archaeological resource.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting after incorporation of GPMM-CUL-4 and GPMM-CUL-5, stating that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity,"[270] concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level."[271] Pursuant to GPMM-CUL-4 and GPMM-CUL-5, the retention of a "County-certified archaeologist…to observe grading activities greater than six feet in depth and salvage and catalogue archaeological resources as necessary" mitigates for any substantial adverse change in the significance of an archaeological resource. Any found resources determined to be significant shall be offered "for curatorial purposes to the County of Los Angeles, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the

[269] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[270] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[271] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County." As the proposed project's approximately 40 cubic yards of cut grading does not exceed a depth of six feet in the undisturbed alluvial terrace with a relatively low to moderate potential for encounter of cultural resources and low potential for encounter of paleontological resources, and because excavation in disturbed fill or the granitic materials on the project parcel would be expected to have no potential for impacts to cultural or paleontological resources, the proposed project transcends the scope of this mitigation measure. Because no reported resources exist on the project site, any specific avoidance measures or performance standards for avoidance tailored to a specific resource would be impractical or infeasible to enumerate. (State CEQA Guidelines Section 15126.4(a)(1)(B)). Nevertheless, MM-CUL-1 has been formulated to ensure that in the unexpected event any resources were to be encountered, management of the resource would adhere to the performance standards specified in the 2035 County General Plan EIR.

- **Threshold 5.5-3**: Disturb any human remains, including those interred outside of formal cemeteries

The project would be expected to result in no adverse impacts from disturbance of any human remains.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "compliance with…regulations would ensure impacts to human burial grounds remain less than significant."[272] Pursuant to RCM-CUL-1, if human remains are discovered during excavation, all work is required to halt in the immediate vicinity of the discovery and the County Coroner must be notified. The Coroner is required to determine whether the remains are of forensic interest. If the Coroner, with the aid of an Archaeologist, determines that the remains are prehistoric, s/he is required to contact the NAHC.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with human remains, the proposed project is consistent with the analysis of the 2035 County General Plan EIR.

Additional Project-specific Analysis

Nearly all of the 40 cubic yards of cut required to implement the project would occur in a volume of fill that was previously deposited by grading during construction of Canyon Crest Road and the adjacent residence to the north, which would therefore not be expected to contain any intact human remains.

- **Threshold 5.5-4:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place,

[272] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a.) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

b.) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.

The project would be expected to result in no adverse impacts from a substantial change to tribal cultural resources listed or eligible for listing in the California Register of Historical Resources or that conform to the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

Project-specific Analysis

As attributed in Section 5.5.2, no resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, is found on or adjacent to the project parcel.

As attributed in Section 5.5.3, neither the CHRIS nor NAHC have any record of any historical resource on the project parcel. Pursuant to Assembly Bill 52, a Tribal Cultural Resources compliance checklist for the Project was completed, included in Section 11 Appendix F. The "Tataviam Band of Mission Indians" was the only group that had requested formal notification of proposed projects within the geographic area that includes the project. A notification letter was mailed on August 18, 2015, and a response was received on September 16, 2015. A representative of the Tataviam Native American Tribe requested that a representative of the "Gabrieleño Band of Mission Indians" be contacted because they have a more direct lineage to the project location. The representative indicated that he concurred with the determination that the impacts from the project would be less than significant. The project grading plan does not entail any excavation beneath the stump of the one oak tree approved for removal. In addition, as a single-family residence with a modest amount and shallow depth of grading in an area that had been previously disturbed by the construction of Canyon Crest Road (*see* Section 11 Appendix G), there is little to no potential for recovery of artifacts.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The project would not impact any known resource identified as having cultural or tribal cultural significance. In addition, the project would not be expected to result in encounter of artifacts of

cultural significance during grading or drilling in previously disturbed fill material or rock of igneous origin, and the very limited amount and shallow depth of grading for the project would be expected to intercept a negligible volume of alluvial terrace with a correspondingly low potential. Compliance with RCM-CUL-1 would ensure that any unexpected encounter of human remains would be dispositioned appropriately.

No additional constraints in the form of tailored mitigation measures would be warranted. Nevertheless, additional mitigation has been formulated to fulfill generally applicable 2035 General Plan EIR measures, for the purpose of permitting the project to be approved as a continuation of the 2035 County General Plan project.

Mitigation Measures

MM-CUL-1: The contractor shall be instructed that if artifacts of potential cultural significance, including bone, ground or chipped stone, pottery shards, fossilized material or any other materials apart from fill and naturally deposited rocks in a soil matrix are encountered during hand excavation, all work shall be halted. Work shall not recommence until a qualified archaeologist meeting the Secretary of the Interior's Standards for professional archaeology can ascertain and record the extent of the resource and its cultural significance under CEQA, in written consultation with the Native American tribes that requested contact pursuant to AB 52 and with the County. If determined to have significance, the qualified archaeologist shall formulate, the County shall approve, and these parties together with the Applicant shall implement a plan that accords with the particular circumstances of the find to preserve intact those artifacts with cultural significance. The resource, supporting documentation and an itemized catalogue shall be offered on a first refusal basis into the collections of a suitable repository, as determined by the Native American tribes that requested contact pursuant to AB 52 (if of tribal cultural significance), the County, or their designees in turn. The Applicant shall be responsible for all associated costs, including any curation costs to accession the resource. If refused, the plan shall provision for alternative means of preservation intact, which may include, but are not limited to, building envelope translation within available height and setback limitations, burial elsewhere on the project parcel, or relocation elsewhere within the County.

Level of Significance After Application of Mitigation Measures

MM-CUL-1 would further reduce impacts already expected to be less than significant by mediating the unexpected encounter of cultural resources according to performance standards established in the 2035 County General Plan EIR. *See also California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 277-280 (EIR's conclusion that impacts from construction of a stadium and extensive associated athletic center facilities located in an area with a "high likelihood" of encountering cultural resources were less than significant was supported by substantial evidence when the project was (a) sited to avoid known, reported resources, if any; (b) required to stop all construction and retain a qualified archaeologist if the

contractor encountered resources; and (c) required to implement the archaeologist's plan to preserve the resources). This measure would not be expected to introduce any secondary effects.

Cumulative Impacts

The incremental effects of the project to cultural and tribal cultural resources would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "the cumulative destruction of significant historical resources from construction and development planned within the region would be considered to be a cumulatively significant impact…. In the event of an unanticipated discovery of archaeological resources during grading and excavation of a site, Mitigation Measures CUL-4 and CUL-5 ensure that impacts are mitigated to a less than significant level. Public Resources Code and the California Health and Safety Code mandate processes to be followed in the event of a discovery of any human remains and would mitigate impacts to a less than significant level."[273] However, the proposed project does not entail any impact to a historical resource and therefore transcends the finding of unavoidable significance. The proposed project has been conditioned with generally applicable contingency mitigation in the unexpected event that archaeological or paleontological resources are encountered.

Past projects have contributed to a degraded existing condition from development affecting sub-surface volumes that may have contained artifacts of cultural significance. Therefore, the project had the potential to result in a cumulatively considerable effect in the disturbance of sub-surface volumes with some potential to contain artifacts of cultural significance. A sufficient, though not a necessary, definition of volumetric extent to define a cumulatively considerable disturbance to volumes potentially containing cultural artifacts can be derived from the definition of minor land use alteration in less than 5,000 cubic yards of grading in the County's CEQA Reporting Guidelines.[274] The project's required grading is two orders of magnitude below this amount, and even this small quantity is limited to volumes with little or no potential for recovery of cultural artifacts.

Other closely related present and future projects would not result in a quantity of grading that would be substantial relative to the extent of volumes in the area of consideration that might contain resources of cultural significance and which have been undisturbed subsequent to historical times. Rather, the other closely related projects, like the proposed project, would be expected to result in limited depth and insubstantial quantity of grading in volumes that were either previously disturbed by residential development with no potential for preservation of cultural resources, or in volumes with low potential.

[273] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[274] Source: County Department of Regional Planning: County CEQA Guidelines, Appendix G, page G-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/LAC_CEQA_Guidelines.pdf.

5.6 Geology and Soils

5.6.1 Introduction

This section of the EIR evaluates the project's potential impacts resulting from interaction of the project with the geology and soils of the project parcel. This evaluation includes an assessment of whether particular existing geological conditions, soil types, or soil configurations may be prone to de-stabilizing events resulting in disturbances of soil that could adversely impact people or property as the disturbance propagates. This also includes an assessment of whether project activities could increase the likelihood of such impacts.

5.6.2 Regulatory Framework

State and local laws, regulations, plans, or guidelines that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to soils and geology.

State Regulation

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures used for human occupancy. The main purpose of the Act is to prevent the construction of buildings used for human occupancy on top of the traces of active faults. Although the Act addresses the hazards associated with surface-fault rupture, it does not address other earthquake-related hazards, such as seismically induced ground shaking, liquefaction, or landslides.

The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults, and to publish appropriate maps that depict these zones. The maps are then distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. In general, construction within 50 feet of an active fault trace requires a fault investigation prior to issuing permits.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was passed in 1990. It addresses earthquake hazards other than surface fault rupture, including liquefaction and seismically induced landslides. Under this Act, seismic-hazard zones have been mapped by the State Geologist to assist local governments in land use planning. The Act states that "it is necessary to identify and map seismic-hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land-use management policies and regulations to reduce and mitigate those hazards to protect public health and safety." Section 2697(a) of the Act states that "cities and counties shall require, prior to the approval of a project located in a seismic-hazard zone, a geotechnical report defining and delineating any seismic hazard."

California Building Code

The California Building Standards Code, also known as Title 24 of the California Code of Regulations, reflects various building criteria that have been derived from different sources. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. One of the sources for Title 24 is the International Building Code ("IBC"), a model building code adopted across the United States that has been modified to suit conditions in the State, thereby creating what is known as the California Building Code ("CBC"), or Part 2 of CCR Title 24. One of the constituent code bases for the IBC was the Uniform Building Code ("UBC"), widely in use in the western parts of the United States before unification in the IBC in 2000. The California Building Code incorporates by reference the UBC with necessary California amendments. Approximately one-third of the text within the California Building Code has been tailored for California earthquake hazards.

The CBC is updated every three years, and much of the CBC is adopted by reference in the Los Angeles County Code, Title 26, Chapters 2 through 35, and Appendices C, I, and J.8 Through the CBC, the State provides a minimum standard for building design and construction. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control.

Local Regulation

Los Angeles County Code

In addition to the adoption of the CBC by reference, the Los Angeles County Code also contains rules and regulations that govern activities that could result in soil erosion or slope instability. Section 101.3 of Title 26 (Chapter 1) states that, "[t]he provisions of this Code [the County Building Code] shall apply to the construction, alteration, moving, demolition, repair, use of any building or structure, and grading within the unincorporated territory of the County of Los Angeles and to such work or use by the County of Los Angeles in any incorporated city". Certain chapters or sections of the County Building Code specifically pertain to construction in areas that present seismic risks, including:

- Chapter 1, Section 110.2, "Geotechnical Hazards", of the County Building Code restricts building and grading activities in areas where geotechnical hazards of landslide, settlement, and slippage may be activated or increased as a result of project activities. Project applicants are required to submit an Engineering Geology and/or Soils Engineering Report to indicate how the hazard will be eliminated or mitigated prior to the use or occupancy of the land.
- Chapter 1, Section 111, "Engineering Geology and Soils Engineering Reports", of the County Building Code gives the Building Official the authority to require an Engineering Geology Report, a Soils Engineering Report, or both in cases where such reports are considered essential for the evaluation of the site's safety. The Engineering Geology and/or Soils Engineering Reports must be prepared by a California-certified engineering geologist or California-licensed civil engineer, respectively, and must contain a finding regarding the safety of the site of the proposed work against hazard from landslide, settlement, or slippage and a finding regarding the effect that the proposed work will have on the geotechnical stability of the area outside the proposed work.

- Chapter 16, Structural Design, of the County Building Code describes requirements for construction of structures based on earthquake loads, including modifications to requirements defined in ASCE 71/2016 CBC Section 1613 related to Seismic Design Categories (formerly Seismic Zones) to reflect County conditions. The Seismic Design Categories consider building location, building use, and underlying soil conditions while Seismic Zones considered only building location. These County-specific building requirements are in addition to all other requirements of the 2016 CBC.
- Chapter 17, Structural Tests and Special Inspections, of the County Building Code requires an applicant to "submit a statement of special inspections prepared by the registered design professional in responsible charge in accordance with Section 106.4.2, as a condition for permit issuance" when specified seismic conditions are met. Section 1709 includes requirements for use of the registered design professional responsible for the structural design, or another registered design professional, to perform structural observations for those buildings included in Seismic Design Category D, E, or F (as determined in Section 1613).

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan. Consistency of the project with these policies, including any related to soils and geology, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.6.3 Existing Conditions

A Geotechnical Report for the project was authored by Irving Geotechnical for purposes of establishing design constraints, using a reference design intended to capture boundary conditions. The Geotechnical Report anticipated a range of possible design features, not all of which are necessary to implement the project. Subsequently, an Addendum was authored with content specific to the final project design. The project referenced in the Addendum is identical, for purposes of geotechnical recommendations, to that proposed in this EIR. Together, the Geotechnical Report and Addendum will be referred to as the "Geotechnical Report." (*See* Section 11, Appendix G).

Faults and Other Hazards

Pursuant to the project's Geotechnical Report, "[t]he principal seismic hazard to the subject property and proposed project is strong ground shaking from earthquakes produced by local faults." However, "[n]o known active faults cross the subject property and the site is not located within an Alquist-Priolo Fault Rupture Hazard Study Zone. The surface trace of the potentially active Sierra Madre fault zone is mapped about 150 feet south of the site. There is no geomorphic or geologic evidence that would indicate faulting within the subject property. The ground rupture hazard at the site is considered low to nil." In addition, "secondary effects such as surface rupture, lurching, liquefaction, consolidation, ridge shattering, and landsliding should not occur at the subject property."

The property is located within the United States Geologic Survey, Pasadena Quadrangle. "Seismic hazards within the Pasadena Quadrangle of the United State Geologic Survey were evaluated by the California Geological Survey in their report "Seismic Hazard Zone Report for the Pasadena 7.5-minute Quadrangle, Los Angeles County, California," Seismic Hazard Zone Report 014, dated 1998, updated 2006. According to the Seismic Hazard Zones Map, portions of the subject property lie within zones of required investigation for liquefaction and earthquake-induced landsliding.[275] The potentially liquefiable soils are located within the stream channel and are remote to the proposed project. As such, liquefaction is not expected to impact the proposed development." The Seismic Hazard Zone Report does not show any mapped areas of landsliding on or near the project parcel.[276] The nearest mapped landslides are more than a mile to the northeast, along steeper portions of the Millard Canyon watershed.

The project is sited in a Hillside Management Area in which slopes exceed 25%.[277] However, "the analysis shows that the subject property and existing slopes are grossly stable with a factor of safety in excess of 1.5 under static conditions and in excess of 1.0 under seismic conditions."

Boulders larger than several feet are evident in places along the surface grade of the project parcel. A large boulder exists under the northwest portion of the footprint of the home. The project has been designed to preserve this boulder in place without disturbance, and to incidentally stabilize it beneath the main level, with lateral support provided by the structural concrete walls of the home along the western and southern (downgrade) orientations of the boulder. Similar boulders exist on slopes above Canyon Crest Road in the vicinity of the project parcel. Similar boulders would be expected throughout the alluvial terrace on which the homes of northwest Altadena sit.

No structures or infrastructure are located in the downslope path of any part of the project footprint, and the prohibition of access to the private property below the project footprint is advertised to the general public with "No Trespassing" signs on lots to the south and north of the project parcel, as well as at the mouth of Millard Canyon where it joins the Arroyo Seco.

Geology/Soils

The geology of the site is characterized by a thin layer of alluvial terrace several feet in thickness sitting atop monolithic decomposed granitic bedrock, which is visible at the surface on portions of the project parcel where the alluvial terrace has eroded.

Pursuant to the Geotechnical Report for the project (Section 11, Appendix G), "[n]atural alluvial terrace deposits underlie the subject property and were encountered in all of the test pits. The terrace deposits consist of silty sand that is gray-brown, very slightly moist to moist, porous,

[275] Source: California Geological Survey: Seismic Hazard Zone Map. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/PASADENA_EZRIM.pdf.
[276] Source: California Geological Survey: Seismic Hazard Zone Report. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Reports/SHZR/SHZR_014_Pasadena.pdf.
[277] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.8. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

medium dense, and contains roots, rootlets, gravel to 2 inches in diameter, cobbles to four inches in diameter, and boulders to four feet in diameter."

"Bedrock underlying the site and encountered in the test pits consists of granodiorite as mapped by Crook, Jr., et al (1987). The bedrock is well exposed in slopes along the northeast portion of the site, as shown on the Geologic Map. The granodiorite is light brown to light orange-brown, massive, tight, moderately weathered, and moderately hard."

"The alluvial terrace and bedrock described are common to this area of the San Gabriel Mountains and the geologic structure is consistent with regional trends. The alluvial terrace and granite are generally massive to horizontally-layered and lacks significant structural planes. Joint planes observed in the bedrock are randomly-oriented and steeply-dipping. The massive nature of both the alluvial terrace and the bedrock are favorably-oriented for stability of the site and proposed project."

A wedge of fill dating from the construction of Canyon Crest Road and the adjacent residence sits atop these layers near street level. Nearly all of the small amount of grading required for the project would occur in this wedge of fill.

5.6.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.6-1**: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  i.) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  ii.) Strong seismic ground shaking
  iii.) Seismic-related ground failure, including liquefaction
  iv.) Landslides

- **Threshold 5.6-2**: Result in substantial soil erosion or the loss of topsoil

- **Threshold 5.6-3**: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse

- **Threshold 5.6-4**: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property
  i.) For purposes of analysis in this EIR, expansive soils in Table 18-1-B of the former Uniform Building Code are soils with an Expansion Index of 20 or greater.

- **Threshold 5.6-5**: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water

- **Threshold 5.6-6**: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.6-6**: Directly or indirectly cause major geological hazards
  - For purposes of analysis in this EIR, major geological hazards are as defined in Threshold 5.6-1.

5.6.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to geology and soils first identifies the type of geology and soils present on the project parcel, as well as mediation of the pre-existing regulatory framework. This includes proximity to hazards such as fault zones and soils with the potential to liquefy, erode, subside, or landslide in a way that would expose people to injury or death. The analysis also considers whether project activities, such as the construction of Onsite Wastewater Treatment Systems and any required grading, have the potential to introduce substantial instabilities.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-GEO-1: The project shall comply with Chapter 12.80 of the County Code, prohibiting the discharge or accumulation of pollutants, as defined in County Code Section 12.80.240, and requiring as a condition of building permit approval the implementation of common and typical stormwater and runoff pollution Best Management Practices ("BMPs"). Such BMPs are expected to include for purposes of this analysis, but are not limited to:

- Any temporary disturbed soil area ("DSA") shall be covered with a sheet or coarse material (e.g. gravel, coarse sand, mulch) when not in use.
- Silt fence, bag berm, straw wattle, or other catchment of similar efficacy shall be installed and maintained as needed at the toe of any temporary DSA to intercept suspended sediment.

- Substances that may be dissolved or suspended in water shall be protected at all times from exposure to stormwater.

RCM-GEO-2: The project shall comply with the California Building Code, all Department of Public Works design, construction and maintenance requirements, and all applicable recommendations contained in the geotechnical report and addendum from Irvine Geotechnical dated April 17, 2014 and March 7, 2016, respectively.

Impact Discussion

- **Threshold 5.6-6**: Directly or indirectly cause major geological hazards; and
- **Threshold 5.6-1**: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The project would be expected to result in no adverse impacts under these thresholds from exposure of future occupants of the project or any other people to earthquake fault hazards.

This threshold is constrained by the California Supreme Court's holding in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, prohibiting so-called "CEQA-in-reverse." It is the project's effect on the environment that is properly within the scope of analysis under CEQA, not the environment's effect on a project. Because the project does not entail a substantial number of new residential units, its future occupants are "particular persons" and not sufficient in number to constitute "persons in general." *See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492 ("Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons."). This analysis is therefore confined to the marginal extent to which the project exacerbates a sensitive existing condition. *Id*. at 377-378. This reduces to whether the project's impacts are cumulatively considerable, and if so, what effect that cumulative considerability could have on the environment.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[a]dherence to [the Alquist-Priolo Earthquake Fault Zoning Map], and the associated setbacks from active fault traces, would help reduce the hazards associated with earthquake fault rupture to a less than significant level." [278] While the Alquist-Priolo Earthquake Fault Zones Act levies no jurisdictional setback requirement, Title 14, California Code of Regulations, Section 3603(a) states that "the area within 50 feet of such active faults shall be presumed to be underlain by active fault branches of that fault unless

[278] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

proven otherwise[,]"establishing a *de facto* zone of further required investigation to determine an appropriate setback that would extend no further than 50 feet. The nearest Alquist-Priolo Earthquake Fault Zone ("APEFZ") is more than six miles to the northwest.[279] The nearest County-designated active fault trace is approximately 1,000 feet to the southeast of the project.[280] As attributed in Section 11, Appendix G, the nearest surface trace of a mapped fault is approximately 150 feet south of the proposed home. The proposed project is therefore more than adequately set back from any seismic fault.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with earthquake faults, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Pursuant to the Geotechnical Report for the project in Section 11, Appendix G, "[n]o known active faults cross the subject property and the site is not located within an Alquist-Priolo Fault Rupture Hazard Study Zone. The surface trace of the potentially active Sierra Madre fault zone is mapped about 150 feet south of the site. There is no geomorphic or geologic evidence that would indicate faulting within the subject property. The ground rupture hazard at the site is considered low to nil." Pursuant to SC-LU-1 and RCM-GEO-2, the project must comply with all building code provisions for structures sited in hillside areas that are seismically active. Pursuant to RCM-GEO-2, the project complies with the recommendation of the Geotechnical Report to incorporate "[d]eepened foundations consisting of friction piles tied with grade beams," and would comply with all other geotechnical report recommendations. No structures are located downgrade of the project parcel, which contains only private property for which public usage is prohibited by "No Trespassing" signs.

ii. Strong seismic ground shaking

The project would be expected to result in no adverse impacts under these thresholds from exposure of future occupants of the project or any other people to strong ground shaking that might result in loss of life or property.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to the provisions of the [California Building Code], which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements, and would include foundation and

[279] Source: California Geological Survey: Seismic Hazard Zone Map. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SUNLAND_EZRIM.pdf.
[280] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.1. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level."[281] The project has been analyzed in a site-specific geotechnical investigation that conforms to these criteria, completed a geotechnical plan check review process and has been designed in compliance with the CBC, as all structures must be.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with strong ground shaking, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Pursuant to the Geotechnical Report for the project in Section 11, Appendix G, "[t]he principal seismic hazard to the subject property and proposed project is strong ground shaking from earthquakes produced by local faults." However, "[m]odern, well-constructed buildings are designed to resist ground shaking through the use of shear panels, moment-resisting frames and reinforcement. Additional precautions may be taken to protect personal property and reduce the chance of injury, including strapping down water heaters and securing furniture and appliances. It is likely that the subject property will be shaken by future earthquakes produced in southern California. However, secondary effects such as surface rupture, lurching, liquefaction, consolidation, ridge shattering, and landsliding should not occur at the subject property." The proposed project complies with the recommendation of the Geotechnical Report to incorporate "[d]eepened foundations consisting of friction piles tied with grade beams." Pursuant to SC-LU-1 and RCM-GEO-2, the project must comply with all building code provisions for structures sited in hillside areas and seismic zones. *See also Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 896-900 (design of structure in conformance with seismic design codes coupled with review by engineers and building officials was sufficient to ensure mitigation of seismic impacts under CEQA).

iii. Seismic-related ground failure, including liquefaction

The project would be expected to result in no adverse impacts under these thresholds from exposure of future occupants of the project or any other people to ground failure, including liquefaction.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to existing building and grading codes, and construction-related grading requires the preparation and submittal of site-specific grading plans and geotechnical reports that must be reviewed and approved by the County beforehand.

[281] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Each future development project would be required to comply with the recommendations in the geotechnical investigation report and comply with the CBC, thereby reducing such hazards to a less than significant level."[282] The project has completed a geotechnical plan check review process and has been designed in compliance with the CBC, as all structures must be.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with ground failure, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Pursuant to the Geotechnical Report for the project in Section 11, Appendix G, "[a]ccording to the Seismic Hazard Zones Map, portions of the subject property lie within zones of required investigation for liquefaction and earthquake-induced landsliding.[283] The potentially liquefiable soils are located within the stream channel and are remote to the proposed project. As such, liquefaction is not expected to impact the proposed development….There is no geomorphic or geologic evidence that would indicate faulting within the subject property. The ground rupture hazard at the site is considered low to nil….It is likely that the subject property will be shaken by future earthquakes produced in southern California. However, secondary effects such as surface rupture, lurching, liquefaction, consolidation, ridge shattering, and landsliding should not occur at the subject property….The analysis shows that the subject property and existing slopes are grossly stable with a factor of safety in excess of 1.5 under static conditions and in excess of 1.0 under seismic conditions." The scope of analysis for the project extends to the roadway to the east of the project parcel, and the monolithic nature of the underlying bedrock is not expected to be suitable to the propagation of any shear fracture plane or other deformation from seismic effects sustained in the limited time after augering but before backfill of any pile with reinforced concrete.

iv. Landslides

The project would be expected to result in no adverse impacts under these thresholds from exposure of future occupants of the project or any other people to landslides.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[c]ompliance with existing state and county regulations, as well as goals and policies included as part of the [2035 County General Plan] would ensure that the impacts associated with exposure to strong seismic ground shaking, seismic-related ground failure including liquefaction, and landslides are reduced to a less than

[282] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[283] Source: California Geological Survey: Seismic Hazard Zone Map. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/PASADENA_EZRIM.pdf.

significant level."[284] The proposed project is consistent with all 2035 County General Plan policies, including those related to geology and soils. (*See* Table 5-11: County General Plan Policy Consistency Analysis). The project has completed its geotechnical plan check review process and has been designed in compliance with the CBC.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with landslides, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Pursuant to the Geotechnical Report for the project in Section 11, Appendix G, "[a]ccording to the Seismic Hazard Zones Map, portions of the subject property lie within zones of required investigation for liquefaction and earthquake-induced landsliding.[285]…However, secondary effects such as surface rupture, lurching, liquefaction, consolidation, ridge shattering, and landsliding should not occur at the subject property….The analysis shows that the subject property and existing slopes are grossly stable with a factor of safety in excess of 1.5 under static conditions and in excess of 1.0 under seismic conditions."

Pursuant to RCM-GEO-1, the project would be required to comply with Best Management Practices ("BMPs") to limit the potential for erosion and debris flow during construction. The manner and small extent of grading further limit these impacts. The project would not permanently alter any structural properties of the hillside, as the project's pile foundation is characterized by superior structural properties to the decomposed granite it replaces. Any fill placed in the project footprint of development, as well as any underlying soil, cobbles, or boulders, would be adequately retained during a seismic event by static resistance of the structural concrete foundation walls of the home, to a much greater extent than would be characteristic of the hillside without the project. The project would make use of drought-tolerant landscaping and is not expected to introduce significant sources of new water or any potentially de-stabilizing stimuli to the structure of the hillside.

- **Threshold 5.6-2**: Result in substantial soil erosion or the loss of topsoil

The project would be expected to result in no adverse impacts under these thresholds from substantial soil erosion or loss of topsoil, and less than significant impacts from any erosion.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[a]dherence to the requirements of the County Code and the CBC, together with the safeguards afforded by the County's building plan check and development review process, would help ensure that appropriate erosion controls are devised

[284] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[285] Source: California Geological Survey: Seismic Hazard Zone Map. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/PASADENA_EZRIM.pdf.

and implemented during construction,"[286] concluding that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss…are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[287] The project has completed a building plan check review process and has been designed in compliance with the CBC, as all structures must be. Pursuant to RCM-GEO-1, the project would be required to comply with BMPs to limit the potential for erosion and sedimentation during construction. Pursuant to RCM-GEO-2, the project would comply with all recommendations of the geotechnical report during construction, including those related to management of soils. The proposed project is consistent with all 2035 County General Plan policies, including those related to geology and soils. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with soil erosion and topsoil, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

All grading for the project would be undertaken by hand, and the 40 cubic yards of cut can be performed more quickly and constrained more easily than the much larger amounts characteristic of most hillside development. (*Compare to* the 15,000 cubic yards required for a use permit in the County Hillside Management Areas, the 2,500 cubic yards required for a use permit in Altadena, and the 5,000 cubic yards that qualify for a Class 4 exemption under the County CEQA Guidelines). The proposed graded volume is composed primarily of fill from the construction of Canyon Crest Road, which is not quality topsoil, and the amount of soil removed from horticultural availability is negligible in the context of extant topsoil in the region.

- **Threshold 5.6-3**: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; and
- **Threshold 5.6-4**: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property

The project would be expected to result in no adverse impacts under these thresholds from being located on unstable ground or causing the ground to become unstable and prone to landslide, lateral spreading, subsidence, liquefaction or collapse.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[i]ndividual development projects would be

[286] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[287] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[288] The 2035 County General Plan EIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[289] The project has completed its geotechnical plan check review process and has been designed in compliance with the CBC, as all structures must be. Pursuant to RCM-GEO-1, the project would be required to comply with BMPs to limit the potential for soil instability during construction. Pursuant to RCM-GEO-2, the project would comply with all recommendations of the geotechnical report during construction, including those related to management of soils. The proposed project is consistent with all 2035 County General Plan policies, including those related to geology and soils. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with soil stability, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Pursuant to the Geotechnical Report for the project in Section 11, Appendix G, "[a]ccording to the Seismic Hazard Zones Map, portions of the subject property lie within zones of required investigation for liquefaction and earthquake-induced landsliding.[290] The potentially liquefiable soils are located within the stream channel and are remote to the proposed project. As such, liquefaction is not expected to impact the proposed development….There is no geomorphic or geologic evidence that would indicate faulting within the subject property. The ground rupture hazard at the site is considered low to nil…. It is likely that the subject property will be shaken by future earthquakes produced in southern California. However, secondary effects such as surface rupture, lurching, liquefaction, consolidation, ridge shattering, and landsliding should not occur at the subject property….The analysis shows that the subject property and existing slopes are grossly stable with a factor of safety in excess of 1.5 under static conditions and in excess of 1.0 under seismic conditions." Therefore, the project would not be founded on unstable ground.

"The alluvial terrace and bedrock described are common to this area of the San Gabriel Mountains and the geologic structure is consistent with regional trends. The alluvial terrace and

[288] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[289] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[290] Source: California Geological Survey: Seismic Hazard Zone Map. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/PASADENA_EZRIM.pdf.

granite are generally massive to horizontally-layered and lacks significant structural planes. Joint planes observed in the bedrock are randomly-oriented and steeply-dipping. The massive nature of both the alluvial terrace and the bedrock are favorably-oriented for stability of the site and proposed project." (*Ibid*.). Therefore, the project would not be expected to cause the ground to become unstable.

"[T]he on-site soils are non-expansive." (*Ibid*.). The project would be supported entirely on six deep-foundation friction piles. Therefore, the expansiveness of the underlying soil has no impact on the structural properties of the home.

- **Threshold 5.6-5**: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater

The project would be expected to result in no adverse impacts from inadequate capacity for on-site wastewater treatment.

Project-specific Analysis

The project would connect to the public sewer system and would not make use of septic tank as the on-site wastewater disposal system. Should any graywater system be installed at any point in the future, it would be expected to adhere to any applicable regulations and permitting processes under Chapter 15 of the California Plumbing Code.

- **Threshold 5.6-6**: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

The project would be expected to result in no adverse impacts under these thresholds from any substantial change in the significance of a paleontological resource or unique geologic feature.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting after incorporation of GPMM-CUL-4 and GPMM-CUL-5, stating that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity,"[291] concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level."[292] Pursuant to GPMM-CUL-4 and GPMM-CUL-5, the retention of a "County-certified archaeologist…to observe grading

[291] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[292] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

activities greater than six feet in depth and salvage and catalogue archaeological resources as necessary" mitigates for any substantial adverse change in the significance of a paleontological resource. Any found resources determined to be significant shall be offered "for curatorial purposes to the County of Los Angeles, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County." As the proposed project's approximately 40 cubic yards of cut grading does not exceed a depth of six feet in the undisturbed alluvial terrace with a low potential for encounter of paleontological resources, and because excavation in disturbed fill or the granitic materials on the project parcel would be expected to have no potential for impacts to paleontological resources, the proposed project transcends the scope of this mitigation measure. Nevertheless, MM-CUL-1 has been formulated to ensure that in the unexpected event any resources were to be encountered, management of the resource would adhere to the performance standards specified in the 2035 County General Plan EIR.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The geotechnical report for the project, which has been reviewed by the Department of Public Works Geotechnical Materials and Engineering Division in the course of approval of the project's structural plans in compliance with the California Building Code and all other applicable regulations, confirms the long-term stability of the underlying geology and soils in which the project is founded. *See Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 904 ("compliance with the Building Code, and the other regulatory provisions, in conjunction with the detailed Geotechnical Investigation, provided substantial evidence that…would reduce seismic impacts to a less than significant level"). The project would not be expected to introduce any mechanism of geologic or soils instability on or adjacent to the project parcel and would employ construction methods that are recommended for and suited to the project parcel. Standard conditions implemented as Best Management Practices as a part of the plan check review process would prevent the propagation down-slope of disturbances during the construction phase of the project. No known active faults cross the project parcel, and the site is not located within an Alquist-Priolo Fault Rupture Hazard Study Zone. There is no geomorphic or geologic evidence that would indicate faulting in the project parcel, and the ground rupture hazard is considered low to nil. Implementation of the project would require grading and the excavation of piles that would result in temporary soil disturbance areas. However, the volume of grading is small, at 40 cubic yards of cut, and would be closely managed through required hand excavation. The entirety of the west-facing slope underlying the residence was determined to be stable using the required static and dynamic factors of safety. The site is characterized by monolithic decomposed granite bedrock that is an ideal substrate for a pile and grade beam foundation.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

MM-CUL-1: The contractor shall be instructed that if artifacts of potential cultural significance, including bone, ground or chipped stone, pottery shards, fossilized material or any other materials apart from fill and naturally deposited rocks in a soil matrix are encountered during hand excavation, all work shall be halted. Work shall not recommence until a qualified archaeologist meeting the Secretary of the Interior's Standards for professional archaeology can ascertain and record the extent of the resource and its cultural significance under CEQA, in written consultation with the Native American tribes that requested contact pursuant to AB 52 and with the County. If determined to have significance, the qualified archaeologist shall formulate, the County shall approve, and these parties together with the Applicant shall implement a plan that accords with the particular circumstances of the find to preserve intact those artifacts with cultural significance. The resource, supporting documentation and an itemized catalogue shall be offered on a first refusal basis into the collections of a suitable repository, as determined by the Native American tribes that requested contact pursuant to AB 52 (if of tribal cultural significance), the County, or their designees in turn. The Applicant shall be responsible for all associated costs, including any curation costs to accession the resource. If refused, the plan shall provide for alternative means of preservation intact, which may include, but are not limited to, building envelope translation within available height and setback limitations, burial elsewhere on the project parcel, or relocation elsewhere within the County.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to geology and soils would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[d]ue to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology and soils impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis….Future cumulative development under the proposed project and the surrounding area would be subject to the same local, state, and federal regulations pertaining to geology and soils, including CBC and Los Angeles County Building Code requirements (or city building code requirements, as appropriate). Therefore, cumulative development in the region would not result in a significant

cumulative impact."[293] The proposed project is subject to and has been designed in accordance with these regulations.

Past projects have not substantially degraded the geological or soils conditions in the influential vicinity of the project with operations like mining, fracking or other physical stimuli promoting instability, and the project would not be expected to substantially decrease any other attribute of stability. The small volume of excavation that would be required to implement the project would universally result in disturbances only everywhere outside of the expanding radial shear zones of any load-bearing surface nearby, including any building foundation, driveway or roadway, leaving these surfaces completely unaffected in their load bearing stability.

Other closely related present and future projects would be expected to be consistent with all applicable technical regulations constraining the design and review of the interaction of structures with geology and soils.

[293] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.6-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.7 Greenhouse Gas Emissions and Energy

5.7.1 Introduction

This section of the EIR evaluates the project's potential impacts resulting from generation of greenhouse gas emissions and usage of energy for the project. A single-family home that is consistent with all applicable plans, policies, building regulations and efficiency standards would not generally be expected to be a significant emitter of greenhouse gases or user of energy.

Fundamentals

Energy entering the Earth's atmosphere can either be reflected or absorbed by Earth. When these effects are imbalanced, the global temperature can rise or fall. GHGs in the atmosphere (such as water vapor and carbon dioxide) absorb most of the Earth's emitted longwave infrared radiation, which heats the lower atmosphere and keeps Earth habitable. Increasing concentrations of GHGs such as carbon dioxide and methane increase the amount of absorption and can increase the temperature of the lower atmosphere, resulting in global climate change.

GHGs are emitted from both natural processes and human activities. Recent climate changes since the mid-twentieth century are believed by climate scientists to exceed what is possible by natural causes only. The Intergovernmental Panel on Climate Change ("IPCC") states that it is extremely likely that human activities have been the dominant cause of recent warming since the mid-20th century. The main components of GHG emissions caused from human activities are carbon dioxide ("CO_2"), methane ("CH_4"), nitrous oxide ("N_2O"), and fluorinated gases. Since each GHG absorbs radiation at a different rate, the effects of each GHG can be normalized to a standard global warming potential.[294] Equivalent carbon dioxide (or "CO_2e") describes how much global warming a given type and amount of GHG may cause, normalizing against the functionally equivalent amount or concentration of CO_2.

5.7.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

The U.S. Environmental Protection Agency ("USEPA") announced on December 7, 2009 that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The USEPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission

[294] Source: United States Environmental Protection Agency: Emission Factors for Greenhouse Gas Inventories. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf.

reduction requirements but allow the USEPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation.[295]

The USEPA's endangerment finding covers emissions of six key GHGs - CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6 - that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the USEPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 metric tons ("MT") or more of CO_2 per year are required to submit an annual report.

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy ("CAFE") standards incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued standards in 2012 for model years 2017–2025, which will require a fleet average of 54.5 mpg in 2025.[296]

Climate Action Plan

In June 2013, President Obama announced the U.S. Climate Action Plan, which took a three-pronged approach by cutting carbon pollution, preparing for the impacts of climate change, and leading international efforts to address global climate change. The Plan aimed to reduce carbon pollution by focusing on setting emission standards for new and existing power plants, improving energy efficiency in vehicles and buildings, reducing energy waste, and investing in renewable energy projects. The Plan also included climate adaptation strategies to address climate vulnerabilities, such as drought and wildfires, and increases resiliency in how cities are built.

On March 28, 2017, President Trump issued an Executive Order on Promoting Energy Independence and Economic Growth, which rescinded several energy and climate related executive orders and plans including the Climate Action Plan of June 2013 and Climate Action Plan Strategy to Reduce Methane Emissions of March 2014.

Paris Climate Agreement

[295] Source: United States Environmental Protection Agency. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-model-year-2012-2016-light-duty-vehicle.
[296] Source: National Highway Transportation Safety Administration: Corporate Average Fuel Economy for MY 2017-MY 2025 Passenger Cars and Light Trucks. Available at: https://www.nhtsa.gov/sites/nhtsa.gov/files/fria_2017-2025.pdf.

On June 1, 2017, the United States withdrew from the Paris Agreement. The Paris Agreement was negotiated within the United Nations Framework Convention on Climate Change in 2015 to reduce GHG emissions internationally. The goal of the Paris Agreement was to keep the global temperature rise this century to below two degrees Celsius above pre-industrial standards, with efforts to limit temperature increase even further to 1.5 degrees Celsius. The Paris Agreement became effective on November 4, 2016. As of October 5, 2016, 155 of 197 parties had ratified the Paris Agreement.

State Regulation

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32) and Senate Bill 375 (SB 375). Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Executive Order S-03-05 (Statewide GHG Targets)

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Executive orders do not have the same status as a law because in California's constitutional system, it is the Legislature, not the Governor, that is entrusted with the role of making statewide laws. The Legislature declined to include the Executive Order's 2050 goal in AB 32 (discussed below), and again declined to use the EO's 2050 goal in adopting Senate Bill ("SB") 375 (discussed below), nor has it incorporated it in any implementing legislation or applicable plans. Additionally, although CARB has the requisite authority to adopt whatever regulations are necessary beyond the AB 32 horizon year 2020 to meet the target set forth in S-3-05, the agency has not done so. Since the Legislature has never enacted EO S-3-05's 2050 target, and no expert agency has interpreted CEQA to require it, the 2050 target has only the force and effect of an executive order issued by a former Governor. *See also Cleveland National Forest Foundation v. San Diego Association of Governments* (2014) 231 Cal.App.4th 1056, 1096; *Professional Engineers in California Government v. Schwarzenegger* (2010) 50 Cal.4th 989, 1015; Office of Planning and Research, Guide to the California State Executive Branch (October 2004), page 8. CEQA is a statute, and the authority to amend and revise its requirements falls first to the Legislature. The Legislature alone has the authority to enact, amend, or revise legislation, absent some express delegation of authority to the Governor or an executive branch agency through statutory enactments. If the Legislature has delegated any of its authority to define CEQA's

requirements, it delegated that authority to the Office of Planning and Research and not to the Governor.

Moreover, CARB's Scoping Plan to implement AB 32 (discussed below) looked beyond 2020 to assess whether implementing the Scoping Plan would achieve the State's long-term climate goals. The 2014 Scoping Plan Update confirms that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" and it recognizes the potential for California to "reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050."[297]

However, the 2014 Scoping Plan Update also concludes that additional actions would be needed to continue reducing emissions and meet the 2050 goals in the face of anticipated population and economic growth. In fact, significant technological innovation, well beyond the scope of an individual development project, are absolutely necessary components of any plausible path to achieving the EO S-3-05's 2050 target. For example, CARB has concluded that "California must transition to zero and near-zero emission transportation and freight movement technologies" which require expedited completing of "promising new heavy-duty vehicle technologies," and to "encourage additional needed technology innovation" CARB proposes to amend some of its regulatory requirements.[298]

These new technology innovations to change transportation engine and fuel technology, and energy generation and storage technology are generally outside the jurisdiction and control of the local government agency such as the County. Achieving these goals will require wholesale shifts in fuel and energy technology, neither of which are currently available, rendering any further analysis of a given development project's impacts relative to the 2050 target too speculative for purposes of determining CEQA significance.

The California Supreme Court in the *Newhall* decision (discussed below) noted that an analysis of goals beyond 2020 may be necessary for new development; however, the Court noted that the target set by EO S-3-05 and the interim goal set in EO B-30-15 (discussed below) were not required significance criteria in analyzing impacts related to GHG emissions and climate change under CEQA, for the reasons attributed herein.

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32, the Global Warming Solutions Act. AB 32 was passed by the California state legislature on August 31, 2006, to place the State on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05.

[297] Source: California Air Resources Board: First Update to the Climate Change Scoping Plan, page 36. Available at: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.
[298] Source: California Air Resources Board: Innovative Technology Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/innovative-technology-regulation/about.

AB 32 directed the California Air Resources Board to adopt discrete early action measures to reduce GHG emissions and outline additional reduction measures to meet the 2020 target. Based on the GHG emissions inventory conducted for the Scoping Plan by CARB, GHG emissions in California by 2020 were anticipated to be approximately 596M (596 million) $MTCO_2e$ under a business-as-usual ("BAU") scenario. In December 2007, CARB approved a 2020 emissions limit of 427 $MMTCO_2e$ (471 million metric tons) for the state, requiring a total emissions reduction of 169 $MMTCO_2e$ or 28.5%.[299]

In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 $MTCO_2e$ per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012. Key AB 32 milestones for CARB's actions include the following:

- June 30, 2007. Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving three early action measures.[300] These were later supplemented by adding six other discrete early action measures.[301]
- January 1, 2008. Identification of the 1990 baseline GHG emissions level; approval of a statewide limit equivalent to that level; and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline.[302]
- January 1, 2009. Adoption of the Scoping Plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted Climate Change Scoping Plan: A Framework for Change (Scoping Plan), discussed in more detail below.[303]
- January 1, 2010. Adoption and enforcement of regulations to implement the "discrete" actions. Several early action measures have been adopted and became effective on January 1, 2010. [304]
- January 1, 2011. Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would

[299] Source: California Air Resources Board: Climate Change Scoping Plan, A Framework for Change, December 2008, page 12. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.
[300] Source: California Air Resources Board: Summary of Board Meeting, Consideration of Recommendations for Discrete Early Actions for Climate Change Mitigation in California, page 5. Available at: https://www.arb.ca.gov/board/ms/2007/ms062107.pdf.
[301] Source: California Air Resources Board: Summary of Board Meeting: Public Meeting to Consider Approval of Additions to Reduce Greenhouse Gas Emissions under the California Global Warming Solutions Act of 2006 and to Discuss Concepts for Promoting and Recognizing Voluntary Early Actions, page 2. Available at: https://www.arb.ca.gov/board/ms/2007/bis102507.pdf.
[302] Source: California Air Resources Board: California Greenhouse Gas Inventory (millions of metric tons of CO2 equivalent) by IPCC Category. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/ghg_inventory_ipcc_90-04_all_2007-11-19.pdf.
[303] Source: California Air Resources Board: Climate Change Scoping Plan, A Framework for Change. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf.
[304] Source: California Air Resources Board, Summary of Board Meeting: Consideration of Recommendations for Discrete Early Actions for Climate Change Mitigation in California, page 5. Available at: https://www.arb.ca.gov/board/ms/2007/ms062107.pdf.

cover sources of approximately 85 percent of California's GHG emissions. On October 20, 2011, the Board adopted the final cap-and-trade regulation. The final rulemaking packing was approved by the Office of Administrative Law on December, 14 2011, with an effective date of January 1, 2012.

- January 1, 2015. Cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending, distillate fuel oils, and liquefied petroleum gas, with emissions that meet or exceed specified emissions thresholds. Emission offsets are allowed for up to eight percent of a facility's compliance obligation. According to the 2016 California Climate Investments Annual Report, $2.6 billion from the Greenhouse Gas Reduction Fund has been appropriated to State agencies, and $1.7 billion has been awarded to projects.[305] CARB has confirmed that the Cap-and-Trade program will continue to be administered after 2020.

CARB 2008 Scoping Plan

As noted above, on December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emission level would require a reduction of GHG emissions of approximately 28.5 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business as usual"). The Scoping Plan evaluates opportunities for sector-specific reductions; integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities; identifies additional measures to be pursued as regulations; and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards (adopted and cycle updates in progress).
- Achieving a mix of 33 percent for energy generation from renewable sources (anticipated by 2020).
- A California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system for large stationary sources (adopted 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets (several Sustainable Communities Strategies have been adopted).
- Adopting and implementing measures pursuant to state laws and policies, including California's clean car standards (amendments to the Pavley Standards adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

[305] Source: California Air Resources Board: California Climate Investments, Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds, page 2. Available at: http://arb.ca.gov/cc/capandtrade/auctionproceeds/cci_annual_report_2016_final.pdf.

In 2009, a coalition of environmental groups brought a challenge to the Scoping Plan alleging that it violated AB 32 and that the environmental review document (called a "Functional Equivalent Document") violated CEQA by failing to appropriately analyze alternatives to the proposed cap-and-trade program. On May 20, 2011, the San Francisco Superior Court entered a judgment in favor of the coalition and ordered that CARB take no further action with respect to cap-and-trade rulemaking until it complies with CEQA by properly analyzing alternatives in its FED to cap and trade. On appeal, the California First District Court of Appeal upheld the Scoping Plan and affirmed CARB's approval of the Scoping Plan to be in compliance with AB 32. *Association of Irritated Residents v. State Air Resources Board* (2012) 206 Cal.App.4th 1487.

In connection with preparation of the supplement to the Functional Equivalent Document, CARB released revised estimates of the expected 2020 emission reductions in consideration of the economic recession and the availability of updated information from development of measure-specific regulations. Consideration of the economic recession and the effectiveness of adopted regulation including cleaner car mandates required by Pavley (vehicle model-years 2009–2016) and the renewable portfolio standard (12 percent–20 percent) reduced the projected 2020 BAU emissions from 596 $MMTCO_2e$ to 506.8 $MMTCO_2e$.[306] As a result, based on both the economic recession and new GHG reduction implementation mandates, CARB determined in 2011 that achieving the 1990 emission level (and 2020 emissions limit of 427 $MMTCO_2e$) would require a reduction of GHG emissions of 80 $MMTCO_2e$, or a reduction by approximately 15.8 percent (down from 28.5 percent, but not directly comparable because of the change in methodology) to achieve in 2020 emissions levels in the "business as usual" or NAT condition.

2014 Update to the Scoping Plan

CARB approved the final "First Update to the Climate Change Scoping Plan" on May 22, 2014. The first update describes California's progress towards AB 32 goals, stating that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32".[307] Specifically, "if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050"[308]. This first update retains from the October 2013 draft the recalculated 1990 GHG emissions level of 431 $MMTCO_2e$, as well as the 509 $MMTCO_2e$ 2020 "business as usual" or NAT condition (CARB 2014b). Thus, under CARB's most current document, reducing the "business as usual" or NAT condition of 509 $MMTCO_2e$ to the 1990 emissions level of 431 $MMTCO_2e$ will require a reduction of 78 $MMTCO_2e$, or approximately a 15.3 percent reduction

[306] Source: California Air Resources Board: Supplement to the AB 32 Scoping Plan Functional Equivalent Document, approved by Resolution 11-27, August 24, 2011, page 11. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/document/final_supplement_to_sp_fed.pdf.
[307] Source: California Air Resources Board: First Update to the Climate Change Scoping Plan, page ES2. Available at: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.
[308] Source: California Air Resources Board: First Update to the Climate Change Scoping Plan, page 63. Available at: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

(compared to a 28.5 percent reduction as set forth in the original Scoping Plan but not directly comparable because of the change in methodology).

2017 Update to the Scoping Plan

CARB approved the final "2017 Climate Change Scoping Plan" on December 14, 2017.[309] The update includes new statutory GHG reduction requirements that were not included in the current Scoping Plan. While AB 32 justified the State's climate action until 2020, SB 32 (discussed below) extends those actions until 2030. The key elements of the update call for further GHG reductions from the refinery sector specifically, further reductions from other stationary sources through either a renewed and expanded cap and trade or carbon tax program, further reductions from other sectors such as transportation technologies and services, water and solid waste conservation and management, and land uses in both open space and urban areas.

Senate Bill 32

SB 32, signed into law on September 8, 2016, requires CARB to ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the 1990 statewide greenhouse gas level no later than December 31, 2030. Per SB 32, CARB is to achieve this 2030 GHG reduction target by "adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions[.]" *See* Health & Safety Code Section 38566. The new SB 32 GHG reduction mandate is the same as the GHG reduction included in Executive Order B-30-15 of 40 percent below 1990 levels by 2030. As discussed above, CARB enacted the SB 32 in its 2017 Climate Change Scoping Plan, which builds upon and leverages the framework for achieving California's GHG reduction mandate established in the initial Scoping Plan and subsequent updates.

Assembly Bill 197

AB 197 is a companion to, and was enacted on the same day as, SB 32. AB 197 adds two non-voting members to the CARB board, establishes certain qualifications for CARB board membership, and creates a six-member Joint Legislative Committee on Climate Change Policies to determine facts and make recommendations to the Legislature regarding California climate change policy. Under AB 197, the CARB Chair is required to appear before this committee on an annual basis and present annual information regarding GHG emissions, toxic air contaminants, and criteria pollutants generated by all economic sectors covered by the Scoping Plan. AB 197 further authorizes the committee to establish an expert panel to independently analyze the State's climate change policies. In addition, AB 197 requires CARB to make available on its website, and updated annually, all GHG emissions, criteria pollutants, and toxic air contaminant information broken down to a local level for stationary sources and sub-county level for mobile sources. AB 197 also obligates CARB, when adopting rules and regulations that achieve emission reductions beyond statewide GHG emission limits to consider "social costs" and to prioritize (a) emissions reductions from large stationary sources of GHG emissions, and (b)

[309] Source: California Air Resources Board: California's 2017 Climate Change Scoping Plan. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

direct emission reductions from mobile sources. For purposes of AB 197, "social costs" is defined to mean "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such a property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emissions per year." Finally, AB 197 requires each Scoping Plan update to identify for each of its emission reduction measures (i) the range of air pollution reductions and GHG emissions reductions projected to result from each measure, and (ii) the cost-effectiveness, including avoided social costs, of each measure.

California Supreme Court Ruling in Center for Biological Diversity v. Department of Fish and Wildlife

In *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204 ("*Newhall*"), the Court evaluated the California Department of Fish and Wildlife's (CDFW) analysis of potential impacts caused by GHG emissions contained in the EIR for the proposed land development called Newhall Ranch. In the EIR, the CDFW analyzed GHG emissions under Assembly Bill (AB) 32, using the business-as-usual (BAU) comparison as its sole criterion of significance.

In *Newhall*, the California Supreme Court concluded that a finding of consistency with meeting statewide emission reduction goals is a legally permissible criterion of significance when analyzing potential impacts of GHG emissions under CEQA. However, the Court found that the EIR's conclusion that the project's emissions would be less than significant under that criterion was not supported by substantial evidence, and remanded back to the appellate court the narrow issue of whether substantial evidence supported the application of AB 32 statewide GHG reduction goal of 29 percent to new land use projects.

The Court then identified "potential options" for lead agencies evaluating cumulative significance of a proposed land use development's GHG emissions in future CEQA documents, but the Court was careful to note that there was no "guarantee" that any of these would be sufficient.

The "potential pathways to compliance" suggested by the Court are as follows:

1. Business As Usual (BAU) Model: While the Court cautioned that the Scoping Plan may not be appropriate at the project-level, the BAU model might be used to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals pursuant to AB 32. The Court specifically directed that reliance on this type of quantitative threshold must be supported by substantial evidence in the record that links the statewide GHG reduction standard to the appropriate GHG reduction standard for the specific type of project under consideration. In other words, for a project's impact to be less than significant, its contribution must be contextualized in a larger model of reductions for all sources of emissions, for which compliance with AB 32 is therefore evidenced by the project bearing its appropriate share of the burden.
2. Compliance With Regulatory Programs Designed To Reduce Greenhouse Gas Emissions: The Court suggests that a lead agency could rely on a showing of compliance with regulatory programs designed to reduce greenhouse gas emissions in order to demonstrate consistency

with AB 32's goals. The Court clarifies that a significance analysis based on compliance with such statewide regulations only goes to impacts within the area governed by the regulations.

3. Local Climate Action Plan Or Other "Geographically Specific Greenhouse Gas Emission Reduction Plans": The Court points out that these plans may provide a basis for the tiering or streamlining of project-level CEQA analysis, so long as the plan is "sufficiently detailed and adequately supported."
4. Regional Sustainable Community Strategy (SCS): The Court also articulates that a lead agency need not additionally analyze greenhouse gas emissions from cars and light trucks in CEQA documents for certain residential, mixed use and transit priority projects that are consistent with an applicable SCS adopted pursuant to SB [Senate Bill] 375.
5. Numerical GHG Significance Thresholds: Although noting that use of such thresholds is not required, the Court favorably cited to the BAAQMD GHG significance thresholds, based on compliance with AB 32, which use a "service population" GHG ratio threshold or fixed 1,100-ton annual GHG emission threshold for use in land use projects of varying size and a 10,000-ton annual GHG emission threshold for industrial projects. The Court remanded for further consideration the application of the 29 percent overall Scoping Plan metric, which is used by several Air Districts and, like the favorably-cited BAAQMD [Bay Area Air Quality Management District] metric, is based on AB 32. This approach is fundamentally an extension of the BAU model, for which assigned burdens for greenhouse gas emissions reductions are preferentially off-loaded onto larger projects with greater economies of scale and degrees of freedom with which to effect reductions, such that the significance threshold distinguishes which projects of a given class are tasked with the reductions.
6. Executive Order Nos. S-3-05 and B-30-15: Citing to Executive Order Nos. S-3-05 and B-30-15, the Court cautioned that those EIRs taking a goal consistency approach to CEQA significance may "in the near future" need to consider the project's effects on meeting emissions reduction targets beyond 2020.

Following the Supreme Court's decision in *Newhall*, the EIR at issue in that case was set aside on remand by the lower court. In November of 2016, the CDFW released a draft Additional Environmental Analysis ("AEA") intended to address the agency's CEQA determination obligations.[310] The AEA does not respond to the Supreme Court's direction to provide substantial evidence supporting the 29% BAU statutory GHG reduction threshold relied upon by the Newhall EIR. The AEA also does not include an assessment of the Newhall project's consistency with any of the Court's suggested GHG CEQA compliance pathways, although referenced documentation in the Newhall administrative record do include and confirm compliance with each pathway. Instead, as described in the AEA, the Newhall project applicant (Five Point LLC) voluntarily modified its project and proposed to achieve "net zero" GHG emissions for the project with the implementation of the project applicant's "zero net emission" proposal, which was made enforceable by the addition of 13 mitigation measures that correspond to the applicant's proposal, as further described in the AEA. The AEA states that the adoption and implementation of the 13 mitigation measures would reduce mobile source, electricity, natural gas, vegetation removal, and construction-related emissions by the amount of emissions estimated for the project and result in no net contributions of GHG emissions from the project, or

[310] Source: California Department of Fish and Wildlife: Draft Additional Environmental Analysis Documents. Available at: https://nrm.dfg.ca.gov/documents/ContextDocs.aspx?cat=NewhallRanchDraftAEA.

"zero net emissions." The AEA further concludes that because the project would result in no net increase of GHG emissions after implementation of the mitigation measures, there would be no contribution of GHG emissions to cumulative GHG emissions influencing global climate change and the Newhall project would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs. Consequently, the AEA concludes that project GHG and climate change impacts would be less than significant.

Senate Bill 375

In 2008, Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle trips and vehicle miles traveled. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations, including the Southern California Association of Governments ("SCAG"), which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the metropolitan planning organizations rather than a total magnitude reduction target. SCAG's targets are an 8% per capita reduction from 2005 GHG emission levels by 2020 and a 13% per capita reduction from 2005 GHG emission levels by 2035.[311]

The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's existing transportation network. The proposed targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met.

SCAG's 2012/2016 RTP/SCS

SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy ("SCS") in their regional transportation plan. For the SCAG region, the 2012 Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS") was adopted in April

[311] Source: California Air Resources Board: Technical Evaluation of the Greenhouse Gas Emissions Reduction Quantification for the Southern California Association of Governments' SB 375 Sustainable Communities Strategy, June 2016, page i.

2012[312] and updated in April of 2016,[313] with subsequent amendments in 2017 and future updates expected to this living document. The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavely I). Pavely I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016. California implemented the Pavely I standards through a waiver granted to California by the USEPA. In 2012, the USEPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the CAFE standards under Federal Laws, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34% fewer global warming gases and 75% fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the State set a new low carbon fuel standard for transportation fuels sold within the State. Executive Order S-1-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The standards require a reduction of 2.5% in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the State identified that CARB, the California Energy Commission ("CEC"), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations).

[312] Source: South Coast Association of Governments: Regional Transportation Plan 2012-2035 Sustainable Communities Strategy. Available at: https://libraryarchives.metro.net/dpgtl/scag/2012-2035-regional-transportation-plan.pdf.
[313] Source: South Coast Association of Governments: The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://scag.ca.gov/sites/default/files/old/file-attachments/f2016rtpscs.pdf.

The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10% of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25% by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80% below 1990 levels.

Senate Bill 97 CEQA Guidelines Amendments

By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze GHG emissions as a part of the CEQA process. SB 97 required OPR to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions (State CEQA Guidelines Section 15064.4).
    - "A lead agency shall have discretion to determine, in the context of a particular project, whether to…[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." (State CEQA Guidelines Section 15064.4(a)(1)).
    - Alternatively, "[a] lead agency shall have discretion to determine, in the context of a particular project, whether to…[r]ely on a qualitative analysis or performance-based standards." (State CEQA Guidelines Section 15064.4(b)(1)).
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions (State CEQA Guidelines Section 15126.4(c)). Such measures may include:
    - "Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision." (State CEQA Guidelines Section 15126.4(c)(1)).
    - "Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F." (State CEQA Guidelines Section 15126.4(c)(2)).
    - "Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions." (State CEQA Guidelines Section 15126.4(c)(3)).
    - "Measures that sequester greenhouse gases." (State CEQA Guidelines Section 15126.4(c)(4)).
    - "In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions." (State CEQA Guidelines Section 15126.4(c)(5)).
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. (State CEQA Guidelines Section 15126.2(a)).

- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a program GHG emissions reduction plan meeting certain criteria. (State CEQA Guidelines Section 15183.5).
    - "Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a program level, such as in a general plan…Later project-specific environmental documents may tier from and/or incorporate by reference that existing program review. Project-specific environmental documents may rely on an EIR containing a program analysis of greenhouse gas emissions as provided in section…15183 (EIRs Prepared for General Plans, Community Plans, or Zoning)." (State CEQA Guidelines Section 15183(a))
- CEQA mandates analysis of a proposed project's potential energy use (including transportation related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives. (State CEQA Guidelines Appendix F).

However, the updated CEQA Amendments do not prescribe specific methodologies for performing an assessment; they do not establish specific thresholds of significance; and they do not mandate specific mitigation measures. Rather, the CEQA Amendments emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA.

Senate Bills 1078 and 107, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewable portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under this standard, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1% in order to reach at least 20% by December 30, 2010. CARB has now approved an even higher goal of 33% by 2020. In 2011, the State legislature adopted this higher standard in SBX1-2. Executive Order S-14-08 was signed in November 2008, which expands the state's Renewable Energy Standard to 33% renewable power by 2020. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

California Building Code

Energy conservation standards for new residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and currently as of the date of the Notice of Preparation in effect for year 2016 (Title 24, Part 6, of the California Code of Regulations ("CCR")). Title 24 requires the design of building shells and building components to conserve energy. The standards are generally updated every three years to allow for consideration and possible incorporation of new energy efficiency technologies and methods. In July of 2016 the 2016 Building and Energy Efficiency Standards were published, which went into effect on January 1, 2017. Buildings that are constructed in accordance with the 2016 Building and Energy Efficiency Standards for residences are five percent more energy

efficient than the 2013 standards, which were in turn 25 percent more efficient than the 2008 standards, as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes.

The 2019 California Building Code will go into effect for building permit applications received after January 1, 2020. The 2019 California Building Code further increases energy efficiency standards for single-family homes and requires that every new single-family home be installed with a solar photovoltaic system.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Title 24, Part 11, known as "CALGreen") established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In July of 2016 the 2016 CALGreen Building Standards Code was published, which went into effect on January 1, 2017.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the CEC on October 11, 2006 and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Local Regulation

Los Angeles County Energy and Environmental Program

In 2006, the County Board of Supervisors adopted an Energy and Environmental Program ("EEP") for the development and enhancement of energy conservation and environmental programs for County departments. These programs contribute to the County's efforts to reduce community-wide GHGs and GHGs from County operations. The EEP consists of the following programs:

- Energy and Water Efficiency: The EEP establishes a reduction target of 20% by 2015 and implements conservation monitoring practices and water and energy shortage awareness programs for County buildings and departments.
- Green Building Construction and Operations: The County's Green Building Program consists of the Green Building, Low-Impact Development, and Drought Tolerant Ordinances.
- Environmental Stewardship: The Environmental Stewardship Program measures and reduces the County's environmental footprint, including the amount of GHGs produced through direct and indirect County operations, and develops climate change-related policies.
- Public Outreach and Education: The Public Outreach and Education Program utilizes the County's communication and outreach channels to share utility industry information, facilitate implementation of subsidy and assistance programs, and spread energy conservation practices throughout the region.

Community Climate Action Plan ("CCAP")

On October 6, 2015, a Community Climate Action Plan ("CCAP") was adopted as part of the 2035 County General Plan Update to address the County's local GHG reduction goals for 2020 pursuant to AB 32. The purpose of the CCAP is to:
1) establish a baseline emissions inventory and reduction needed to meet County goals;
2) identify specific actions that will measurably reduce GHG emissions consistent with AB 32;
3) establish a framework for implementing state and local level actions; and
4) provide a mechanism for ongoing tracking and updates to the CCAP.

As part of the CCAP, the County has identified a GHG reduction target of at least 11% below 2010 levels by 2020. The CCAP identifies 26 local actions to reduce community-wide GHG reductions in 2020 to reach the GHG reduction goal for the unincorporated areas of the County.

Pursuant to State CEQA Guidelines Section 15183.5(b), the CCAP provides that projects that "demonstrate consistency with applicable CCAP actions can be determined to have a less than significant cumulative impact on GHG emissions and climate change."

In addition, on June 6, 2018, the County adopted the CCAP Implementation Ordinances 2017 to reconcile some elements of the County Code with the CCAP.[314]

As of the drafting of the NOP, a draft 2045 update to the Community Climate Action Plan[315] is in the process of being analyzed by EIR, but has not been adopted.[316] While the CCAP adopted in 2015 laid a roadmap through 2020, "[t]he Draft 2045 CAP builds on previous work and defines new reduction targets beyond the year 2020. Approval of the Draft 2045 CAP would result in updates to the General Plan as shown in Table 2-1, Proposed Updates to the Los Angeles County General Plan 2035 Air Quality Element, and Table 2-2, Proposed Updates to the Los Angeles County General Plan 2035 Implementation Program." These changes include expanding General Plan Air Quality policies and updating its Implementation Program through 2045. While many specific actions of the adopted CCAP are continued in the draft update, a revised framework of nomenclature is proposed, which includes new actions.

The Los Angeles County 2045 Climate Action Plan was adopted by the Board of Supervisors and took effect on June 25, 2024.[317]

General Plan and Community Plan

[314] Source: County Department of Regional Planning: CCAP Implementation Ordinances 2017 / Project No. 2017-003637-(1-5), RPPL201600293. Available at: https://file.lacounty.gov/SDSInter/bos/supdocs/116525.pdf.
[315] Source: County Department of Regional Planning: County 2045 Community Climate Action Plan. Available at: https://planning.lacounty.gov/wp-content/uploads/2023/03/LA_County_2045_CAP_Public_Draft_April_2022.pdf.
[316] Source: County Department of Regional Planning. Available at: https://planning.lacounty.gov/site/climate/los-angeles-county-cap/.
[317] Source: County Department of Regional Planning. Available at: https://planning.lacounty.gov/long-range-planning/climate-action-plan/.

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to greenhouse gases, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.7.3 Existing Conditions

Sources of GHG Emissions

Global

Global GHG emissions as of 2010, the latest year for which IPCC published data is presently available, were estimated as 49+/-4.5 $GMTCO_2e/yr$.[318] (49 billion metric tons of CO_2 equivalent per year). Electricity and heat production comprises the single largest contribution to global GHG emissions with 25%, followed by agriculture/forestry/land use, industry and transportation.

National

National GHG emissions as of 2015, the latest year for which USEPA published data is presently available, were estimated as 6,586.7 $MMTCO_2e$[319] (6.6 billion metric tons of CO_2 equivalent per year). In 2015, fossil fuel combustion for electricity generation and transportation were the top two GHG emissions contributors, at 29% and 26%, respectively. Total GHG emissions have decreased by 13% since peak levels in 2005.

California Greenhouse Gas Inventory

The California Greenhouse Gas Inventory, maintained by the CARB, includes emissions from CO_2, CH_4, N_2O, sulfur hexafluoride ("SF_6"), hydrofluorocarbons ("HFCs"), perfluorocarbons ("PFCs"), and nitrogen trifluoride ("NF_3").[320] Of the total 440.4 $MMTCO_2e$ of GHG emissions in California in 2015, the most recent year for which figures are available, 84% were from CO_2. In 2015, the transportation sector and the industrial sector were the top two GHG emissions contributors, at 39% and 23%, respectively. Total GHG emissions have decreased by 10% since peak levels in 2004.[321]

[318] Source: Intergovernmental Panel on Climate Change: Technical Summary, page 42. Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_technical-summary.pdf.
[319] Source: United States Environmental Protection Agency: Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2015, page ES-4. Available at: https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf.
[320] Source: California Air Resources Board: 2019 GHG Inventory. Available at: https://ww2.arb.ca.gov/ghg-inventory-archive.
[321] Source: California Air Resources Board: California Greenhouse Gas Emissions for 2000 to 2015 – Trends of Emissions and Other Indicators. Available at: https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2015/ghg_inventory_trends_00-15.pdf.

County Greenhouse Gas Inventory

Unincorporated areas in the County of Los Angeles comprise more than 2,600 square miles and are home to over one million residents. The most recent inventory from 2010, described in the County CCAP, attributes approximately 8.0 $MMTCO_2e$ from the unincorporated areas. A projected inventory for 2020 attributes approximately 9.06 $MMTCO_2e$ of GHG emissions.

Site Characteristics

No appreciable sources of greenhouse gas emissions or energy usage are currently identified on the project parcel, a vacant, residentially zoned parcel.

5.7.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.7-1**: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

County Community Climate Action Plan

Consistency of a land-use project with the policies of a Community Climate Action Plan ("CCAP") designed to meet greenhouse gas reduction targets is a basis for a finding of less than significance. *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 231 ("To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with "performance-based standards" adopted to fulfill "a statewide…plan for the reduction or mitigation of greenhouse gas emissions." (Guidelines, § 15064.4, subds. (a)(2), (b)(3); see id., § 15064, subd. (h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including "plans or regulations for the reduction of greenhouse gas emissions"].")

The County CCAP intends that project-specific environmental documents that incorporate applicable CCAP actions may tier off of the 2035 County General Plan EIR under which the CCAP was approved. [322] Such projects "that rely on the CCAP can qualitatively evaluate GHG impacts by identifying all applicable CCAP actions and describing how those actions have been incorporated into the project design and/or identified as mitigation….Projects that demonstrate consistency with applicable CCAP actions can be determined to have a less than significant cumulative impact on GHG emissions and climate change." (*Id.* at p. 1-2). The CCAP is

[322] Source: County Department of Regional Planning: County Community Climate Action Plan 2020, page 1-1. Available at: http://planning.lacounty.gov/assets/upl/project/ccap_final-august2015.pdf.

intended to be updated such that the County will be able to meet all state and federal greenhouse gas emissions reduction requirements, taking into consideration latency in update of the CCAP where it must be revised to reduce certain contributions to a total greenhouse gas emissions inventory as standards are adjusted in the future.

Therefore, a project that integrates all applicable CCAP actions will have a less than significant impact on GHG emissions.

Numerical Greenhouse Gas Emissions Significance Threshold

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency.[323] Currently, the SCAQMD Governing Board has only adopted thresholds relevant to industrial (stationary source) projects. To achieve a policy objective of capturing 90 percent of GHG emissions from new residential/commercial development projects and implement a "fair share" approach to reducing emission increases from each sector, SCAQMD staff have proposed as a draft approach combining performance standards and screening thresholds. As of the date of the Notice of Preparation of this EIR, the SCAQMD has not adopted any significance thresholds for new residential, commercial, or mixed-use development projects, but has proposed several draft thresholds. The SCAQMD's latest iteration of proposed thresholds, as introduced in September 2010,[324] suggests four tiers of approaches, two of which could apply to the project.

Tier II declares a project's impacts to be significant if it is inconsistent with the locally adopted GHG reduction plan. This approach is discussed further below.

Tier III proposes numeric screening thresholds derived in Attachment E of its staff proposal for an interim CEQA GHG significance threshold.[325] The proposal suggests "two options that lead agencies could choose: option #1 – separate numerical thresholds for residential projects (3,500 $MTCO_2e$/yr.), commercial projects (1,400 $MTCO_2e$/yr.), and mixed use projects (3,000 $MTCO_2e$/yr.) and; option #2 – a single numerical threshold for all nonindustrial projects of 3,000 $MTCO_2e$/yr.….The current staff proposal is to recommend the use of option #2."

The general premise of a screening threshold is to capture a high percentage (as high as 90 percent) of the GHG emissions from new land-use development projects under CEQA review, such that mitigation may be implemented under a unified framework designed to meet the fraction of the greenhouse gas reductions intended to be captured by land-use development projects. Such screening figures apply to project operation, not the short-lived emissions of

[323] Source: South Coast Air Quality Management District: Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2.
[324] Source: South Coast Air Quality Management District: Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf.
[325] Source: South Coast Air Quality Management District: Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf.

project construction, which may be amortized to a small contribution in the lifetime emissions of a project.

A figure of 3,000 $MTCO_2e$/yr. scales the adopted threshold for industrial uses of 10,000 $MTCO_2e$/yr. by the fraction of greenhouse gas emissions attributable to residential uses (9%) compared to industrial uses (30%) in the 2002-2004 statewide inventory (0.09/0.3=30%). Implicit in this assumption is an approximate correspondence in the statistical distribution of project sizes between industrial and residential projects. The threshold would be expected to correspond to a development of 70-80 single-family residential units. The assumption is therefore that of the residential units yet to be built in the County, more than 90% would by analyzed in projects comprising more than 70-80 single-family residential units.

In the absence of an adopted threshold for use in the SCAQMD, other thresholds may be examined to gauge the similarity of approach and outcome. Pursuant to State CEQA Guidelines Section 15064.7(c), "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies…provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

A threshold of 900 $MTCO_2e$/yr. is recommended by the California Air Pollution Control Officers Association ("CAPCOA") for statewide applicability (including data from Los Angeles), corresponding to "50 residential units" or "office projects of approximately 35,000 square feet, retail projects of approximately 11,000 square feet, or supermarket space of approximately 6,300 square feet"[326] across the sample set. "While this would exclude perhaps 10 percent of new residential development, the capture of 90 percent of new residential development would establish a strong basis for demonstrating that cumulative reductions are being achieved across the state." This approach is therefore consistent with that taken in the SCAQMD, albeit deriving a different statistical distribution of project sizes statewide, as compared to the SCAQMD alone.

A threshold of 1,100$MTCO_2eq$/yr. currently adopted and in use by the BAAQMD for land use projects[327] was cited approvingly in *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 230 ("a lead agency may rely on existing numerical thresholds of significance for greenhouse gas emissions…(Guidelines, § 15064.4, subd. (b)(2); *see, e.g.*, Bay Area Air Quality Management Dist. (BAAQMD), California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance (May 3, 2010) pp. 8-21 [regional air quality district for the San Francisco Bay Area proposes a threshold of 1,100 MTCO2 E in annual emissions as one alternative agencies may use in determining CEQA significance for new land use projects]."). Pursuant to the BAAQMD, a threshold of 1,100 $MTCO_2eq$/yr. is consistent with statewide greenhouse gas reduction goals, as derived by an eight-step approach focusing on total emissions reductions required to meet AB 32 and SB 375. This threshold uses somewhat

[326] Source: California Air Pollution Control Officers Association: White Paper, CEQA & Climate Change: Evaluating and Addressing Greenhouse gas emissions from projects subject to the California Environmental Quality Act, page 43. Available at: http://www.capcoa.org/wp-content/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf.
[327] Source: Bay Area Air Quality Management District: CEQA Air Quality Guidelines, page 2-4. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

different assumptions than in the SCAQMD to find a correspondence with a residential development of 60 units.

The analysis of steps 1 through 3 apply statewide and derive a deficiency in meeting required GHG emissions reduction goals from other centralized approaches adopted statewide, apart from mitigation implemented in discretionary projects approved under CEQA. Step 4 translates that percentage deficiency into an absolute figure using a local inventory, assuming that land-use projects will close the entirety of the deficiency and that each region of the state will share closing that deficiency proportionally to its total emissions. Steps 5 through 6 project land use development forward in time based on population projections, and steps 7 through 8 assess what fraction of that development requires mitigation for GHG emissions to close the deficiency, assuming uniform effectiveness of mitigation of between 25 and 30 percent. Due to potential differences in the local inventory, growth rates, and size distribution of land use projects in the SCAQMD compared to the BAAQMD, a threshold derived with an identical approach would be expected to be somewhat different in the SCAQMD.

Every screening threshold approach "would exclude the smallest proposed developments from potentially burdensome requirements to quantify and mitigate GHG emissions under CEQA." [328]

While this EIR examines consistency of the proposed project with the CCAP as a primary means of determining significance of greenhouse gas emissions, these screening thresholds for residential land-use projects corresponding to 50 to 80 single-family residences – 3,000 $MTCO_2eq/yr.$ proposed in the SCAQMD, 1,100 $MTCO_2eq/yr.$ adopted in the BAAQMD and 900 $MTCO_2eq/yr.$ in the CAPCOA white paper – provide a sufficient alternative basis for determining significance. Because the CAPCOA white paper was formulated for statewide applicability, because the Los Angeles area exhibits a larger percentage of new units in larger projects that would be captured, and because it is the lowest figure of the three[329], this figure is adopted as a suitable screening threshold for this project. Using this approach, the proposed project represents an insubstantial outlier in the statistical distribution of the size of projects that would ever be considered under CEQA with custom analysis, and not cumulatively in the course of fulfilling program and prescriptive regulatory requirements, such as building efficiency standards.

- **Threshold 5.7-2**: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases
  - For purposes of analysis in this EIR, the applicable plan or regulation for the reduction of greenhouse gas emissions is the County's Community Climate Action Plan ("CCAP").

[328] Source: California Air Pollution Control Officers Association: White Paper, CEQA & Climate Change: Evaluating and Addressing Greenhouse gas emissions from projects subject to the California Environmental Quality Act, pages 43-44. Available at https://planning.lacity.gov/eir/8150Sunset/References/4.E.%20Greenhouse%20Gas%20Emissions/GHG.02_CAPCOA%20CEQA%20and%20Climate%20Change.pdf.

[329] Note: As attributed subsequently in analysis, the figure represents more than a factor of ten greater emissions than the proposed project would be expected to generate at any point in its lifecycle. To the extent these screening thresholds contain imprecise or limited data, resulting inaccuracy would not reasonably be expected to be greater than this difference.

  - For purposes of analysis in this EIR, policies for the reduction of greenhouse gas emissions are contained in the Conservation and Natural Resources Element of the 2035 County General Plan attributed in Table 5-11: County General Plan Policy Consistency Analysis and those in the Environmental Resources Element of the Altadena Community Plan attributed in Table 5-12: Altadena Community Plan Policy Consistency Analysis.

- **Threshold 5.7-3**: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation

- **Threshold 5.7-4**: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency
  - For purposes of analysis in this EIR, the applicable plan for renewable energy or energy conservation is the County's Community Climate Action Plan ("CCAP"), in the form adopted as of the date of the Notice of Preparation.

State CEQA Guidelines Appendix F

Appendix F of the State CEQA Guidelines states that the potentially significant energy implications of a project should be considered in an EIR and provides direction as to the type of information, analysis and mitigation measures that may be considered in evaluating a project. However, Appendix F does not provide thresholds relating to energy usage. Therefore, for purposes of analysis in this EIR, additional significant adverse impacts could result from a project, as informed by Appendix F of the State CEQA Guidelines, if the project would:

- **Threshold 5.7-5:** Violate existing energy standards
  - For purposes of analysis in this EIR, existing energy standards include the County Green Building Standards Code (County Code Title 31) and Title 24 of the California Code of Regulations (the California Energy Code).

- **Threshold 5.7-6:** Result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.7-7**: Encourage activities which result in the use of large amounts of fuel, water or energy.

- **Threshold 5.7-8**: Use fuel, water or energy in a wasteful manner

5.7.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to greenhouse gas emissions evaluates compliance with the policies in the County's Community Climate Action Plan. Direct and indirect greenhouse gas emissions are also attributed using CalEEMod, which includes mobile sources, water use, solid waste, area sources, natural gas, and electricity use.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-LU-2: The project shall comply with the provisions of the California Green Building Code and County Code Title 31 – the Green Building Program – which includes Green Building Standards, Low-Impact Development standards, and Drought Tolerant Landscaping requirements.

Impact Discussion

- **Threshold 5.7-1**: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- **Threshold 5.7-2**: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases
- **Threshold 5.7-4:** Conflict with adopted plans for energy conservation or renewable energy

The project would be expected to result in no adverse impacts from conflict with any plan, policy or regulation adopted with the purpose of reducing greenhouse gas emissions or conserving energy, and less than significant impacts from the emission of greenhouse gases or use of energy.

Project-specific Analysis

One single-family home would not be expected to generate greenhouse gas emissions from either stationary or mobile sources in quantities that would make a substantial contribution to regional emissions, either directly or indirectly. The contribution of the project to generation of the principal greenhouse gas emitter by global impact, CO_2, is attributed in Section 11 Appendix C. The less than 90 metric tons of estimated yearly construction emissions of CO_2 equivalent and less than 15 metric tons of estimated yearly operational emissions of CO_2 equivalent are well below the 900 $MTCO_2e$/yr screening threshold. Operational impacts of this net-zero home are conservative in that they are predominantly attributable to vehicle trips assuming average (default) emissions efficiency and trip rates, reflecting no assumptions as to continuing ownership of the project by the Applicant. Actual emissions during the period of ownership of the Applicant would be expected to be significantly lower because the Applicant currently owns one and would be expected to continue using at least one electric vehicle and to exhibit lower than average trip distances and rates due to close proximity to work and a corresponding

expectation of regularly commuting on foot. Neither would the project be expected to emit any appreciable amounts of other greenhouse gases.

The removal and subsequent mulching of the biomass of one oak tree would be expected to release a small fraction of the CO_2 of a single year of operation. The CARB Forest Protocol establishes a process to approximate the expected sequestration of carbon in trees.[330]

First, an approximate volume is computed for different species based on trunk diameter and height.[331] Equation 43 applies to coast live oak. Pursuant to that equation, the total volume above ground in cubic feet (Cubic Volume of Total Stump) of the 24" diameter and 40' tall oak tree #7 approved for removal would be expected to be approximately:

$CVTS(ft.^3) = 0.0065261029 \times DBH(in.)^{2.31958} \times HT(ft.)^{0.62528} = 104.2ft.^3$

Then, an amount of biomass is computed based on the density of $36.82lb/ft.^3$ of coast live oak.[332]

$Biomass(tons) = CVTS(ft.^3) \times density(lb./ft.^3) / 2{,}000 = 1.91 \text{ tons}$

The carbon fraction of wood is 50%.[333] Even accounting for biomass sequestered in roots, and assuming that all of the sequestered CO_2 would be emitted in the decomposition of the mulched wood and roots, the resulting amount of carbon mass would be expected to be less than 1.5 metric tons. Preliminarily, this amount of biomass is a small fraction of the estimated annual emissions associated with one single-family residence.

Because the biomass sequestered in oak woodlands and in individual oak trees over time is known to be a complicated and irregular relationship with the ecology, a "payback period" from replacement plantings is difficult to compute.[334] However, the CO_2 that is released would be expected to be eventually sequestered in greater amounts in the much larger number of replacement plantings on the project parcel.

Setting aside numerical thresholds that would indicate the project would clearly be expected to have less than significant greenhouse gas emissions, compliance of the project with the CCAP actions is attributed in Table 5-10: Community Climate Action Plan Compliance Analysis.

[330] Source: California Air Resources Board: U.S. Forest Projects – June 25, 2015. Available at: https://www.arb.ca.gov/cc/capandtrade/protocols/usforest/usforestprojects_2015.htm.
[331] Source: California Air Resources Board: FIA Volume Equation documentation updated on 9-19-2014. Available at: https://www.arb.ca.gov/cc/capandtrade/protocols/usforest/2015/volume.equations.ca.or.wa.pdf.
[332] Source: California Air Resources Board: Regional Biomass Equations Used by FIA to Estimate Bole, Bark and Branches. Available at: https://www.arb.ca.gov/cc/capandtrade/protocols/usforest/2015/biomass.equations.ca.or.wa.pdf.
[333] Source: United States Department of Agriculture, Forest Service: Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States. Available at: https://www.arb.ca.gov/cc/capandtrade/protocols/usforest/2015/smith.2006.pdf.
[334] Source: University of California Division of Agriculture and Natural Resources: Carbon Sequestration in Oak Woodlands. Available at: http://ucanr.edu/sites/forestry/files/211097.pdf.

Table 5-10: Community Climate Action Plan Compliance Analysis

CCAP Action	Summary	Project Implementation
BE-1: Green Building Development	Promote and incentivize at least Tier 1 voluntary standards within CALGREEN for all new residential and nonresidential buildings. Develop a heat island reduction plan and facilitate green building development by removing regulatory and procedural barriers.	The home would meet Tier 2 voluntary standards under CALGREEN, the highest level of efficiency, corresponding to at least a 30% improvement compared to the base requirements of CALGREEN. The building scientific basis for this over-performance is the use of wall assemblies with actual or effective R-25+ insulation values, an R-50+ radiant roof assembly, mass floors and walls in portions of the home, a tight building envelope inherent to the assemblies chosen, thermally broken windows and doors, a photovoltaic system, high-efficiency ductless hydronic HVAC and other energy-saving features. The building assemblies are instances of the "Perfect Wall"[335] and roof design, as described by the Building Science Corporation. Given these project design attributes, which significantly exceed the prescriptive requirements in Title 24 for single-family residences,[336] such over-performance is reasonably expected.
BE-2: Energy Efficiency Programs	Energy efficiency retrofits for at least 25% of existing commercial buildings over 50,000 square feet and at least 5% of existing single family residential buildings.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.

[335] Source: Building Science Corporation, BSI-001: The Perfect Wall. Available at: https://www.buildingscience.com/documents/insights/bsi-001-the-perfect-wall.
[336] Source: California Energy Commission: 2016 Building Energy Efficiency Standards, Subchapters 7 and 8. Available at: https://www.energy.ca.gov/sites/default/files/2021-06/CEC-400-2015-037-CMF.pdf.

CCAP Action	Summary	Project Implementation
BE-3: Solar Installations	Promote and incentivize solar installations for new and existing homes, commercial buildings, carports and parking areas, water heaters, and warehouses.	The home would incorporate roof-mounted solar designed to render the project net-zero energy. Because the home would not make use of any natural gas, this would account for nearly all operational GHG emissions excepting those related to transportation.
BE-4: Alternative Renewable Energy Programs	Implement pilot projects for currently feasible wind, geothermal, and other forms of alternative renewable energy.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
BE-5: Wastewater Treatment Plant Biogas	Encourage renewable biogas projects.	As one new single-family residence connecting to the public sewer system, this action does not apply to the project.
BE-6: Energy Efficiency Retrofits of Wastewater Equipment	Encourage the upgrade and replacement of wastewater treatment and pumping equipment.	As one new single-family residence connecting to the public sewer system, this action does not apply to the project.
BE-7: Landfill Biogas	Partner with the owners and operators of landfills with at least 250,000 tons of waste-in-place to identify incentives to capture and clean landfill gas to beneficially use the biogas to generate electricity, produce biofuels, or otherwise offset natural gas or other fossil fuels.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-1: Bicycle Programs and Supporting Facilities	Construct and improve bicycle infrastructure to increase biking and bicyclist access to transit and transit stations/hubs. Increase bicycle parking and “end-of-trip” facilities.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-2: Pedestrian Network	Construct and improve pedestrian infrastructure to increase walking and pedestrian access to transit and transit stations/hubs. Program the construction of pedestrian projects toward the goal of completing 15,000 linear feet of new pedestrian improvements / amenities per year.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.

CCAP Action	Summary	Project Implementation
LUT-3: Transit Expansion	Collaborate with the Los Angeles County Metropolitan Transportation Authority ("Metro") on a transit program that prioritizes transit by creating bus priority lanes, improving transit facilities, reducing transit-passenger time, and providing bicycle parking near transit stations. Construct and improve bicycle, pedestrian and transit infrastructure to increase bicyclist and pedestrian access to transit and transit stations/hubs.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-4: Travel Demand Management	Encourage ride- and bike-sharing programs and employer sponsored vanpools and shuttles. Encourage market-based bike sharing programs that support bicycle use around and between transit stations/hubs. Implement marketing strategies to publicize these programs and reduce commute trips.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-5: Car-sharing Program	Implement a car-sharing program to allow people to have on demand access to a shared fleet of vehicles.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-6: Land Use Design and Density	Promote sustainability in land use design, including diversity of urban and suburban developments.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-7: Transportation Signal Synchronization Program	Improve the network of traffic signals on the major streets throughout LA County.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-8: Electric Vehicle Infrastructure	Install 500 electric vehicle ("EV") charging facilities at County-owned public venues (e.g., hospitals, beaches, stand-alone parking facilities, cultural institutions, and other facilities) and ensure that at least one-third of these charging stations will be available for visitor use.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project. However, the project would incorporate a separately metered EV charging station.

CCAP Action	Summary	Project Implementation
LUT-9: Idling Reduction Goal	Encourage idling limits of 3 minutes for heavy-duty construction equipment, as feasible within manufacturer's specifications.	The project would be expected to minimize the idling of construction equipment, pursuant to RCM-AQ-2 and SC-BIO-1.
LUT-10: Efficient Goods Movement	Support regional efforts to maximize the efficiency of the goods movement system throughout the unincorporated areas.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LUT-11: Sustainable Pavements Program	Reduce energy consumption and waste generation associated with pavement maintenance and rehabilitation.	The project does not propose any new pavement.
LUT-12: Electrify Construction and Landscaping Equipment	Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment	The project would be expected to use electric hand tools and other electric construction equipment as feasible, and to use electric landscaping equipment such as a string trimmer.
WAW-1: Per Capita Water Use Reduction Goal	Meet the State established per capita water use reduction goal, as identified by SB X7-7 for 2020.	The compliance processes established under SB X7-7 exist at a regional or water agency level and therefore do not apply to one single-family residence. However, the project would use native landscaping with low water requirements and low-flow fixtures. As such, it would be expected to be consistent with water reduction goals.
WAW-2: Recycled Water Use, Water Supply Improvement Programs, and Storm Water Runoff	Promote the use of wastewater and gray water to be used for agricultural, industrial, and irrigation purposes. Manage stormwater, reduce potential treatment, and protect local groundwater supplies.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
SW-1: Waste Diversion Goal	For the County's unincorporated areas, adopt a waste diversion goal to comply with all state mandates associated with diverting from landfill disposal at least 75% of the waste by 2020.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.

CCAP Action	Summary	Project Implementation
LC-1: Develop Urban Forests	Support and expand urban forest programs within the unincorporated areas.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LC-2: Create New Vegetated Open Space	Restore and re-vegetate previously disturbed land and/or unused urban and suburban areas.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LC-3: Promote the Sale of Locally Grown Foods and/or Products	Establish local farmers markets and support locally grown food.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.
LC-4: Protect Conservation Areas	Encourage the protection of existing land conservation areas.	As one new single-family residence on a residentially zoned parcel, this action does not apply to the project.

Because the proposed project is consistent with or exceeds the goals of all applicable CCAP actions[337], impacts from the emission of greenhouse gases and associated usage of energy would be expected to be less than significant.

- **Threshold 5.7-3:** Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation
- **Threshold 5.7-5:** Violate existing energy standards
- **Threshold 5.7-6:** Result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- **Threshold 5.7-7**: Encourage activities which result in the use of large amounts of fuel, water or energy.
- **Threshold 5.7-8**: Use fuel, water or energy in a wasteful manner

The project would be expected to result in no adverse impacts under these thresholds from violation of energy efficiency standards, wasteful use of resources with corresponding energy and greenhouse gas emissions footprints, or substantial increases in resource demand with indirect effects, and less than significant impacts from the use of energy or resources.

Project-specific Analysis

[337] Note: while the County's 2045 update to the CCAP was not adopted in final form as of the date of the NOP and does not apply to the proposed project, the proposed project remains consistent with all actions applicable to one single-family residence that were proposed as of the date of the NOP.

As the project would use no natural gas during construction or operation, electricity and combustion fuel are the only forms of energy the project would be expected to consume.

The energy usage of the project during the period of occupancy before consideration of mitigation and self-generation is calculated by CalEEMod in Section 11 Appendix C as less than 8,500kWh/yr. Pursuant to the methodology established in the CalEEMod User Guide, project attributes were encoded where known and accessible, and approximated according to CalEEMod program defaults for single-family residential projects where not known or accessible. However, in consideration of mitigation in the form of project design features including self-generation, the project would be expected to supply all of its net non-transportation energy requirements over time with generation from the 7.5kW solar array, though it would rely on grid power during the periods when its own solar photovoltaic capacity could not meet project demand (such as at night), and supply surplus power back into the grid when capacity exceeded project demand. One of the expected two vehicles that would be used by the occupants of the project is now and would according to the Applicant be expected to remain an electric vehicle, the energy needs of which would also be fully accommodated over time by on-site generation. Using default CalEEMod assumptions for a vehicle consuming 0.05 gallons per mile would equate to approximately 1,500 gallons of gasoline used per year. This estimate, while suitable to an arbitrary or representative occupant, would be conservative for the initial owners of the project, as CalEEMod assumed 32,000 VMT per year with default assumptions, though the two vehicles used in the Applicant's family collectively travel approximately 10,000 miles per year, including less than 5,000 miles per year in the gasoline engine vehicle.

The electrical energy usage of the project during construction would be lesser still, given the expected use as necessary only of small electrical hand tools and equipment. Construction electrical needs would be supplied through a temporary electricity drop. Diesel-powered construction delivery vehicles would be expected to constitute a small fraction of the total VMT during construction but to consume fuel at a higher rate than passenger vehicles including light trucks. While diesel emissions from deliveries and other assumed equipment usage using default CalEEMod assumptions contribute to higher emissions during construction, these emissions would be necessary and would not constitute inefficient use of resources. Assuming that as many as 40 equivalent larger truck round trips would be made from a distance as great as 50 miles in the course of ferrying building materials for the proposed structure, the resulting 4,000 VMT at a rate of 0.2 gallons per mile would correspond to 800 gallons of diesel consumed. Based on trip generation rates, the remaining passenger vehicle trips during construction would generate a lower number of VMT than during the period of occupancy and therefore consume less gasoline.

In any event, project resource usage would not be expected to deviate from those typical of one single-family residence. The Secretary of the Natural Resources Agency has stated that such projects " '*do not* have a significant effect on the environment.' (§ 21084, subd. (a), italics added; [Citations.])." *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1101. The project would be served by existing electrical power distribution equipment from Southern California Edison that was sized in anticipation of the zoned usage of the project, and no additional facilities or corresponding impacts from the upgrade of electrical power infrastructure would be expected.

Pursuant to Appendix F of the State CEQA Guidelines, the goal of conserving energy implies decreasing overall per capita energy consumption, decreasing reliance on fossil fuels such as coal, natural gas and oil, and increasing reliance on renewable energy sources. The County's Green Building Program serves to meet these goals. The Green Building Program includes Green Building Standards, Low Impact Development standards, and Drought Tolerant Landscaping requirements. California has also adopted energy efficiency thresholds and mandatory measures for green and efficient building practices in Title 24 of the California Building Code. As all residential development in the County must comply, the project would therefore not conflict with these requirements, which mitigate impacts related to hazardous construction materials, dust, glare, noise and energy, with the intent of conserving water; energy, and other natural resources as well as diverting waste from landfills, minimizing impacts to existing infrastructure, and promoting a healthier environment. as attributed in Table 5-10: Community Climate Action Plan Compliance Analysis, the project would be expected to exceed the performance standards in Title 24 of the 2016 California Building Code by more than 30% and to reduce transportation impacts through the use of one or more electric vehicles. Consistent with these requirements, the project must use low-flow fixtures, and its native plantings would be expected to require minimal irrigation.

In meeting or exceeding the provisions of all applicable plans and energy efficiency standards, and having quantified its energy usage, the project would not be expected to involve the inefficient use of energy resources. *See Tracy First v. City of Tracy* (2009) 177 Cal.App.4th 912, 933-934 (along with discussion and quantification of energy usage, EIR's attribution of compliance with Title 24 of the California Building Code was substantial evidence to support a finding that a 95,000 square foot supermarket would not have significant impacts from inefficient usage of energy).

As it concerns inefficient lifecycle energy usage embodied in the waste of materials, the project would not be expected to needlessly or inefficiently generate waste. The poured concrete foundation using a volumetric concrete mixer truck would be expected to result in little to no material waste from partially unused loads. The project framing would be comprised principally of laminated timber inherently minimizing waste from scraps. Laminated timber in a portion of the home would permanently dispose of the dimensional lumber used earlier in the project as concrete formwork. The project has been designed for a service life that exceeds typical residential construction, reducing lifecycle energy costs from the replacement of materials. What construction waste will be generated must be recycled to the extent feasible pursuant to RCM-USS-1.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The incremental increase in potential greenhouse gases and energy associated with the single-family home would not be considerable or substantial in the context of the contribution of greenhouse gas emissions and energy usage throughout the service area. The project must

comply with all provisions of the California Building Code and County Green Building Program, which promote efficient use of energy.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to greenhouse gas emissions would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[t]he CCAP would ensure that GHG emissions from buildout of the proposed project would be minimized"[338] in accordance with AB 32, but also considered compliance with the more aggressive Executive Order S-03-05, with a target of 80% emissions reductions by 2050. No statewide framework for meeting this goal had been identified at the time, and "[s]ince no additional statewide measures are currently available cumulative GHG emissions impacts would remain significant and unavoidable." However, the proposed project, as one net-zero single-family residence, transcends the finding of unavoidable significance from the lack of unified statewide framework for meeting emissions reduction goals of the California executive.

Past projects in California and throughout the world have contributed to global greenhouse gas emissions and concentrations that have prompted the State of California to declare a degraded condition and legislate the need for reductions in greenhouse gas levels and emissions rates. The project therefore had the potential to create an incremental effect that was cumulatively considerable. However, the proposed project meets or exceeds the performance criteria of all applicable provisions of the County Community Climate Action Plan, which has the purpose of ensuring that development in the County meets the greenhouse gas emissions and energy usage reduction goals of the California legislature. The project would be expected to generate more than its required electricity usage during existing periods of peak demand of the electrical utility (typically the afternoons of the hottest days of the year, when the project's southwest-facing solar array would be generating at or near peak capacity). To the extent that excess power generated during this time is fed back into the grid, the project would have a beneficial cumulative impact during these periods of peak demand.

[338] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.7-41. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Other closely related present and future projects would be expected to comply with all applicable energy efficiency standards and would not emit a cumulatively considerable amount of greenhouse gases or consume substantial amounts of energy. The existing electrical infrastructure was also sized to accommodate buildout according to zoning and land use designation.

5.8 Hazards and Hazardous Materials

5.8.1 Introduction

This section of the EIR evaluates the project's potential impacts relating to hazards and hazardous materials. This evaluation includes an assessment of whether hazards or hazardous materials are currently present on the site and the potential of the project to impact any such resources during construction or operation. This also includes an assessment of whether project activities would credibly introduce hazards or hazardous materials that may significantly affect people or property.

5.8.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act. These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. DTSC is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency ("CUPA") program, the California Environmental Protection Agency ("CalEPA") has in turn delegated enforcement authority to the County of Los Angeles for state law regulating hazardous waste producers or generators.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, on December 11, 1980. It established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act of 1986 amended Superfund on October 17, 1986, stressing the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; requiring Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; providing new enforcement authorities and settlement tools; increasing state involvement in every phase of the Superfund program; increasing the focus on human health problems posed by hazardous waste sites; encouraging greater citizen participation in making decisions on how sites should be cleaned up; and increasing the size of the trust fund to $8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act, also known as the Superfund Amendments and Reauthorization Act Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. Sections 301 through 312 are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the Section 313 program. In California, the Emergency Planning Community Right-to-Know Act is implemented through the California Accidental Release Prevention program.

Hazardous Materials Transportation Act

DOT regulates hazardous materials transportation under Title 49 CFR. State agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 CFR reflects laws passed by Congress as of January 2, 2006.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that: 1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; 2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and 3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

State Regulation

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 and 19 California Code of Regulations Section 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

The Los Angeles County Fire Department ("LACFD") is the Certified Unified Program Agency ("CUPA") for the County and is responsible for enforcing Chapter 6.95 of the Health and Safety Code. As the CUPA, LACFD is required to regulate hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, and risk-management plans. The Hazardous Materials Business Plan is required to contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of on development sites. The plan also contains an emergency-response plan, which describes the procedures for mitigating a hazardous release, procedures, and equipment for minimizing the potential damage of a hazardous materials release, and provisions for immediate notification of the HMD, the Office of Emergency Services, and other emergency-response personnel, such as the local Fire Agency having jurisdiction. Implementation of the emergency response plan facilitates rapid response in the event of an accidental spill or release, thereby reducing potential adverse impacts. In addition, the LACFD is required to conduct ongoing routine inspections to ensure compliance with existing laws and regulations; to identify safety hazards that could cause or contribute to an accidental spill or release; and to suggest preventative measures to minimize the risk of a spill or release of hazardous substances.

California Building Code

The State of California provided a minimum standard for building design through the 2010 California Building Code ("CBC"), which is located in Part 2 of Title 24 of the California Code of Regulations ("CCR"). The 2010 CBC is based on the 1997 Uniform Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code ("CFC"), included as Part 9 of that title. Updated every three years, the CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The LACFD provides fire protection services for the unincorporated areas of Los Angeles County and as such, implements and enforces the CFC in the Project Area.

California Government Code Section 65952.5

California Government Code Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and update specified lists of hazardous material release sites. California Public Resources Code Section 21092.6 requires the Lead Agency to determine whether the project and any alternatives are identified on these lists.

California Government Code Section 65850.2

Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or authorized agent has met, or is meeting, the applicable requirements of the Health and Safety Code, Division 20, Chapter 6.95, Article 2, Sections 25500 through 25520.

Local Regulation

Wildland Fire Hazard Prevention

County programs for wildland fire prevention include the adoption of the State Fire Code for regulations and standards to be applied toward new development in "hazardous fire areas." Fire prevention items addressed in the County Fire Code include provision of fire apparatus access roads, adequate road widths, all-weather access requirement, fire flow requirement, fire hydrant spacing, and clearance of brush around structures located in hillside areas that are considered primary wildland fire risk areas.

For areas located within the Very High Fire Hazard Severity Zone ("VHFHSZ"), County Fire Code Sections 325.2.1.2, 328.10, 1117.2.1, and 4908.1 require completion and approval of a land development plan and fuel modification plan. The Fuel Modification Unit provides guidelines the VHFHSZ in order to create a defensible space for effective fire protection in newly constructed and/or remodeled homes. Fuel modification zones are strategically placed strips of land where combustible native or ornamental vegetation has been modified or replaced with drought-tolerant, low-fuel-volume plants, creating a buffer to areas of natural vegetation surrounding the perimeter of a single-family dwelling. A fuel modification plan identifies specific zones within a property which are subject to fuel modification. Plans vary in complexity, and fuel modification distances are estimated based on the fire history, the amount and type of vegetation, the arrangement of the fuels, topography, local weather patterns, and construction, design and placement of structures. The plan must also include an irrigation plan, a landscape plan, zone delineation for setbacks, irrigation, and thinning, and the identification of responsible parties for the plan's installation and maintenance.

Local All-Hazards Mitigation Plan

The County, in conjunction with its many emergency services partners, has prepared a Local All-Hazards Mitigation Plan that sets strategies for coping with the natural and man-made hazards faced by residents. The plan is a compilation of information from County departments correlated with known and projected hazards that face Southern California. The plan complies with, and has been approved by, FEMA and the Governor's Office of Emergency Services ("OES"). The plan has been formally adopted by the Los Angeles County Board of Supervisors for use in the development of specific hazard mitigation proposals that have a high cost-benefit ratio.

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to hazards and hazardous materials, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.8.3 Existing Conditions

Emergency Response

The Los Angeles County Office of Emergency Management ("OEM") is the designated Lead Agency for emergency response and coordinates the development, maintenance, and implementation of the Los Angeles County Operational Area Emergency Response Plan.[339] This Plan serves as a guide for the County's response to emergencies/disasters in the County. The project parcel is located in Disaster Management Area C. The nearest designated disaster route to the project parcel is Altadena Drive, 0.35 miles to the south.[340]

Hazardous Materials and Hazardous Waste

Hazardous materials are generally defined as any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or future hazard to human health and safety or to the environment, if released into the workplace or the environment (Health and Safety Code Section 25501(o)). The project parcel is currently vacant, and there is no use or disposal of hazardous materials on or from it. However, a sewer siphon serving the Meadows neighborhood to the north spans a portion of the project parcel and transports wastewater. According to the County Department of Public Works, the sewer siphon is serviced every 60 days, following an incident reported in 2009[341] in which 150 gallons of sewage overflowed at manhole #16 of sewer index map 1906.[342]

Within the project vicinity, much of the environment has been developed, resulting in areas of impervious surfaces that include rooftops, roadways, and other hardscapes. Stormwater and urban runoff from these impervious surfaces tends to pick up trash and other pollutants including:

[339] Source: County Office of Emergency Management: Los Angeles County Operational Area Emergency Response Plan. Available at: https://ceo.lacounty.gov/wp-content/uploads/2023/11/County-of-Los-Angeles-OAEOP-2023-Final-for-Website.pdf.
[340] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.6. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip
[341] Source: California Integrated Water Quality System. Available at: https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportId=sso_detail_report&reportAction=generate&sso_spill_id=742859.
[342] Source: County Department of Public Works: LA County Sanitary Sewer Network – Consolidated Sewer Maintenance District Map Interface. Available at: http://dpw.lacounty.gov/smd/sewernetwork/; https://pw.lacounty.gov/smd/smd/maps/1906m.pdf.

- sediment
- fuels, oil, grease, and chemicals from motor vehicles and mechanized equipment
- fertilizers, pesticides and herbicides from landscaping and gardens
- viruses, bacteria, and nutrients from pet waste and failing septic systems
- road salts
- heavy metals from roof shingles, motor vehicles, and other sources

Hazards and hazardous materials at the project parcel were evaluated based on a review of the Cortese List, the California Department of Toxic Substances Control ("DTSC") Haznet, federal Environmental Protection Agency ("EPA") databases, the Safety Element of the County General Plan[343], and the Altadena Community Plan.[344]

EnviroStor Database

The DTSC EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes federal Superfund sites on the National Priorities List, state response sites, voluntary cleanup sites, school investigation and cleanup sites, corrective action sites, tiered California permit sites, and hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code. It also includes sites that are being investigated for suspected but unconfirmed contamination.

The EnviroStor database shows only two sites within a one-mile radius, both associated with the Jet Propulsion Laboratory. (*See* Figure 5-17: EnviroStor Hazardous Materials Sites Within One Mile of Project).

[343] Source: County Department of Regional Planning: 2035 County General Plan, Chapter 12. Available at: https://planning.lacounty.gov/wp-content/uploads/2025/04/12.1_gp_final-general-plan-ch12_updated_2025.pdf.
[344] Source: County Department of Regional Planning: Altadena Community Plan.

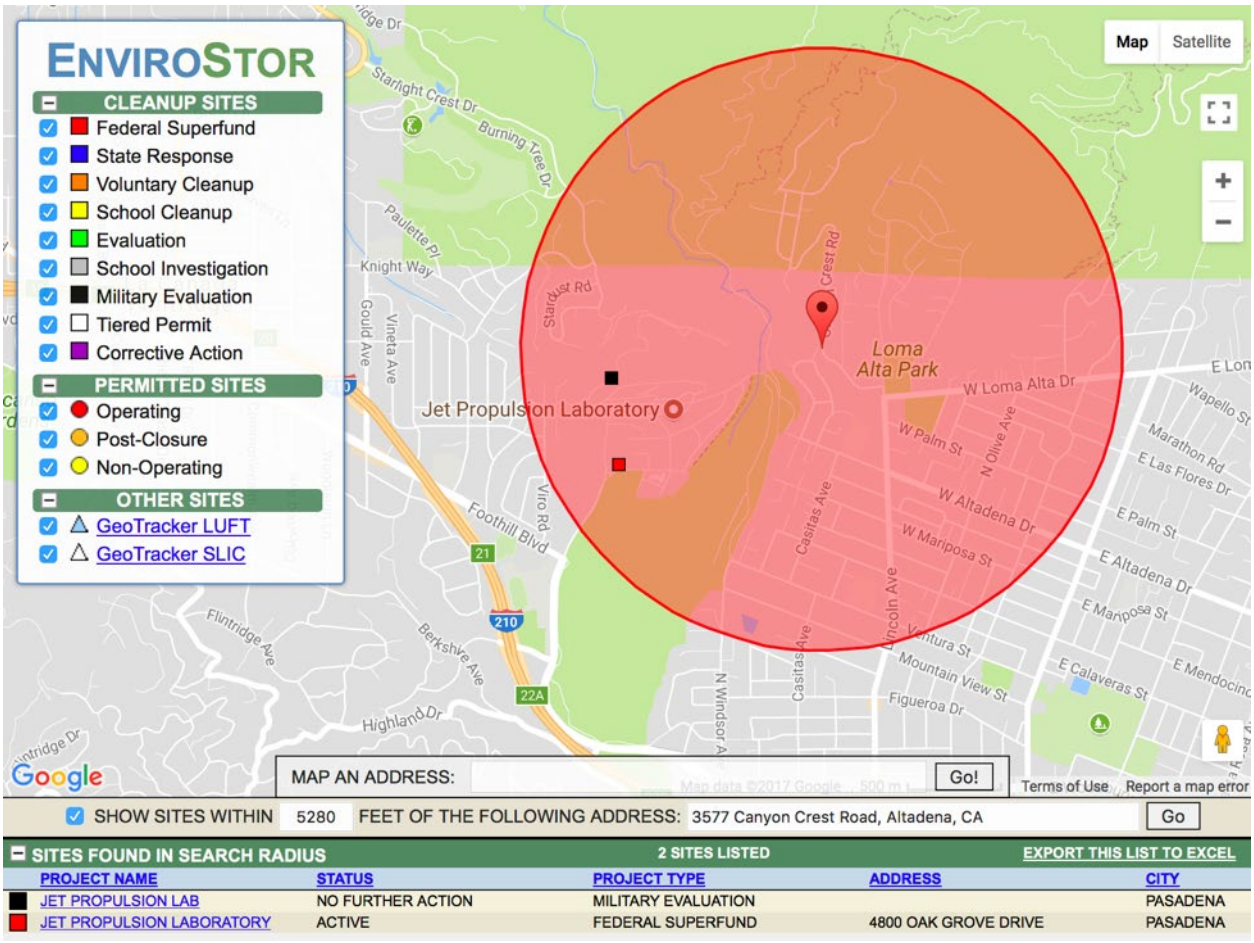


Figure 5-17: EnviroStor Hazardous Materials Sites Within One Mile of Project[345]

Leaking Underground Storage Sites

The State Water Resources Control Board ("SWRCB") GeoTracker database is used by the SWRCB, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. It includes regulatory data for the following types of sites:[346]

- Leaking Underground Storage Tanks ("LUST") cleanup sites;
- Cleanup Program Sites also known as Site Cleanups and formerly known as Spills, Leaks, Investigations, and Cleanups sites);
- Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites);
- Land Disposal sites (landfills);

[345] Source: Department of Toxic Substances Control. Available at: http://www.envirostor.dtsc.ca.gov/public.
[346] Source: State Water Resources Control Board: About Geotracker. Available at: http://www.swrcb.ca.gov/ust/electronic_submittal/about.shtml.

- Permitted Underground Storage Tank facilities[347];
- Waste Discharge Requirement ("WDR") sites;
- Agricultural Waivers Program (Irrigated Lands Regulatory Program) sites.

The GeoTracker Database showed eight closed sites and four active sites within a one-mile radius of the project parcel. (*See* Figure 5-18: GeoTracker Hazardous Materials Sites Within One Mile of Project). The Millard Canyon entry (Global ID: T10000009319) was a "land disposal site," cleanup of which was undertaken on APN: 5863006900, a government-owned property, and completed as of 9/1/2016.[348]

[347] Note: Permitted UST information is now being maintained by the California Environmental Reporting System ("CERS") http://cers.calepa.ca.gov/ and GeoTracker's Permitted UST data is no longer up-to-date.
[348] Source: State Water Resources Control Board. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000009319.

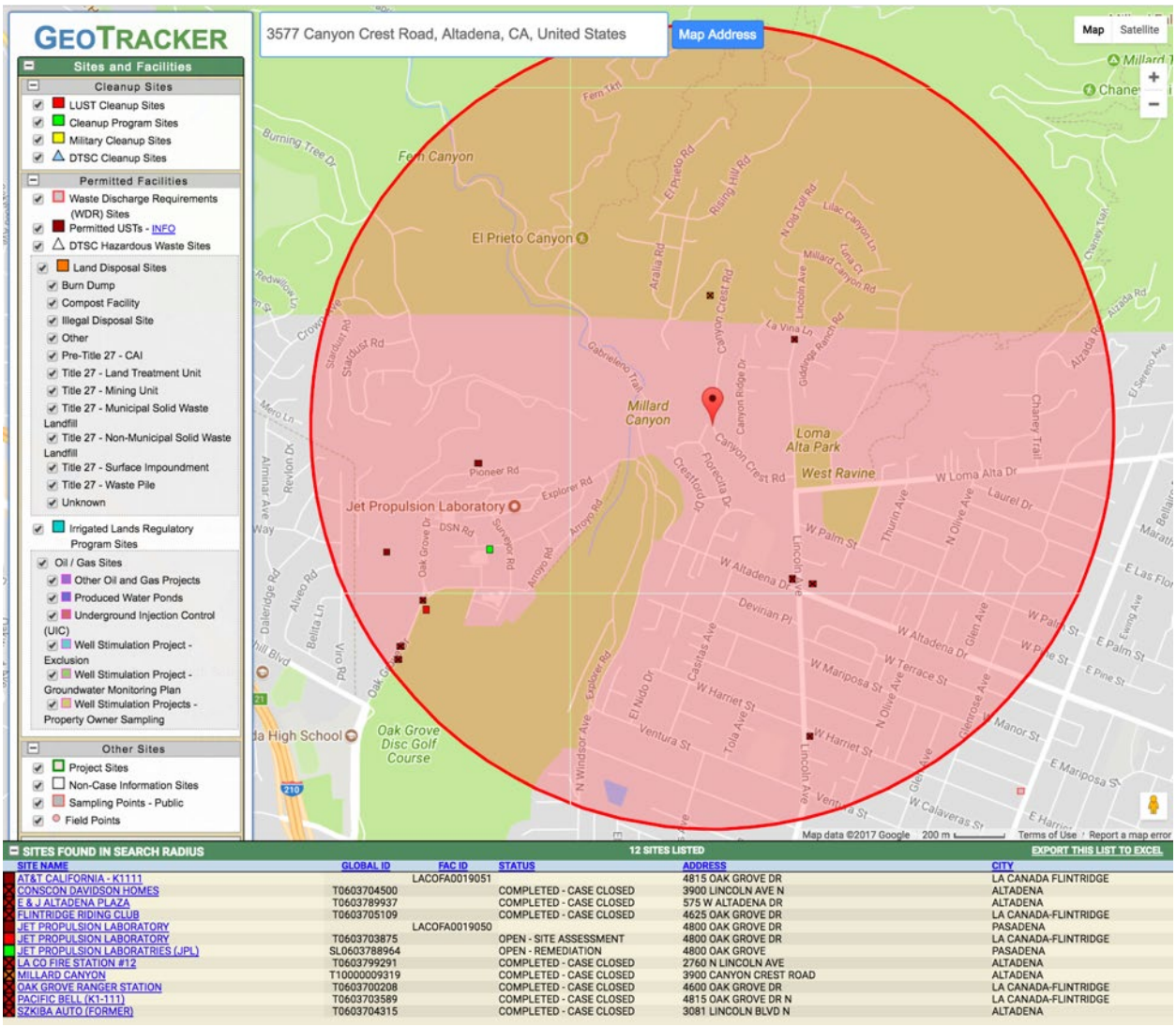


Figure 5-18: GeoTracker Hazardous Materials Sites Within One Mile of Project[349]

Solid Waste Disposal Sites

Only one solid waste disposal site with waste constituents above hazardous waste levels outside the waste management unit is located in the County, in Monterey Park, more than 10 miles south of the project parcel.[350]

SWRCB Cease and Desist Orders

[349] Source: State Water Resources Control Board. Available at: https://geotracker.waterboards.ca.gov.
[350] Source: California Environmental Protection Agency: Sites identified with waste constituents above hazardous waste levels outside the waste management list. Available at: https://calepa.ca.gov/sitecleanup/corteselist/.

Only 18 SWRCB cease and desist orders are presently in effect in the County.[351] The nearest is the former Excello Plating Company at 4057 Goodwin Avenue in Los Angeles, more than 10 miles southwest of the project parcel.

Hazardous Waste Facilities Subject to Corrective Action

Only two facilities are presently subject to corrective action in the County.[352] The nearest is The Marquardt Company at 16555 Saticoy Street in Van Nuys, more than 15 miles to the west of the project parcel.

DTSC HazNet

A review of the DTSC Hazardous Waste Tracking System manifests returned no transport to or from the project parcel or any address in the immediate vicinity.[353] The nearest is the Jet Propulsion Laboratory, less than a mile to the southwest of the project parcel.

EPA Comprehensive Environmental Response, Compensation and Liability Information System ("CERCLIS")

CERCLIS was decommissioned in 2014, following the deployment of the Superfund Enterprise Management System.[354] The County of Los Angeles contains 680 archived CERCLIS sites. The nearest site is Bow Tie Cleaning & Laundry at 458 Foothill Boulevard in the city of La Canada, more than 1.5 miles west of the project parcel.

EPA Resource Conservation and Recovery Act Information System ("RCRIS")

The Resource Conservation and Recovery Act Information System ("RCRIS") is a national management program and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act ("RCRA"), as amended by the Hazardous and Solid Waste Amendments of 1984.[355]

[351] Source: California Environmental Protection Agency. Available at: https://calepa.ca.gov/wp-content/uploads/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx.
[352] Source: California Environmental Protection Agency: Cortese List: Section 65962.5(a). Available at: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.
[353] Source: Department of Toxic Substances Control: Hazardous Waste and Substances Site List. Available at: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29.
[354] Source: United States Environmental Protection Agency: Superfund Data and Reports. Available at: https://www.epa.gov/superfund/superfund-data-and-reports#cerclis.
[355] Source: United States Environmental Protection Agency: RCRAInfo Overview. Available at: https://www.epa.gov/enviro/rcrainfo-overview.

The nearest site included in the RCRIS database is Audubon Elementary School (now Odyssey Charter School), approximately 0.3 miles to the southeast of the project parcel.

5.8.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.8-1**: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

- **Threshold 5.8-2**: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

- **Threshold 5.8-3**: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

- **Threshold 5.8-4**: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
    - For purposes of analysis in this EIR, the list of hazardous material sites complied pursuant to Government Code Section 65962.5 is the Cortese List.

The Cortese List is a meta-list consolidating many of the databases used by federal, state and local agencies and is intended for use in CEQA compliance pursuant to CEQA Section 21092.6.[356] It includes the following:

- List of Hazardous Waste and Substances sites from DTSC EnviroStor database
    - This list includes Superfund sites pursuant to the EPA NPL.
    - This list includes hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
- List of Leaking Underground Storage Tank Sites by County and Fiscal Year from the State Water Resources Control Board ("SWRCB") GeoTracker database
    - This list includes LUST pursuant to the SWRCB LUSTIS, as described below.
- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB[357]

[356] Source: California Environmental Protection Agency: Cortese List Data Resources. Available at: https://calepa.ca.gov/sitecleanup/corteselist/.

[357] This list contains many Cease and Desist Orders and Cleanup and Abatement Orders that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, for example, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water

- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the California Hazardous Waste and Hazardous Substances Law Code[358]

The following federal and state lists are either constituents of or complements to the Cortese List.

- USEPA National Priorities List ("NPL"): Lists all sites under the US EPA's Superfund program, which was established to fund cleanup of contaminated sites that pose risk to human health and the environment.
- USEPA Comprehensive Environmental Response, Compensation and Liability Information System ("CERCLIS") and Archived Sites: lists 15,000 sites nationally identified as hazardous sites. This would also involve a review for archived sites that have been removed from CERCLIS due to No Further Remedial Action Planned status.
- USEPA Resource Conservation and Recovery Information System ("RCRIS"): national inventory system about hazardous waste handlers. Generators, transporters, handlers, and disposers of hazardous waste are required to provide information for this database.
- California Department of Toxic Substances Control ("DTSC") Cortese List: Hazardous Waste and Substances Sites List maintained as a planning document for use by state and local agencies to comply with CEQA requirements for providing information about the location of hazardous materials release sites. This list includes the Site Mitigation and Brownfields Reuse Program Database (CalSites).
- California DTSC HazNet: database to track hazardous waste shipments.
- California State Water Resources Control Board ("SWRCB") Leaking Underground Storage Tank ("LUST") Information System ("LUSTIS"): inventory of USTs and leaking USTs, which tracks unauthorized releases.

- **Threshold 5.8-5**: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area

- **Threshold 5.8-6**: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
  - For purposes of analysis in this EIR, the adopted emergency response plan in the County is the Los Angeles County Operational Area Emergency Response Plan.[359]

- **Threshold 5.8-7**: Directly or indirectly cause a significant risk of loss, injury or death involving wildland fires

Boards' database does not distinguish between these types of orders. See more at: https://calepa.ca.gov/sitecleanup/corteselist//default.htm#sthash.oSjMvSw7.dpuf.

[358] Source: California Environmental Protection Agency: Cortese List: Section 65962.5(a). Available at: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.

[359] Source: County Office of Emergency Management: Los Angeles County Operational Area Emergency Response Plan. Available at: https://ceo.lacounty.gov/wp-content/uploads/2023/11/County-of-Los-Angeles-OAEOP-2023-Final-for-Website.pdf.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.8-8**: Create a potential public health or safety hazard; or involve the use, production or disposal of materials which pose a hazard to people or animals or plant populations in the area affected

- **Threshold 5.8-9**: Interfere with emergency response plans or emergency evacuation plans
  - For purposes of analysis in this EIR, the adopted emergency response plan in the County is the Los Angeles County Operational Area Emergency Response Plan.[360]

5.8.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to hazards and hazardous materials first identifies whether any class of known hazard or hazardous material would be expected to interact with and be substantially exacerbated by the project. This includes catalogues of the federal, state and local lists identifying such hazards. The analysis also considers the likelihood of the project to introduce hazards, including hazardous materials, fire, accidents or other disruptions that would affect the public or the environment, and attributes compliance with methods to limit exposure to these potential impacts.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-H-1: Pursuant to County Code Title 32 Section 4908.1, the project shall implement landscaping to create and maintain a defensible space for effective fire safety through fuel modification consistent with the requirements of County Code Title 32, Sections 325.2.1, 325.2.2, 325.10, and 503.2, the County Fire Department's fuel modification guidelines, and California Code of Regulations, Title 14, Division 1.5, Chapter 7, subchapter 2.

Impact Discussion

- **Threshold 5.8-1**: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

[360] Source: County Office of Emergency Management: Los Angeles County Operational Area Emergency Response Plan. Available at: https://ceo.lacounty.gov/wp-content/uploads/2023/11/County-of-Los-Angeles-OAEOP-2023-Final-for-Website.pdf.

- **Threshold 5.8-2**: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- **Threshold 5.8-3**: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school

The project would be expected to result in no adverse impacts under these thresholds from emission of any hazardous materials, and less than significant impacts from interaction with any hazardous materials.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[361] Reasonably expecting compliance with all applicable regulations that were analyzed to mediate the interaction of single-family residences with hazardous materials, the project was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

A site inspection and review of government databases were completed to assess the potential exposure of people and property to risks associated with the transport, use, or disposal of hazardous materials:

- There are no pipelines for hazardous or potentially hazardous or explosive substances affected by the project. A 6" diameter subterranean sewer main spans a portion of the project parcel, but construction of the home would take place well outside of the easement for this main.
- There are no subterranean storage fields or above- or below-ground storage tanks within the project parcel or immediately adjacent properties.
- There are no solid waste facilities within the project parcel or immediately adjacent properties.
- There are no solid waste water treatment facilities within the project parcel or immediately adjacent properties.
- There are no major utility transmission or distribution facilities affected by the project. A 6" diameter subterranean sewer main spans a portion of the project parcel, but construction of the home would take place well outside of the easement for this main.
- There is no evidence of recognized vector (e.g., rodents, insects, etc.) management problems within the project parcel or immediately adjacent properties.

[361] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

- The project parcel is vacant, residentially zoned, and contains no facilities that use or manage hazardous substances in sufficient quantities to cause a potential hazard; nor are such facilities located on the immediately adjacent properties.

As such, there are no known sources of hazards or hazardous materials for which the project would have the potential to result in a reasonably foreseeable risk of upset or accident. The only existing source of potentially hazardous materials on the project parcel is the subterranean sewer main that spans a portion of it, which would be unaffected by project activities. (*See* also Figure 3-6: Proposed Project Site Plan). The sewer main is encased below grade in a soil concrete mixture and secured to the hillside's bedrock through a series of anchor blocks.[362] As attributed in Section 5.6, the project would not be expected to result in any structural alteration of the hillside in which this main is encased. While the possibility of debris flows in the course of the implementation of the project are sufficiently addressed by RCM-GEO-1, RCM-GEO-2, and the use of controlled hand excavation, the sewer main could only be so affected where it is exposed in the canyon bottom more than 150 feet distant from the project footprint and more than 70 feet distant from the valley lines describing the area down-grade of the project footprint. (*See* topographical lines in Figure 3-6: Proposed Project Site Plan). As such, there would be no reasonably foreseeable vector for upset or accident conditions affecting this sewer main.

There are no existing or proposed schools located within one quarter mile of the project parcel. The nearest school is Odyssey Charter School, located approximately 0.3 miles southeast of the project parcel. As such, operation or on-site construction activities could not emit hazardous emissions within a quarter mile of a school.

- **Threshold 5.8-4**: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment

The project would be expected to result in no adverse impacts from being located on a site included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "compliance with applicable existing regulations and processes would ensure that the [2035 County General Plan] would not result in a significant hazard to the public or the environment from future development on existing hazardous materials sites. Therefore, the [2035 County General Plan] would have a less than significant impact associated with existing hazardous materials sites."[363] The proposed project is consistent with the zoning for the project parcel and must comply with all applicable regulations. As attributed in Section 5.8.3, the project area is not listed on or near any hazardous waste or hazardous

[362] Source: County Department of Public Works. As-built map for Capital Improvement 1978M.
[363] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

substances sites according to the databases maintained pursuant to Government Code Section 65962.5.

- **Threshold 5.8-5**: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area

The project would be expected to result in no adverse impacts from being located within an airport land use plan or proximity to an airport.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[e]xisting FAA regulations, County policies and regulations, and Proposed Project goals and policies are intended to identify and properly address potential airport hazards prior to implementation of specific projects within the Project Area. Therefore, potential impacts associated with public airports, private airstrips, and heliports are less than significant."[364] Reasonably expecting compliance with all applicable regulations that were analyzed to mediate the interaction of single-family residences with airports, the project was sufficiently analyzed by the 2035 County General Plan EIR.

- **Threshold 5.8-6**: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- **Threshold 5.8-9**: Interfere with emergency response plans or emergency evacuation plans

The project would be expected to result in no adverse impacts under these thresholds from interference with an emergency response plan or emergency evacuation plan, and less than significant impacts in the event of any emergency in the area.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[365] The project must comply with all applicable regulations. The project would be consistent with all 2035 County General Plan policies, including those related to emergency plans. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

[364] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[365] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with known hazardous materials sites, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The proposed project is not located on a designated disaster route, but Canyon Crest Road is the sole means of vehicular entrance and exit for hundreds of residences. Pursuant to SC-TRANS-1, vehicular access on Canyon Crest Road would be maintained at all times, and the County is empowered to abate any non-compliant activity violating the standard traffic management process. Without more, this is sufficient to conclude that the project's impacts to emergency access would not be significant. *See Berkeley Hillside Preservation v. City of Berkeley* (2015) 241 Cal.App.4th 943, 957, 961 (roadway access management is a common and typical concern of residential construction, and adherence to a standard management process would reasonably prevent significant effects).

As attributed in Section 5.16, the duration of encroachment in the public right of way during utility connection would be expected to be brief in overall duration, limited to the least impactful hours of the day relative to existing burden on the circulation system, and to constitute the only non-transient disruption in the flow of traffic. SC-TRANS-1 requires that the materials needed to restore two lanes of traffic be kept on hand and capable of being deployed quickly in the event of emergency and that two-lane access be restored whenever work is not in progress, as for the other trenching disturbances that have characterized the roadway.

Past construction and the existing conditions in the vicinity of the project parcel gracefully support single lane closures of similar durations, with signage and flagging as governed by the MUTCD. (*See* Figure 5-31: Regular Single Lane Closure Adjacent to Project Site and Figure 5-32: Observed Single-Lane Closures and Construction Vehicles Along Canyon Crest Road). Other signs of single-lane closure for utility work characterize Canyon Crest Road in the vicinity of the project parcel, in the form of pavement repair from trenching along hundreds of feet in the road segment between Canyon Ridge Drive to the southeast of the project parcel and the hairpin turn in Canyon Crest Road to the north. These signs of trenching occur in both the north-bound and south-bound lanes and down the centerline of Canyon Crest Road. Other signs of single-lane closure for utility work characterize Canyon Crest Road in the vicinity of the project parcel, in the form of pavement repair from trenching along hundreds of feet in the road segment between Canyon Ridge Drive to the southeast of the project parcel and the hairpin turn in Canyon Crest Road to the north. These signs of trenching occur in both the north-bound and south-bound lanes and down the centerline of Canyon Crest Road.

Figure 5-19: Signs of Past Utility Construction and Maintenance in Vicinity of Project[366]

- **Threshold 5.8-7**: Directly or indirectly cause a significant risk of loss, injury or death involving wildland fires

The project would be expected to result in no adverse impacts under these thresholds from exposure of people or structures to significant risk of loss, injury or death involving wildland fires and a cumulatively inconsiderable increase in wildfire risk.

This threshold is constrained by the California Supreme Court's holding in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369,

[366] Source: Applicant

prohibiting so-called "CEQA-in-reverse." It is the project's effect on the environment that is properly within the scope of analysis under CEQA, not the environment's effect on a project. Because the project does not entail a substantial number of new residential units, its future occupants are "particular persons" and not sufficient in number to constitute "persons in general." *See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492 ("Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons."). This analysis is therefore confined to the marginal extent to which the project exacerbates a sensitive existing condition. *Id*. at 377-378. This reduces to whether the project's impacts are cumulatively considerable, and if so, what effect that cumulative considerability could have on the environment.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[2035 County General Plan] policies and conditions of approval for future development projects within the [County], in addition to compliance with applicable regulations, would minimize [2035 County General Plan] impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[367] The proposed project is consistent with all 2035 County General Plan policies, including those related to fire hazards. (*See* Table 5-11: County General Plan Policy Consistency Analysis). The project must comply with Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including landscape management, fire sprinklers, fire-rated wall assemblies and windows and Class A roof coverings.

The contractor would be expected to adhere to all regulations limiting the potential for flame spread, including prohibiting smoking on-site and adhering to California Public Resources Code Section 4427, 4431 and 4442. The metal building components used to construct the project, including pre-cut cladding panels and roofing, pre-formed anchors, and pre-cut and -formed lapped or spliced rebar, would be pre-manufactured offsite and would not be expected to require field welding, cutting or other spark emission. The project would not be expected to involve the use, manufacture, or storage of readily-combustible materials, with the exception of the fuel and oil for internal combustion engines maintained in accordance with manufacturer instructions, use of which also characterize the existing condition in the vicinity in far greater numbers.

The project would not be expected to require any new fire-related infrastructure or firebreaks with indirect effects. Should a wildfire occur in the vicinity, like that of the Station Fire, Eaton Fire, or other smaller fires that have occurred in the area, timely evacuation of the project site would be expected to prevent the exposure of future residents to pollutant concentrations substantially elevated above those degrading the remainder of the air basin. Were the area up-grade of the project to burn, the up-grade slope is not steep, and existing pavement and the remnants of up-grade development would be expected to limit the mobilization of debris, mud or other dynamic disturbances in a manner that might compromise the safety of future residents. In addition, it would be assumed that after such an event, evacuation orders would either remain in

[367] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

effect or precede substantial stormwater events, like those that affected the portions of Malibu located in the County following the Woolsey Fire in 2018.

The fuel modification plan for the project has been designed to comply with preventative brush clearance regulations.[368] The dominant understory species on the project parcel, including California sagebrush, sage, California mugwort, laurel, sugar bush, yucca, elberberry and similar native species are approved to exist in the fuel modification zone B at distances between 30 and 50 feet from a structure. Other species on the project parcel, including agave and prickly pear cactus, and some succulent species, are approved to exist at no offset to a structure. Vegetation on the site, including those oak trees that would remain in close proximity to the home, is consistent with the surrounding residential development and would not pose an elevated wildfire risk.

The project parcel is located within one mile of the primary responder fire station and therefore meets County standards for fire response distance in neighborhoods. The project is located within 100 feet of fire hydrants on two independent water systems (Lincoln Avenue Water Company and the City of Pasadena), and these hydrants have been tested to confirm that adequate fire flow availability exists. Canyon Crest Road provides adequate fire access for fire suppression efforts. The surrounding residential land usage is not considered to pose an elevated risk of fire hazard.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The constituent databases of the Cortese List indicate that no known contamination exists on the project parcel that might adversely affect site development. Although grading activities would expose subsurface soils and may result in the temporary generation of some amount of fugitive dust, the use of hand tools and standard Best Management Practices would minimize this impact, and no hazardous emissions would be expected to occur as a result of project implementation. The project would comply with brush clearance requirements and the building safety requirements for homes constructed in VHFHSZs; be located within the County's maximum response distance from an engine company; and is not expected to involve the use, manufacture, or storage of readily-combustible materials, with the exception of the fuel for combustion equipment safely stored within the equipment itself. Commonly used household hazardous materials (e.g. insecticides, herbicides, cleaning agents, etc.) would not be expected to contaminate the environment in the course of normal operation in accordance with manufacturer instructions. During construction, all paints, coatings and other fluids would be expected to be low-VOC in accordance with SCAQMD requirements, and runoff from the cleanout of equipment would be placed in the municipal sewer system, either on- or off-site. The project would not impact the buried sewer siphon that spans a portion of the project parcel.

[368] Source: County Fire Department. Available at: https://fire.lacounty.gov/forestry-fuel-modification/.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to hazards and hazardous materials would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[a]ny future development would be required to comply with applicable federal, state and local regulations related to hazardous materials, emergency response, wildland fires, and public airports, private airstrips, and heliports. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, would be less than significant. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, emergency response, wildland fires, and airports would be less than significant. Therefore, impacts related to hazards and hazardous materials would not be cumulatively considerable."[369] The proposed project is subject to and would be expected to adhere to these regulations.

Past projects have not created uncommonly hazardous conditions or emitted uncommonly hazardous materials in the vicinity of the project site, and the project would not be expected to impose a considerably higher risk of hazards than is already sustained from activities associated with the surrounding residences.

Other closely related present and future projects would not be expected to possess vectors for the use, transport or creation of hazards and hazardous materials and would be expected to comply with all applicable regulations mediating the construction and renovation of single-family residences with elevated wildfire risk. The proposed project's marginal wildfire risk from activities associated with a human presence would be insubstantial in the context of the human activity that already occurs in the hundreds of residences throughout the surrounding neighborhoods.

[369] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.9 Hydrology and Water Quality

5.9.1 Introduction

This section of the EIR evaluates the project's potential impacts to hydrology and water quality. Assessment of hydrological impacts considers the circulation of water, both on land in lakes, rivers, streams and creeks and underground in groundwater aquifers. Water quality addresses the introduction of substances into water in the course of its circulation, including silt and contaminating solutes or suspensions. The analysis considers impacts to the flow of stormwater, including the need for any drainage devices and alteration of existing patterns of flow that may affect biota.

5.9.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal and State Regulation

Clean Water Act

The federal Water Pollution Control Act (also known as the Clean Water Act ("CWA")) is the principal statute governing water quality. The CWA establishes the basic structure for regulating discharges of pollutants into the Waters of the United States and gives the USEPA the authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to end all pollutant discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution. Section 402 of the CWA requires a permit for all point source (a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel) discharges of any pollutant (except dredge or fill material) into waters of the United States.

Under the CWA, an applicant for a federal license or permit to conduct any activity that may result in a discharge to Waters of the United States must provide the federal agency with a Section 401 certification. The certification, made by the state in which the discharge originates, declares that the discharge would comply with applicable provisions of the Act, including water quality standards. A state's water quality standards specify the designated use of a stream or lake (e.g., for water supply or recreation), pollutant limits necessary to protect the designated use, and policies to ensure that existing water uses would not be degraded by pollutant discharges.

Section 404 of the Clean Water Act ("CWA") regulates the discharge of dredged or fill material into Waters of the U.S. and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Implementing regulations for the CWA define Waters of the U.S. 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." The permit review process entails an assessment of potentially adverse impacts to U.S. Army Corps of Engineers ("USACE") jurisdictional Waters of the U.S.

Over the years, the USACE has modified its regulations, typically due to evolving policy or judicial decisions, through the issuance of Regulatory Guidance Letters, memorandums, or more expansive instruction guidebooks. These guidance documents help to update and define how jurisdiction is claimed, and how these 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 USACE and the U.S. Environmental Protection Agency ("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 of 1899. 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 U.S. 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*).

The *Rapanos* case outlines the conditions and criteria used by the USACE to assess and claim jurisdiction over non-isolated, 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 Traditional Navigable Water ("TNW")." 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. For drainage features that do not meet the significant nexus criteria, a significant nexus determination is provided by the USACE to the USEPA for the final determination of federal jurisdiction.

On January 15, 2003, the USACE and USEPA issued a Joint Memorandum to provide clarifying guidance regarding the United States Supreme Court ruling in the *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*, No. 99-1178 (January 9, 2001) ("the SWANCC ruling"), (Federal Register: Vol. 68, No. 10.). This ruling held that the CWA does not give the federal government regulatory authority over non-navigable, isolated, intra-state waters. As a result of this decision, some previously regulated depressional areas such as mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes, natural ponds, and vernal pools, which are not hydrologically connected to other intra- or inter-state "waters of the U.S.," are no longer regulated by the USACE.

National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System ("NPDES") program promulgated under Section 402 of the CWA, all facilities that discharge pollutants from any point source into Waters of the United States are required to obtain an NPDES permit. The term pollutant broadly includes any type of industrial, municipal, and agricultural waste discharged into water. Point sources are discharges from publicly owned treatment works, discharges from industrial facilities, and discharges associated with urban runoff. While the NPDES program addresses certain specific types of agricultural activities, the majority of agricultural facilities are defined as nonpoint sources and are exempt from NPDES regulation. Pollutant contributors come from direct and indirect sources. Direct sources discharge directly to receiving waters, whereas indirect sources discharge wastewater to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only to direct point source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-Process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the USEPA has recently focused on integrating the NPDES program further into watershed planning and permitting.

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more, as well as construction sites one acre or more in size, must file for and obtain an NPDES permit. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances (including roadways, catch basins, curbs, gutters, ditches, manmade channels and storm drains, designed or used for collecting and conveying stormwater) is the USEPA's Storm Water Phase II Final Rule. The Phase II Final Rule requires an operator (such as a city) of a regulated small municipal separate storm sewer system ("MS4") to develop, implement, and enforce a program (e.g., Best Management Practices, ordinances, or other regulatory mechanisms) to reduce pollutants in post-construction runoff to storm drain systems from new development and redevelopment projects that result in the land disturbance of greater than or equal to one acre.

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code Sections 13000 *et seq.*) is the basic water-quality control law for California. Under this Act, the State Water Resources Control Board ("SWRCB") has ultimate control over state water rights and water-quality policy. In California, the USEPA has delegated authority to issue NPDES permits to the SWRCB. The State is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine Regional Water Quality Control Boards ("RWQCBs") carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in

existing water quality, the beneficial uses of the region's ground and surface water, and local, water-quality conditions and problems. Waste discharge requirements for discharges to municipal storm drain systems in the Los Angeles Water Board Region are set forth in Order No. R4-2012-0175 ("MS4 Permit") issued by the Los Angeles Regional Water Quality Control Board in 2012.

Water Quality Control Plan for the Los Angeles Region

The RWQCB has prepared a Water Quality Control Plan for the Los Angeles Region (Basin Plan), which encompasses all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente).[370] In addition, the Los Angeles region includes all coastal waters within three miles of the continental and island coastlines. As the eastern boundary, formed by the Los Angeles County line, departs somewhat from the hydrologic divide, the Los Angeles and Santa Ana regions share jurisdiction over watersheds along their common border. The first essentially complete Basin Plan, which was established under the requirements of California's 1969 Porter-Cologne Water Quality Control Act (Section 13000 *et seq.* of the California Water Code), was adopted in 1975 and revised in 1984. The latest version was adopted in 1994.

The Basin Plan assigned beneficial uses to surface and groundwater such as municipal water supply and water-contact recreation to all waters in the basin. It also set water quality objectives, subject to approval by the EPA, intended to protect designated beneficial uses. These objectives apply to specific parameters (numeric objectives) and general characteristics of the water body (narrative objectives). An example of a narrative objective is the requirement that all waters must remain free of toxic substances in concentrations producing detrimental effects upon aquatic organisms. Numeric objectives specify concentrations of pollutants that are not to be exceeded in ambient waters of the basin.

The Los Angeles RWQCB:

- Prepares, monitors compliance with, and enforces Waste Discharge Requirements, including NPDES permits;
- Implements and enforces local stormwater control efforts;
- Enforces water quality laws, regulations, and waste discharge requirements; and
- General Construction Activity Stormwater Discharges
- Stormwater discharges that are composed entirely of runoff from qualifying construction activities may require regulation under the General Construction Activity Storm Water Permit issued by the SWRCB. Construction activities that qualify include clearing, grading, excavation, reconstruction, and dredge-and-fill activities that result in the disturbance of at least one acre and less than five acres of total land area.

[370] Source: California Environmental Protection Agency: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.shtml.

Storm Water Pollution Prevention Plans

Pursuant to the CWA, in 2012, the SWRCB issued a statewide general NPDES Permit for stormwater discharges from construction sites (Order No. 2012-0006-DWQ; NPDES No. CAS000002). Under this Statewide General Construction Activity permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or to be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan ("SWPPP"). Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list BMPs implemented on the construction site to protect stormwater runoff, and must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of Best Management Practices; and a monitoring plan if the site discharges directly to a water body listed on the State's 303(d) list of impaired waters.

Local Regulation

County Code Title 26

Requirements for erosion control and water quality for grading operations are set forth in Title 26 of the County Code. NPDES compliance is required for all projects in the County.

For small residential construction sites with a disturbed, graded area less than one acre, stormwater pollution control measures/best management practices ("BMPs") must be incorporated on the site during construction.

For all new non-residential projects consisting of a disturbed, graded area less than one acre, an Erosion and Sediment Control Plan ("ESCP"), which should include specific best management practices to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding, or the deposition of mud, debris, or construction-related pollutants, is required prior to issuance of a grading permit by the County. In addition to an ESCP, for construction sites with a disturbed, graded area of one acre or greater, a State Storm Water Pollution Prevention Plan must be prepared and a Notice of Intent filed with the State Water Resources Board. Filing of a Notice of Intent and attainment of a Waste Discharge Identification number from the State is necessary for projects of this magnitude prior to issuance of a grading permit by the County. All active grading projects with grading proposed within the rainy season, October 15 to April 15 of each calendar year, must update the ESCP on file with the County annually and have all BMPs installed prior to the beginning of the rainy season or as determined by the County's building official.

Low Impact Development ("LID") Standards

The County has prepared the 2014 Low Impact Development Standards Manual ("LID Standards Manual")[371] to comply with the requirements of the National Pollutant Discharge Elimination System ("NPDES") Municipal Separate Storm Sewer System ("MS4") Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), henceforth referred to in this document as the 2012 MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges.

Small-scale residential development of four units or fewer qualifies as a "Non-Designated Project." For such projects, a minimum of two BMPs from a set of menu options are required to implement the intent of the LID standards. These options include porous pavement, downspout routing to rain barrels or rain gardens, disconnection of impervious surfaces, a dry well, landscaping techniques, and a green roof.

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with these policies, including any related to hydrology and water quality, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.9.3 Existing Conditions

The project parcel contains both east-facing and west-facing slopes that are separated by what the USGS 7.5-minute topographical map for Pasadena portrays as an intermittent[372] drainage (see Figure 3-3: Project Vicinity Topographic Map) more than 150 feet northwest and nearly 100 feet below the elevation of the downslope edge of the home's footprint. The drainage originates in the Angeles National Forest approximately 3.5 miles northeast and exhausts into the Arroyo Seco approximately 0.2 miles to the west, comprising a canyon watershed of nearly 2,000 acres. The Arroyo Seco is a tributary of the Los Angeles River and connects to it more than nine miles to the southwest.[373] The Los Angeles River has been designated a Traditional Navigable Waters

[371] Source: County of Los Angeles Department of Public Works: Low Impact Development Standards Manual, February 2014. Available at: https://dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf.
[372] Intermittent streams are portrayed on USGS maps with dashed lines. USGS topographical legend available at: https://pubs.usgs.gov/gip/TopographicMapSymbols/topomapsymbols.pdf.
[373] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.4. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip

by the USEPA.[374] The Los Angeles River watershed is approximately 824 square miles,[375] or 527,360 acres, of which the Millard Canyon watershed comprises approximately 0.37%.

Existing residences on both sides of Millard Canyon extending some distance in both directions from the project parcel are located at similar or reduced offsets to the riparian environment. A minority of the Millard Canyon watershed burned during the Eaton Fire in January of 2025. As after the Station Fire in 2009, watershed burns are associated with increased soil and debris loading during subsequent stormwater events.

[374] Source: United States Environmental Protection Agency: CWA Jurisdictional Delineation for Los Angeles River. Available at: https://archive.epa.gov/region9/mediacenter/web/pdf/laspecialcaseletterandevaluation.pdf.
[375] Source: California Water Boards: Los Angeles River Watershed. Available at: https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/regional_program/Water_Quality_and_Watersheds/los_angeles_river_watershed/la_summary.shtml.

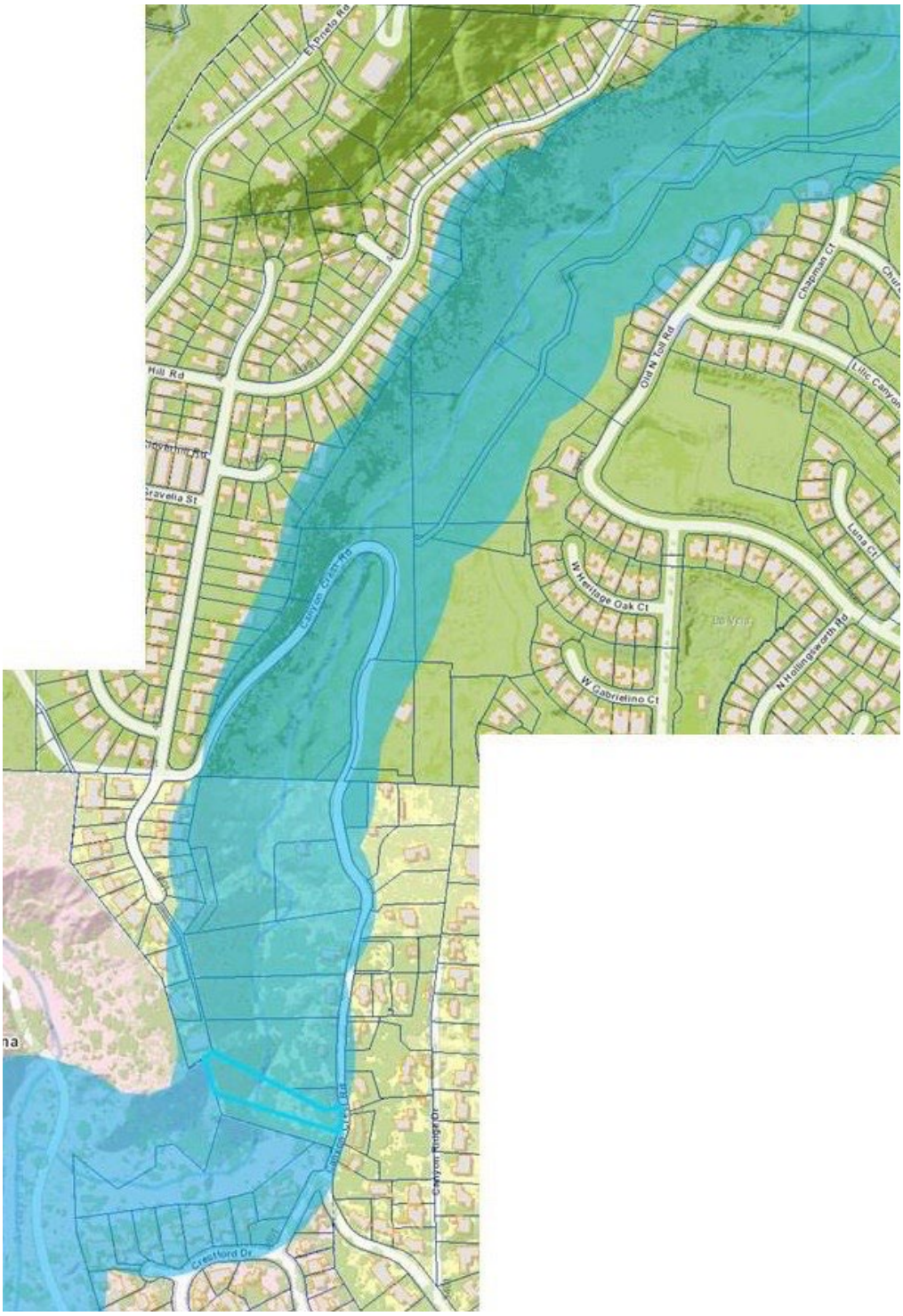


Figure 5-20: Proximity of Existing Single-Family Residences to Millard Canyon Bottom[376]

[376] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public. 200-foot horizontal spacing.

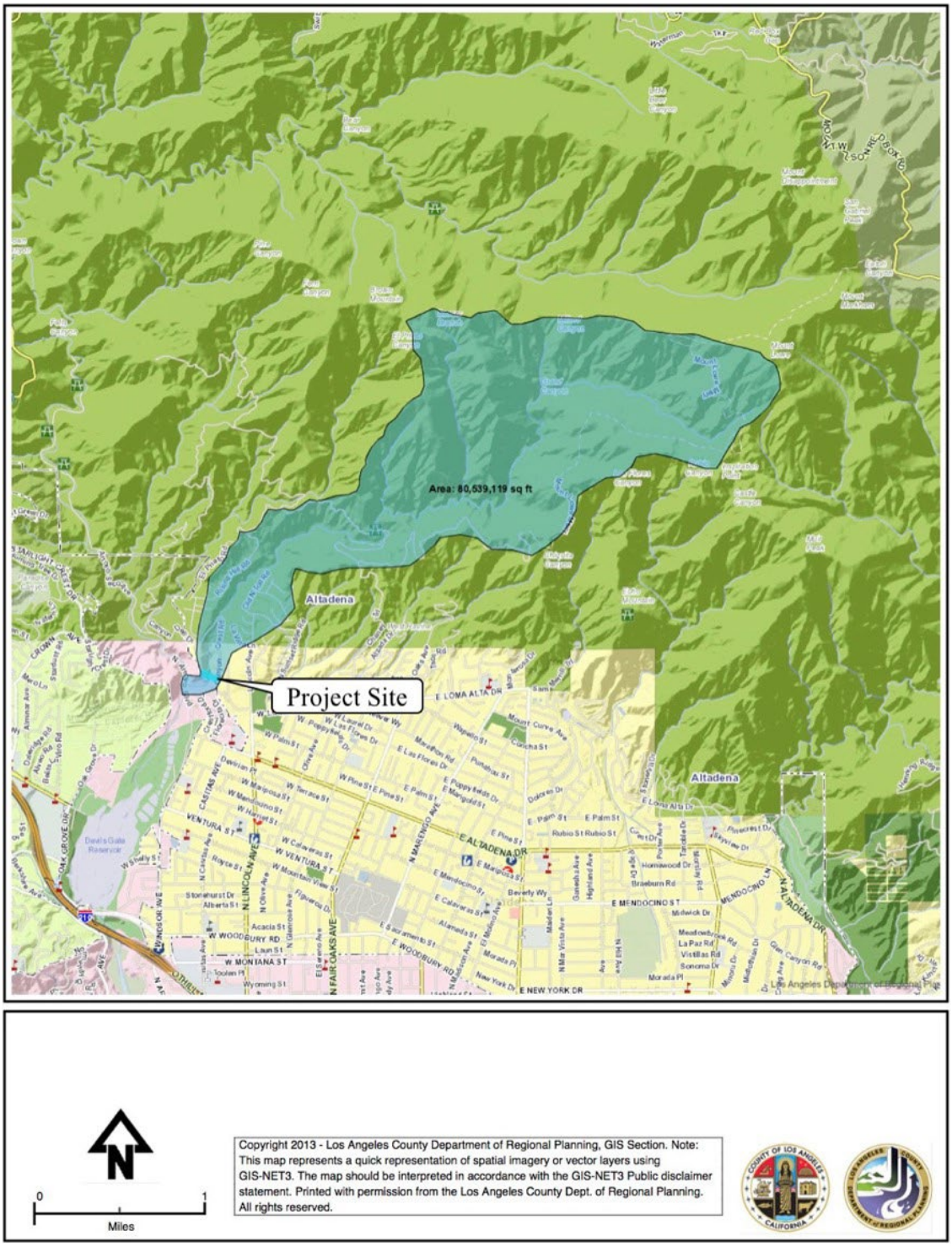


Figure 5-21: Millard Canyon Watershed[377]

[377] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

Drainage Patterns

Surface runoff within the footprint of development drains in a southwesterly direction down the westward facing slope, collecting in a drainage swale that cuts across the southeast corner of the project parcel. The drainage swale conducts surface runoff from a residential area of approximately one acre to the east of the project parcel through an 18" diameter culvert under Canyon Crest Road.

A drainage swale partially lined with riprap runs across the southeast portion of the project parcel from this culvert and spans additional parcels before exhausting into the canyon below. According to the United States Army Corps of Engineers ("USACE"), this open drainage channel is non-jurisdictional, as a "small wash…characterized by low volume, infrequent, or short duration flow…draining only uplands…that [does] not carry a relatively permanent flow of water"[378] and therefore supports no aquatic habitat. (*See* Section 11 Appendix H). No sustained soil saturation is present, no hydrophytes are present and non-hydrophytic vegetation is present in and along the boundaries of the swale. This erosional feature does not appear as a "river, stream or channel" on the County's watershed map,[379] nor can it be resolved in the earliest topographical maps of the area, dating to 1896.[380] As both the Arroyo Seco and the feature in the bottom of Millard Canyon which is tributary to it are portrayed as "intermittent" by the USGS, this small wash of approximately one-acre watershed is not a "significant nexus" to the nearest "traditional navigable waterway" for which it is tributary, comprising approximately 0.00018% of the watershed of the Los Angeles River,[381] more than nine miles to the southwest. Residential lots farther to the north along Canyon Crest Road and from dozens of other residential lots in the Meadows neighborhood to the northwest of the project parcel also drain into Millard Canyon with similar open swales.

Drainage on the subject property is principally by sheet runoff intercepted by the open channel or the canyon bottom, where not consumed as soil moisture, percolated to lower strata, or channelled within subsurface cracks. As precipitation falls on the soil surface, it penetrates the soil in nearly random "wetting fronts." Depending upon the duration, amount, and intensity of precipitation, stormwater may penetrate only a few millimeters, or may saturate the soil, initiating sheet runoff.

Stormwater and Flood Hazard

[378] Source: United States Army Corps of Engineers: U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook, page 16. Available at: https://www.nap.usace.army.mil/Portals/39/docs/regulatory/jd/jd_guidebook_051207final.pdf.
[379] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.4. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[380] Source: United States Geological Survey. Available at: https://ims.er.usgs.gov/gda_services/download?item_id=5503543&quad=Pasadena&state=CA&grid=15X15&series=Map%20GeoPDF.
[381] Source: Environmental Protection Agency: Clean Water Act Jurisdictional Determination Letter for Los Angeles River. Available at: https://archive.epa.gov/region9/mediacenter/web/pdf/laspecialcaseletterandevaluation.pdf.

The community of Altadena receives an average of 22 inches of rain a year.[382] The 85th percentile 24-hour rainfall intensity (i.e. the figure for which 85% of rainfall events within a 24-hour period contain less rainfall) for the project parcel is approximately 1.2".[383]

The project is not located within a County-designated Flood Hazard Zone[384] and the Federal Emergency Management Agency ("FEMA") designates the project location as an area of minimal flood hazard. There are no existing dams, levees, or flood control basins located upgrade of the project area. In addition, the project is sited nearly 100 feet above the elevation of the intermittent feature in the bottom of Millard Canyon below the project footprint of development and is therefore at no risk of flooding from it.

Water Quality

The project parcel is underlain by the Raymond Groundwater Basin aquifer,[385] a source of local potable water for the private water purveyor serving the site, Lincoln Avenue Water Company. Based on a review of the project topological map, there are no natural or manmade surface water impoundments on the project parcel.

Seiche and Tsunami

Seiches and tsunamis are the result of tectonic activity, such as an earthquake. A seiche is an oscillation of the surface of a landlocked body of water that can create a hazard to persons and structures on and in the vicinity of the water. A tsunami is a long-period, high-velocity tidal surge that can result in a series of very low (trough) and high (peak) sea levels, with the potential to inundate areas up to several miles from the coast, depending on the slope of the topography, creating hazards to people or structures from loss, injury, or death. Most of the hazards created by a tsunami come when a trough follows the peak, resulting in a rush of sea water back toward the ocean. The project parcel is not located in a County-designated Tsunami Hazard Area[386] or Sea Level Rise Impact Area.[387]

Mudflow, Landslide and Liquefaction

A mudflow is a moving mass of soil that is made fluid by a loss of shear strength, generally as a result of saturation from rain or melting snow. According to the geotechnical report for the

[382] Source: Western Regional Climate Center: Altadena, California. Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca0144.
[383] Source: County Department of Public Works: LA County Hydrology Map. Available at: http://www.dpw.lacounty.gov/wrd/hydrologygis/.
[384] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[385] Source: California Department of Water Resources. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_023_Raymond.pdf
[386] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.3. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[387] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.4. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

project (Section 11 Appendix G), the project parcel does not bear any signs of mudflow or landslide, and the slopes on the project parcel were analyzed to exceed the required factors of safety for both static and dynamic stability. Soil liquefaction describes a phenomenon whereby a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress such as an earthquake, causing it to behave like a liquid. According to the geotechnical report for the project, "[t]he potentially liquefiable soils are located within the stream channel and are remote to the proposed project. As such, liquefaction is not expected to impact the proposed development."

Existing Infrastructure

The vicinity of the project is not served by any stormwater drains. As previously attributed, stormwater is conducted principally by sheet runoff and collected in open drainage swales. An 18" diameter culvert collects this runoff from an area of approximately one acre above the project parcel for passage under Canyon Crest Road, to an open drainage channel that spans the southeast corner of the project parcel. Existing flow through this culvert and drainage swale are unaltered by the project.

5.9.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.9-1**: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality
  - For purposes of analysis in this EIR, applicable water quality and waste discharge requirements are contained in the County's National Pollutant Discharge Elimination System ("NPDES") Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from within the coastal watersheds of Los Angeles County (NPDES Permit No. CAS004001)

- **Threshold 5.9-2**: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
  - For purposes of analysis in this EIR, the groundwater underlying the project parcel is the Raymond Groundwater Basin.

- **Threshold 5.9-3**: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i.) Result in substantial erosion or siltation on- or off-site
  - ii.) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite

iii.) 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
iv.) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation
v.) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.9-4**: Substantially degrade water quality
- **Threshold 5.9-5**: Contaminate a public water supply
- **Threshold 5.9-6**: Substantially degrade or deplete ground water resources
- **Threshold 5.9-7**: Interfere substantially with ground water recharge
- **Threshold 5.9-8**: Cause substantial flooding, erosion or siltation

5.9.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to hydrology and water quality first identifies the hydrological features on the project parcel and pattern of drainage, as well as mediation of the pre-existing regulatory framework. As the project does not dispose of any wastewater on-site or re-route any hydrological feature, the impact assessment is concerned principally with the project's impacts to stormwater runoff.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

SC-WQ-1: The project shall comply with County Low Impact Development Standards, which for this project would be implemented with the following design features:
- The output of each of the home's downspouts will be buffered in and treated by a rain garden constructed in accordance with the specifications in the County LID manual.
- The project will incorporate no impervious surfaces outside the footprint of the home.

Impact Discussion

- **Threshold 5.9-1**: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality
- **Threshold 5.9-4**: Substantially degrade water quality
- **Threshold 5.9-5**: Contaminate a public water supply

The project would be expected to result in no adverse impacts under these thresholds from the degradation of water quality beyond permitted standards, and less than significant impacts to the quality of surface or groundwater.

General and Project-specific Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[i]mpacts would be less than significant upon compliance with regulatory requirements and [2035 County General Plan] policies."[388] The project must comply with all applicable regulatory requirements and standard conditions, including the Department of Public Works grading and drainage plan check review and the County Low Impact Development Ordinance. The proposed project is consistent with all 2035 County General Plan policies, including those related to water quality. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

- **Threshold 5.9-8**: Cause substantial flooding, erosion or siltation
- **Threshold 5.9-3**: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site

The project would be expected to result in no adverse impacts under these thresholds from a change to any drainage pattern that would result in substantial erosion or siltation, and less than significant impacts to drainage in the area of the project.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]nder the MS4 Permit certain categories of development and redevelopment projects are required to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use,"[389] specifically through implementation of Low Impact Development requirements for residential projects, concluding that "[u]pon implementation of regulatory requirements and standard conditions of approval,

[388] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.9-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[389] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.9-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

[this impact] would be less than significant." The proposed project would comply with all standard conditions and regulations, including Low Impact Development requirements.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with drainage, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The project would not alter the course of any stream, river or other waters. Therefore, the project would not result in substantial erosion or siltation from the diversion of a hydrological feature. Pursuant to RCM-GEO-1, the project would be required to comply with Best Management Practices ("BMPs") to limit the potential for stormwater erosion and siltation during construction.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite

The project would be expected to result in no adverse impacts under these thresholds from a change to any drainage pattern that would result in substantial flooding, and less than significant impacts to drainage in the vicinity of the project.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]nder the MS4 Permit certain categories of development and redevelopment projects are required to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use," specifically through implementation of Low Impact Development requirements for residential projects, concluding that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[390] The proposed project complies with all standard conditions and regulations, including Low Impact Development requirements.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with drainage, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The project would not alter the course of any stream or river, and neither would it alter the course of the non-jurisdictional open drainage swale crossing the southeast portion of the property.

[390] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.9-42. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

In the County of Los Angeles, the Los Angeles Regional Water Quality Control Board ("RWQCB") recommends analysis of flooding using the greater of the 85th percentile 24-hour rainfall event or the 0.75-inch event for Standard Urban Storm Water Mitigation Plan ("SUSMP").[391,392] Using these figures, a 1.2" stormwater event would be expected to generate approximately 870 gallons of stormwater runoff in 1,159 square feet of impervious surface area. The project's rain gardens would be expected to cut across the slope to maintain a shallow grade and exhaust into the open drainage swale, together comprising more than 40 linear feet or 120 cubic feet of capacity, equal to the runoff from the 1.2" stormwater event. The introduction of native landscaping below the project footprint would further increase infiltration. Stormwater events exceeding the 85% event would also be expected to saturate the soil, initiating surface runoff into the open drainage swale. As any runoff exceeding the buffering capacity of the rain garden would be routed back into that open drainage swale, the pattern of drainage on the project parcel would thus be expected to remain substantially unaltered. In addition, this small amount of impervious surface area would be negligible in comparison with the tributary area of the drainage swale. Even if the project routed all of its small impervious surface area into the swale without consideration of buffering or infiltration, the marginal impact of this runoff to the existing flow of water on- or off-site would be negligible and therefore not expected to precipitate any flooding.

Pursuant to RCM-GEO-1, the project would be required to comply with Best Management Practices ("BMPs") to limit the potential for concentration of stormwater during construction.

iii. 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

Project-specific Analysis

The project would not require the construction of any stormwater drainage systems and would not impact the function of any existing stormwater facility. Stormwater in the vicinity is conducted principally by sheet runoff and collected in drainage swales that exhaust into the bottom of Millard Canyon. An 18" diameter culvert collects this surface runoff from an area of more than one acre above the project parcel for passage under Canyon Crest Road, to an open drainage swale that spans the southeast corner of the project parcel and two parcels to the southwest before exhausting into the canyon bottom. Existing flow through this culvert and drainage swale would be unaltered by the project. The project's sewer lateral would be expected to cross the swale in a shallow subsurface trench approximately 12 inches in depth. However, the trench would be constructed when no possibility of a stormwater event exists, and flow in the swale would not be permanently diverted by the project.

[391] Source: County Department of Public Works: Analysis of 85th Percentile 24-hour Rainfall Depth Analysis Within the County of Los Angeles, page 1. Available at: http://ladpw.org/wrd/publication/engineering/Final_Report-Probability_Analysis_of_85th_Percentile_24-hr_Rainfall1.pdf.

[392] Source: County Department of Public Works: Low Impact Development Standards Manual, February 2014, page 6-1. Available at: https://dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf.

Pursuant to the County's National Pollutant Discharge Elimination System ("NPDES") Municipal Separate Storm Sewer System ("MS4") Permit for stormwater and non-stormwater discharges from within the coastal watersheds of Los Angeles County (NPDES Permit No. CAS004001), the project would be required to comply with Best Management Practices ("BMPs") described in the County Low Impact Development ("LID") standards.[393,394] These water quality regulations have been analyzed to minimize the impact of point and non-point sources of pollution that emanate from development. In regulating NPDES stormwater permits, the USEPA has repeatedly expressed a preference for controlling water quality by way of BMPs, rather than by way of imposing numerical limitations or modeling.[395] Compliance with these BMPs "[l]essen[s] the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters and other water bodies"; "[m]inimize[s] pollutant loadings from impervious surfaces"; and "[m]inimize[s] erosion and other hydrologic impacts on natural drainage systems."[396]

For the project, the LID standards are fulfilled by eliminating impervious surface areas outside the footprint of the structure and routing its two downspouts through rain gardens. Rain gardens serve two hydrological functions. First, rain gardens filter up to 90% of the pollution collected on the project's roof (e.g. from deposition of particulates from the atmosphere, decomposing organic material, etc.). In addition, as other residences in the collection area upgrade of the project do not provide this filtration, the project's stormwater discharge is not expected to reduce the quality of flow in this drainage swale. Second, rain gardens provide a buffer into which stormwater may collect and then infiltrate or evapotranspire.

During construction, stormwater runoff has the potential to reduce water quality by acquiring silt or through exposure to other substances that may form in solution or suspension with water. However, pursuant to RCM-GEO-1, construction BMPs are required to reduce or eliminate this potential interaction.

During the period of occupancy, stormwater may also acquire urban pollutants deposited on project surfaces. However, these quantities would be expected to be insubstantial and would be filtered at least in part by the project's rain gardens.

[393] Source: County Department of Public Works: Low Impact Development Standards Manual, February 2014, page 3-3. Available at: https://dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf.
[394] Source: Los Angeles Regional Water Quality Control Board: Order No. 01-182 NPDES Permit No. CAS004001 Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the County of Los Angeles, and the Incorporated Cities Therein, Except the City of Long Beach. Available at: http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/los_angeles_ms4/2006_1003_final/2001%20la%20ms4%20permit%20as%20updated%20by%20order%20no.%20r4-2006-0074%20sep%2014%202006.pdf.
[395] Source: United States Environmental Protection Agency: Interim Permitting Strategy Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 Fed. Reg. 43761. Available at: https://www.gpo.gov/fdsys/pkg/FR-1996-08-26/pdf/96-21671.pdf.
[396] Source: County Department of Public Works: Low Impact Development Standards Manual, page 1-2. Available at: https://dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards%20Manual.pdf.

The Los Angeles Regional Water Quality Control Board ("RWQCB") summarizes the wastewater discharge requirements for domestic uses in a Water Quality Control Plan.[397] The project would not generate wastewater that would result in the elevation of constituents regulated by the wastewater treatment requirements of the RWQCB Los Angeles Region Water Quality Control Plan. The project does not make use of an Onsite Wastewater Treatment System. Wastewater from the project is discharged in a public sewer main and treated to a tertiary level at the San Jose Creek Water Treatment Plant ("WTP") complying with all applicable state and federal standards, pursuant to the County's National Pollutant Discharge Elimination System ("NPDES") permit for the San Jose Creek WTP (NPDES Permit No. CAG994003). Pursuant to SC-BIO-1, cleaning of equipment during construction would be performed only where wastewater runoff can be routed to the sewage system, off-site as needed before such facilities exist on-site.

iv. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation

The proposed project would be expected to result in no adverse impacts under these thresholds from placement of a structure within a flood hazard area, tsunami or seiche zone.

Project-specific Analysis

The proposed project is not located within a designated 100-year Flood Hazard Area,[398] and the Federal Emergency Management Agency designates the project location as an area of minimal flood hazard. The proposed project is not located within a designated Tsunami Hazard Area.[399] According to the geotechnical report for the project (Section 11 Appendix G), "[t]he potentially liquefiable soils are located within the stream channel and are remote to the proposed project. Soil liquefaction describes a phenomenon whereby a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress such as an earthquake, causing it to behave like a liquid. The project is located 100 feet and more in elevation upgrade of any liquefiable soils or the potential high watermark of any earthquake-induced seiche of any water flowing in the seasonal stream.

v. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan

The proposed project would be expected to result in no adverse impacts from obstructing implementation of a water quality control plan or sustainable groundwater management plan.

Project-specific Analysis

[397] Source: Los Angeles Regional Water Quality Control Board. Available at: http://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.shtml.
[398] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[399] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.3. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

The applicable "water quality control plan" is the Los Angeles Regional Water Quality Control Board ("LARWQCB") Basin Plan.[400] The proposed project has no foreseeable vector of impact on the update or implementation of this plan.

A "sustainable groundwater management plan" is a plan to manage groundwater supply required of most California water basins pursuant to SB 1168 (the 2014 "Sustainable Groundwater Management Act"), which created Water Code Part 2.74, Sections 10720 et seq. This applies to all of California's 517 groundwater basins and requires that any basins identified by the California Department of Water Resources be identified as high, medium, low, or very low priority. Local responsible entities in high and medium basins are required to form a Groundwater Sustainability Agency ("GSA") and develop a sustainable groundwater management plan. Certain basins with adjudicated water rights are exempted from this requirement in Water Code Section 10720.8, including the Raymond Basin. Raymond Basin's adjudication in 1944 established a management that utilizes a fixed safe-yield operation. As a result, the Raymond Basin was determined to be very low priority, and is therefore not subject to the requirements to form a GSA or develop a plan. As such, the proposed project has no foreseeable vector of impact on any sustainable groundwater management plan.

- **Threshold 5.9-2**: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin
- **Threshold 5.9-6**: Substantially degrade or deplete ground water resources
- **Threshold 5.9-7**: Interfere substantially with ground water recharge

The project would be expected to result in no adverse impacts under these thresholds from a substantial reduction of groundwater supply, or substantial interference with groundwater recharge, and less than significant impacts to groundwater in the area of the project.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be less than significant."[401] The project would introduce new impervious surface area on only 3% of the project parcel, or 1,159 square feet, an insubstantial increase in impervious surface area.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with the roadway transportation system, and by transcending its mitigation, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

[400] Source: Los Angeles Regional Water Quality Control Board: LARWQCB Basin Plan. Available at: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/.
[401] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Additional Project-specific Analysis

The project would not entail construction or use of a well and would take water supply from a water purveyor for which the added demand of one single-family home is neither substantial nor unanticipated. The project has been designed with a small area of drought-tolerant landscaping and would adhere to County Green Building Code requirements for low-flow fixtures and would therefore not be expected to consume a substantial amount of water from the local purveyor, which draws in part from local groundwater supply, or contribute substantially to the depletion of that supply. The project would not be expected to emit substantial quantities of any substance that might leach into and degrade the quality of groundwater underlying the project. In addition, the California Water Board's Geotracker database reports the nearest ground well with ground water depth monitoring information in the Raymond Basin, approximately three miles to the southeast, to have a depth to water of more than 300 feet.[402] The excavation required to implement the project, limited to a depth of approximately eight feet, and the pile augering required to construct the six concrete piles, limited to a depth of less than 40 feet, would therefore not be expected to interfere with or otherwise degrade groundwater quality to any extent.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The pattern of drainage in the open swale across the project parcel would not be altered, and the amount of runoff from the project parcel would not be expected to substantially increase. The actual amount of stormwater runoff generated from the impervious footprint of the project (of 1,159 square feet) would be insubstantial and would be attenuated by rain gardens designed to filter the runoff and buffer it for infiltration and evapotranspiration. This runoff would be routed back into the open drainage swale through rain gardens, pursuant to SC-WQ-1.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

[402] Source: California Water Board. Available at: http://geotracker.waterboards.ca.gov/gama/gamamap/public/dtw_data.asp?well_id=01N12W11N004S.

The incremental effects of the project to hydrology and water quality would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[a]s cumulative projects would be required to comply with [applicable] water-quality, drainage, and flood safety requirements, significant cumulative impacts would not occur. Therefore, the [2035 County General Plan] would not contribute to significant cumulative hydrology and water-quality impacts."[403] The proposed project is subject to and would be expected to adhere to these regulations.

Past projects have contributed to reductions in water quality, claims on water supply, and hydrological effects that have resulted in the creation of mediating infrastructure, including aqueducts, water treatment, stormwater control devices and design requirements, which remain adequate to manage the insubstantial effects of the project. To the extent that groundwater recharge from varying levels of rainfall in the County is both desirable to supplement imported sources of water and facilitated by permeable surfaces, and given that development over the Raymond groundwater basin has resulted in a substantial fraction of impermeable surface area, the proposed project would create an impermeable footprint of less than 1,500 square feet, or 0.0001% of the approximately 41 square-mile surface area of the Raymond groundwater basin, and would provision for on-site treatment and buffering of stormwater to facilitate infiltration compensating for even this insubstantial figure.

Other closely related present and future projects would not be expected to possess vectors for substantial degradation of water quality, new water supply requirements, or hydrological effects, and like the project are governed by standard regulations protecting water quality.

[403] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.9-41. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.10 Land Use and Planning

5.10.1 Introduction

This section of the EIR evaluates the project's potential impacts to land use and planning. This evaluation includes an assessment of the conformance of the project to its zoning and development standards and to the policies of the community and general plans that govern the project. Direct land use impacts result in land use incompatibilities, the division of neighborhoods or communities, or interference with other land use plans, such as habitat or wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use implementation such as an increase in demand for public utilities or services, or increased traffic on roadways, which are addressed in other areas of analysis of this EIR. Pursuant to State CEQA Guidelines 15121(a), the "information in an EIR may constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court." As such, this EIR analyzes the burdens of proof and other code requirements of the entitlements requested.

5.10.2 Regulatory Framework

State and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to land use and planning.

State Regulation

State Planning Law

State planning law (California Government Code Section 65300 *et seq.*) requires every city and county in California to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction and of any land outside its boundaries that, in the planning agency's judgment, bears relation to its planning (sphere of influence). A general plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a general plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the community that the general plan should address, such as hazards or flooding.

City and county land use authority stems from the California Constitution (California Constitution, art XI, Section 7), and an agency's administration of this authority is entitled to "great deference" by the courts based on the principle of separation of powers. *San Francisco Tomorrow v. City and County of San Francisco* (2014) 229 Cal.App.4th 498, 515.

State planning law finds that "[t]he lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." (Government Code section 65589.5(a)(1)). Pursuant to Government Code section 65589.5(j),

"[w]hen a proposed housing development project complies with applicable, objective general plan and zoning standards and criteria, including design review standards, in effect at the time that the housing development project's application is determined to be complete, but the local agency proposes to disapprove the project or to approve it upon the condition that the project be developed at a lower density, the local agency shall base its decision regarding the proposed housing development project upon written findings supported by substantial evidence on the record that both of the following conditions exist:

(1) The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a specific, adverse impact means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

(2) There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density."

The California Department of Housing and Urban Development states that a project comprised of one single-family residence and one ADU is governed by Government Code Section 65589.5(j).[404]

Conditional Use Permit

A conditional use permit ("CUP") "allows a city or county to consider special uses which may be essential or desirable to a particular community, but which are not allowed as a matter of right within a zoning district, through a public hearing process."[405]

"The approval of a conditional use permit is an administrative, quasi-judicial act. It is not a change of zone, but rather a project-specific change in the uses allowed on a specific property. Conditional use permits do not involve the establishment of new codes, regulations or policies. Instead a conditional use permit applies the provisions of the zoning ordinance and its standards to the specific set of circumstances which characterize the proposed land use." *Ibid*.

"Local governments have the authority to enact local planning and land use regulations to protect the public health, safety and welfare of their residents through police power. The "police power" provides the right to adopt and enforce zoning regulations, as long as they do not conflict with

[404] Source: California Department of Housing and Urban Development: Housing Accountability Act Technical Assistance Advisory. ["Since an application for both a single-family residence and an ADU includes more than one residential unit, the HAA applies (Gov. Code, § 65589.5, subd. (h)(2).)"] Available at: https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos/docs/hcd-memo-on-haa-final-sept2020.pdf.

[405] Source: California Office of Planning and Research: The Planner's Training Series: The Conditional Use Permit, page 1. Available at: https://www.opr.ca.gov/docs/theconditionalusepermit_071997.pdf.

state laws." *Ibid*. Government Code Section 65901(a) describes these police powers in the consideration of a CUP: "The board of zoning adjustment or zoning administrator shall hear and decide applications for conditional uses or other permits when the zoning ordinance provides therefor and establishes criteria for determining those matters…"

"Section 65901 [of the Government Code] empowers local decision-making bodies to take action on use permit proposals when zoning ordinances make provisions and set criteria for them. The hearing body may also modify a conditional use permit's terms by imposing new or revised conditions…Four general rules…in applying conditions of approval include: (1) the jurisdiction must be acting within its police powers; (2) the condition must substantially further a legitimate public purpose; (3) the condition must further the same public purpose for which it was imposed; (4) the property owner may not be required to carry a disproportionate load in furthering the public purpose. [Citation.]"[406]

As California's Office of Planning and Research guides, "[i]f a condition applied to a conditional use permit is not linked to some legitimate public need or burden the project creates, the condition imposed could be deemed a taking of property in violation of the U.S. Constitution's Fifth and Fourteenth Amendments. [Citation.] Where a regulatory taking has been found to occur, the courts will overturn the agency's action and may require the agency to pay the applicant compensation for the taking [Citation.]" [407] ;" '[I]n restricting individual rights by exercise of the police power neither a municipal corporation nor the state legislature itself can deprive an individual of property rights by a plebiscite of neighbors….Such action is arbitrary and unlawful.' " *Ross v. City of Yorba Linda* (1991) 1 Cal.App.4th 954, 968. Pursuant to Government Code section 65589.5(b), "[i]t is the policy of the state that a local government not reject or make infeasible housing development projects…without a thorough analysis of the economic, social, and environmental effects of [denial]." The Legislature has further noted that denial of housing can result in "lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration." Government Code, Section 65589.5(a)(1)(C).

Variance

Government Code 65906 establishes that "[v]ariances from the terms of the zoning ordinances shall be granted only when, because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification. … Any variance granted shall be subject to such conditions as will assure that the adjustment thereby authorized shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such property is situated. … A variance shall not be granted for a parcel of property which authorizes a use or activity which is not otherwise expressly authorized by the zone regulation

[406] Source: California Office of Planning and Research: The Planner's Training Series: The Conditional Use Permit, page 5. Available at: https://www.opr.ca.gov/docs/theconditionalusepermit_071997.pdf.
[407] Source: California Office of Planning and Research: The Planner's Training Series: The Conditional Use Permit, page 5. Available at: https://www.opr.ca.gov/docs/theconditionalusepermit_071997.pdf.

governing the parcel of property. The provisions of this section shall not apply to conditional use permits."

Accessory Dwelling Unit

An Accessory Dwelling Unit ("ADU") is accessory to a primary residence and has complete independent living facilities for one or more persons.[408]

Government Code Section 65852(e) establishes four statewide ministerial exemptions to local ADU development standards, which must be approved by the local planning agency without any discretionary planning conditions or additional applicability criteria:

1.) In an existing or proposed single-family residence, "any of" an attached ADU or Junior Accessory Dwelling Unit ("JADU"), or both, provided that: a.) the units are fully contained within the envelopes permitted of local single-family residential design guidelines, or else need expanded by less than 150 square feet in the case of an existing residence, for the sole purpose of adding a means of ingress/egrees; b.) the space has exterior access; c.) the side and rear setbacks are sufficient for fire safety; d.) a JADU meets certain additional requirements.
2.) A detached unit must be smaller than 800 square feet and be subject to certain height limitations.
3.) Multiple ADUs within the portions of existing multifamily dwelling structures that are not currently used as livable space.
4.) Not more than two ADUs that are located on a lot that has an existing or proposed multifamily dwelling, but are detached from that multifamily dwelling and are subject to certain height limitations.

Ministerial planning approvals may still be subject to standard building permit conditions uniformly applied to the class of project, such as requirements concerning circuit sizing, soundproofing at party boundaries, etc.

CEQA Suspension for Wildfire Recovery

In response to the wildfires that struck Los Angeles and Ventura counties in January 2025, Governor Gavin Newsom issued Executive Order N-4-25 on January 12, 2025, implementing sweeping regulatory suspensions to expedite rebuilding efforts. The executive order suspends California Environmental Quality Act review and California Coastal Act permitting for properties and facilities substantially damaged or destroyed by the fires. The suspension applies to reconstruction projects that meet specific criteria: the new construction must occur substantially in the same location as, and not exceed 110% of the original footprint and height of, properties and facilities that were legally established and existing immediately before the

[408] Source: California Department of Housing and Community Development: Accessory Dwelling Unit Handbook. Available at: https://www.hcd.ca.gov/sites/default/files/2022-07/ADUHandbookUpdate.pdf.

emergency. The suspension covers properties affected by the Palisades, Eaton, Hurst, Lidia, Sunset, and Woodley.

Local Regulation

Los Angeles County Code, Title 22 (Planning and Zoning)

Title 22, Planning and Zoning, of the Los Angeles County Code establishes classes of zones for the unincorporated area of the County in order to classify regularly and restrict the location of trades and industries and the locations of buildings of special uses, and the use and area of the premises for the general welfare of the County as regulations for the execution of the General Plan pursuant to Chapters 3 and 4 of Title 7 (Planning and Land Use) of the California Government Code, or any statute superseding those chapters.

Conditional Use Permit

County Code Section 22.14.030 - C defines a Conditional Use, as "uses which because of characteristics peculiar to them, or because of size, technological process or type of equipment, or because of its location with reference to surroundings, street or highway width, traffic generation or other demands on public services, require discretionary consideration relative to placement at specific locations in the (zone or) zones where classified to ensure proper integration with other existing or permitted uses in the same (zone or) zones."

County Code Section 22.160, which governs the grant of an MCUP, establishes these criteria. When the necessary findings may be substantiated, the Review Authority has discretion to "a. Approve the application; b. Approve the application contingent upon compliance with applicable provisions of other ordinances; and c. Impose conditions of use deemed reasonable and necessary to ensure that the approval will be in compliance with any findings made by the Review Authority." (County Code Section 22.222.200).

While CEQA contains a different definition of "substantial evidence," evaluation of compliance with the County Code and findings described therein adheres to case law for which "[s]ubstantial evidence is defined as evidence of 'ponderable legal significance…reasonable in nature, credible, and of solid value[, and]….relevant evidence that a reasonable mind might accept as adequate to support a conclusion.' [Citation.]" *Young v. Gannon* (2002) 97 Cal.App.4th 209, 225. "Only if no reasonable person could reach the conclusion reached by the administrative agency, based on the entire record before it, [are] the agency's findings [] not supported by substantial evidence." *Doe v. Regents of the University of California* (2016) 5 Cal.App.5th 1055, 1073. Such evidence will be upheld as substantial without "weigh[ing] the evidence, consider[ing] the credibility of witnesses, or resolv[ing] conflicts in the evidence or in the reasonable inferences that may be drawn from it." *Ibid*.

Los Angeles County General Plan

As required by Government Code Section 63500, the 2035 County General Plan provides "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning."[409] The General Plan guides growth countywide through goals, policies, and programs that discourage sprawling development patterns; protect areas with hazard, environment and resource constraints; encourage infill development in areas near transit, services and existing infrastructure; and make a strong commitment to ensuring sufficient services and infrastructure. It also lays the foundation for future community-based planning initiatives that will identify additional opportunities for accommodating growth.

The 1980 General Plan preceded the 2035 County General Plan.[410] As attributed in Section 2.3, because the permit applications of the project pre-dated the adoption of the 2035 County General Plan, the 1980 General Plan could have been used as the governing document. However, at the request of the Applicant, in order that the analysis in this EIR not become temporally disjointed, he has requested that the project be analyzed according to all rules and regulations in effect at the time of the Notice of Preparation, as a new permit application would have been, instead of those in effect at the time of application in August of 2014. Pursuant to the 2035 County General Plan, the "applicant may choose whether the application will be reviewed for consistency with the previously adopted General Plan or with this General Plan" and thus is granted discretion to make this decision.[411]

Altadena Community Plan

The Altadena Community Plan establishes a framework of goals, policies, and programs which are designed to provide guidance to those making decisions affecting the allocation of resources, pattern, density, and character of development in Altadena.[412]

Altadena Community Standards

The Altadena Community Standards District ("CSD") is a supplemental district of zoning regulations in the County Code applying to projects in Altadena, compliance with which ensures that new and expanded structures and uses are compatible in size and scale with the surrounding neighborhoods within the unincorporated community of Altadena.

Oak Tree Ordinance

The County Oak Tree Ordinance (County Code Sections 22.174, *et seq*.) was established to recognize oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of oak trees, to ensure that impacts are minimized to the extent feasible and that oak trees are replaced such that a net loss of oak trees is not permitted to occur in the County.

[409] Source: County Department of Regional Planning: 2035 County General Plan, page 14. Available at: https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.
[410] Source: County Department of Regional Planning: 1980 County General Plan.
[411] Source: County Department of Regional Planning: 2035 County General Plan, Chapter 2, page 16. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/2.0_gp_final-general-plan-ch2.pdf.
[412] Source: County Department of Regional Planning: Altadena Community Plan, page 1-1.

5.10.3 Existing Conditions

As previously described, the project is sited on a vacant, residentially zoned parcel in a residential neighborhood subject to the applicable provisions of the Altadena Community Plan, County General Plan, and County Zoning Code.

5.10.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.10-1**: Physically divide an established community

- **Threshold 5.10-2**: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect
  - For purposes of analysis in this EIR, policies adopted to avoid or mitigate for an environmental effect include a subset[413] of those in the 2035 County General Plan and Altadena Community Plan.
  - For purposes of analysis in this EIR, other regulations adopted, at least in part, to avoid or reasonably limit environmental effects that could be characteristic of residential projects, include the Altadena Community Standards Ordinance (County Code Section 22.306), Hillside Management Area Ordinance (County Code Section 22.104), Low Impact Development Ordinance (County Code Section 12.84), Stormwater and Runoff Pollution Control Ordinance (County Code Section 12.80), Noise Control Ordinance (County Code Section 12.08), Building Code and Residential Code Ordinances (County Code Titles 26 and 30), and the Green Building Standards Ordinance (County Code Title 31).

As it relates to the analysis of conflict, a "general and specific plans attempt to balance a range of competing interests. It follows that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. An agency, therefore, has the discretion to approve a [project] even though the [project] is not consistent with all of a…plan's policies*." Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1510-1511. *See also Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719. "[T]he General Plan is 'a statement of policy to govern *future regulations*.' " (emphasis added) *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 541. Pursuant to the Office of Planning and Research General Plan Guidance, "given the long-term nature of a general plan, its diagrams and text should be general enough to allow a

[413] Note: As the project does not conflict with any plan policies, this analysis does not attempt to distinguish between policies created for the purpose of avoiding or mitigating a significant physical effect on the environment and policies enacted for social and other purposes.

degree of flexibility in decision-making as times change."[414] As such, it is not intended to be a regulatory document, requiring a narrow statutory construction of every goal or policy described therein. A Lead Agency's interpretation and application of their General Plan will only be overturned if no reasonable person could have reached the same conclusion. *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 142; *San Franciscans Upholding the Downtown Plan v. City & County of San Francisco* (2002) 102 Cal.App.4th 656, 677; *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1192.

In addition, the Office of Planning and Research guides that a conflict is not *ipso facto* a significant effect, but must also result in some significant physical effect on the environment. As such, land use consistency conclusions inherently involve a two-step process that asks (1) whether there is a plan conflict, and (2) whether there is "any adverse environmental impact that might result from a conflict."[415] General Plans incorporate a broad range of elements, which include a host of competing policy directives, including environmental issues, social issues, socioeconomic issues, resource management issues, military issues, etc. (Government Code, Section 65302). However, CEQA's statutory scheme calls for an analysis of "significant effects on the environment of a project" (CEQA Section 21002.1(a)), and the "environment" is defined as "the physical conditions which exist within the area which will be affected by a proposed project." (CEQA Section 21060.5). As such, plan policies not associated with a physical effect within the area affected by the project are not within the ambit of analysis under CEQA.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.10-3**: Conflict with adopted environmental plans and goals of the community where it is located
  - For purposes of analysis in this EIR, adopted environmental plans and goals are as defined in Threshold 5.10-2.

- **Threshold 5.10-4**: Disrupt or divide the physical arrangement of an established community

- **Threshold 5.10-5**: Conflict with established recreational, educational, religious or scientific uses of the area

5.10.5 Impact Analysis

Methodology

[414] Source: California Office of Planning and Research: General Plan Guidelines, page 52. Available at: http://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.
[415] Source: California Office of Planning and Research: Initial Statement of Reasons for Regulatory Action – Amendments and Additions to the State CEQA Guidelines, page 73. Available at: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/update2018/initial-statement-of-reasons.pdf.

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to land use and planning first identifies the land use policies, development standards, and entitlement burdens of proof governing the project, as well as mediation of the pre-existing regulatory framework. Compliance of the project with every policy in the County General Plan and Altadena Community Plan that applies to development of a new single-family home on a vacant lot is attributed. Compliance of the project with the burdens of proof required for issuance of a Minor Conditional Use Permit and Oak Tree Permit is attributed. Compliance of the project with the generally applicable development standards specified by County Code for single-family homes is attributed. Compliance of the project with the Altadena Community Standards and development regulations is attributed, including height, number of stories above grade, yard setbacks, gross structural area, the number of covered parking spaces, and application processing. The proposed project is exempt from the Hillside Management Area Ordinance pursuant to County Code Section 22.104.030(A), though the optional compliance of the project with the Hillside Management Area findings and Sensitive Design Guidelines is attributed as additional substantial evidence of the rationale for and compatibility of the design.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-LU-1: All attributes of the construction and occupancy of the project must comply with all applicable provisions of the California Building Code, Uniform Fire Code, County Code, and other applicable codes and ordinances.

PDF-LU-1: Prior to beginning construction, the Applicant proposes to provide a courtesy notification letter to all residential structures located within 200 feet of the project footprint of development. The notification shall include a start date for construction; the types of activities that will be occurring during construction; a simple, non-technical summary of the constraints that govern the project; and contact information for the Applicant and for the County point(s) of contact to which residents may address questions or concerns relating to the constraints for the project.

Impact Discussion

- **Threshold 5.10-1**: Physically divide an established community; and
- **Threshold 5.10-4**: Disrupt or divide the physical arrangement of an established community

The project would be expected to result in no adverse impacts under these thresholds from disrupting or dividing the physical arrangement of an established community.

General and Project-specific Analysis

The 2035 County General Plan EIR found that projects in urbanized areas of the County would be expected to improve connectivity and density to a greater extent than any incidental division, stating that, “[u]nlike the roadways proposed for the more rural areas of Los Angeles County,

those proposed for the heavily urbanized portions of Los Angeles County (the East San Gabriel Valley, Gateway, Metro, San Fernando Valley, West San Gabriel Valley, and Westside Planning Areas) would traverse existing communities. These highways include roadways proposed to be widened (or otherwise improved) and roadways that would be built where no current roadway exists. Although such projects would involve the displacement of existing land uses, they would generally be constructed to increase access and connectivity in established communities, not divide them."[416] Consequently, "[i]mpacts would be less than significant."[417]The proposed project is located in an area developed with single-family residences surrounding the project parcel, which would not be divided.

- **Threshold 5.10-2**: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect
- **Threshold 5.10-3**: Conflict with adopted environmental plans and goals of the community where it is located

The project would be expected to result in no adverse impacts under these thresholds from conflict with the goals or policies of an applicable land use or environmental plan or regulation for the purpose of avoiding or mitigating an environmental effect.

Project-specific Analysis

The project would be consistent with the applicable policies of the County General Plan (*see* Table 5-11: County General Plan Policy Consistency Analysis) and Altadena Community Plan (*see* Table 5-12: Altadena Community Plan Policy Consistency Analysis). The proposed project is consistent with its zoning designation of R-1-10000, permitting one single-family residence on a minimum 10,000 square foot lot, and with the lower density designation in the Altadena Community Plan for one dwelling unit per gross acre. The proposed project complies with all applicable development standards in the County Code, including those constraining height, number of stories above grade, yard setbacks, gross structural area and covered parking. Therefore, the project would not conflict with an applicable land use plan, policy or regulation, nor conflict in a manner that may have an adverse physical effect on the environment.

Los Angeles County General Plan

The consistency analysis in Table 5-11: County General Plan Policy Consistency Analysis evaluates the compliance of the project with the policies that implement the 2035 County General Plan's goals. Because a General Plan considers a range of development with many impacts and considerations that are not intended for or applicable to single-family residences, some General Plan topics contain policies that are uniformly irrelevant to this analysis. These include: General Plan Amendments, Specific Plans, Regional and Community-Based Planning Initiatives, Employment Generating Uses, Sustainable Subdivisions, Complete Streets, Active

[416] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.10-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[417] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.10-35. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Transportation Design, Innovative Street Design, Transit Efficiency and Multimodal Transportation, Travel Demand Management, Land Use and Transportation, Transportation Funding, Goods Movement, Environmentally Sensitive Design, Rural Streets, Agricultural Resources, Sustainable Agricultural Practices, Mineral Resource Zone Protection, Mineral Extraction, Park Programming, Park Management, Collaboration and Financing of Parks, Mass Care and Shelters, Parkland Acquisition and Dedication, Parkland Development, Trail System, Park Resource Preservation, Education and Programming at Parks, Sustainable Parks System, Early Care and Educational Facilities, Library System, Target Industries, County Incentives for Businesses, Industrial Land, Business and Environmental Justice, Streamlined Permit Processing, Agriculture, Infrastructure Improvements, Economic Development Strategies, Commercial/Industrial Infill Development, Education, Job Training and Coordinated Economic Development. Other General Plan topics contain a mix of policies that are applicable and inapplicable, and these topics are addressed with any irrelevant policies attributed as such.

The Applicant has requested that this EIR analyze the current 2035 County General Plan, though the project's application and an earlier Initial Study for the project pre-dated adoption of the 2035 County General Plan and incorporated analysis derived from the 1980 County General Plan. Pursuant to the 2035 County General Plan, the "applicant may choose whether the application will be reviewed for consistency with the previously adopted General Plan or with this General Plan" and thus is granted discretion to make this decision.[418]

[418] Source: County Department of Regional Planning: 2035 County General Plan, Chapter 2, page 16. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/2.0_gp_final-general-plan-ch2.pdf.

Table 5-11: County General Plan Policy Consistency Analysis

Topic	Policy No.	General Plan Policy	Analysis
Land Use Element			
Growth Management	LU 3.1	Encourage the protection and conservation of areas with natural resources, and SEAs.	The proposed project footprint of development has been designed on the eastern portion of the project parcel in order to avoid the SEA referenced around the riparian environment on the western portion of the project parcel, minimizing encroachment and removal of the oak woodlands on the project parcel and conserving natural resources to the extent reasonably feasible for this zoned usage. The proposed project conserves the vast majority of woodlands resources on the project parcel and permanently expands the spatial area and density of these resources.
Growth Management	LU 3.2	Discourage development in areas with high environmental resources and/or severe safety hazards.	The proposed project footprint of development has been designed to avoid the more intact riparian habitat on the project parcel with higher value biological resources. No severe safety hazards to future residents of the project or to any others were identified in this EIR. While the proposed project is sited in a VHFHSZ, the proposed project incorporates all requirements that mediate the interaction of single-family residences with elevated wildfire risk.
Growth Management	LU 3.3	Discourage development in undeveloped areas where infrastructure and public services do not exist, or where no major infrastructure projects are planned, such as state and/or federal highways.	The proposed project is sited on a parcel zoned for single-family residential use within a developed area adjacent to an existing road surrounded by single-family residences that is currently served by infrastructure and public services.
Infill Development	LU 4.1	Encourage infill development in urban and suburban areas on vacant, underutilized, and/or brownfield sites.	The proposed project is surrounded by developed residential parcels to the east, north and west and a vacant residential parcel to the south and is located in an “urbanized area” pursuant to CEQA. The construction of a home consistent with the zoning of this lot would promote the goal of efficiently augmenting the housing supply with infill development.
Infill Development	LU 4.2	Encourage the adaptive reuse of underutilized structures and the revitalization of older, economically distressed neighborhoods.	The project parcel does not contain any underutilized structures and is not located in an economically distressed neighborhood.

Topic	Policy No.	General Plan Policy	Analysis
Infill Development	LU 4.3	Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.	As attributed in Section 5.16.3, the proposed project is adequately served by public transportation, including a bus stop less than 0.5 miles distant connecting to major public transportation routes in Pasadena, and the siting of the project was selected by the Applicant to enable him to walk to and from work each day.
Infill Development	LU 4.4	Encourage mixed use development along major commercial corridors in urban and suburban areas.	The proposed project is not located along a major commercial corridor.
Community-Serving Uses	LU 5.1	Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.	The project parcel is zoned for low-intensity development in a residential neighborhood with a mix of zoning densities, building types and styles. The proposed project is compatible with its single-family residential land use designation.
Community-Serving Uses	LU 5.2	Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional and local needs.	Because the project parcel land use designation and zoning would conflict with usage for commercial or retail services and public facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Community-Serving Uses	LU 5.3	Support a mix of land uses that promote bicycling and walking and reduce VMTs.	The proposed project is located in a region with a high ratio of jobs to housing and would therefore contribute to reduced VMT. The proposed project is located within walking and bicycling distance less than a half mile from employment opportunities at the Jet Propulsion Laboratory.
Community-Serving Uses	LU 5.4	Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.	Because the project parcel land use designation and zoning would conflict with usage for community-serving commercial facilities, the proposed project is not affected by, nor does it conflict with, this policy.

Topic	Policy No.	General Plan Policy	Analysis
Community-Serving Uses	LU 5.5	Ensure that all households have access to a sufficient supply of quality early care and education and supervised school-age enrichment options for children from birth to age 13.	As attributed in Section 5.14.3, the proposed project is adequately served by public facilities, including public schools for any future residents who may be of school age.
Community-Serving Uses	LU 5.6	Reduce regulatory and other barriers to early care and education facilities.	Because the project parcel land use designation and zoning would conflict with usage for early care and education facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Community-Serving Uses	LU 5.7	Direct resources to areas that lack amenities, such as transit, clean air, grocery stores, bikeways, parks, and other components of a healthy community.	The proposed project is sited in a residential neighborhood with proximity to typical components of a healthy community.
Community-Serving Uses	LU 5.8	Encourage farmers markets, community gardens, and proximity to other local food sources that provide access to healthful and nutritious foods.	Because the project parcel land use designation and zoning would conflict with usage for markets and gardens, the project is not affected by, nor does it conflict with, this policy.
Rural Character	LU 6.1	Protect rural communities from the encroachment of incompatible development that conflict with existing land use patterns and service standards.	The proposed project is sited in a suburban residential neighborhood and would be consistent with this existing land use pattern and with the service standards of the similar, surrounding development. The project would be consistent with the zoning and land use density of both the County General Plan and Altadena Community Plans.
Rural Character	LU 6.2	Encourage land uses and developments that are compatible with the natural environment and landscape.	The proposed project has been sensitively designed to minimize the footprint of development, introducing less than 3% of new impervious surface area to the site; use the existing oak trees to help screen the home from view; utilize coloration that blends with the environment; and to minimize oak tree removal.
Rural Character	LU 6.3	Encourage low density and low intensity development in rural areas that is compatible with rural community character, preserves open space, and conserves agricultural	The proposed project has been sensitively designed with a development footprint that is less than 5% of the project parcel; to use the existing oak trees to help screen the home from view; utilize coloration that blends with the environment; and to minimize oak tree removal. The proposed

Topic	Policy No.	General Plan Policy	Analysis
		land.	project is consistent with the zoning and land use density of both the County General Plan and Altadena Community Plans.
Land Use Compatibility	LU 7.1	Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.	The construction of a single-family home on a residentially zoned lot in a residential neighborhood is not an incompatible land use.
Land Use Compatibility	LU 7.2	Protect industrial parks and districts from incompatible uses.	Because the project parcel land use designation and zoning would conflict with usage for industrial parks, the proposed project is not affected by, nor does it conflict with, this policy.
Land Use Compatibility	LU 7.3	Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.	Because the project parcel land use designation and zoning would conflict with usage for public and semi-public facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Land Use Compatibility	LU 7.4	Ensure land use compatibility in areas adjacent to military installations and where military operations, testing, and training activities occur.	The proposed project is not sited adjacent to any military installation or military operations.
Land Use Compatibility	LU 7.5	Ensure land use compatibility in areas adjacent to mineral resources where mineral extraction and production, as well as activities related to the drilling for and production of oil and gas, may occur.	The proposed project is not sited adjacent to any permitted mineral extraction or production activities.
Land Use Compatibility	LU 7.6	Ensure that proposed land uses located within Airport Influence Areas are compatible with airport operations through compliance with airport land use compatibility plans.	The proposed project is not sited within an Airport Influence Area.

Topic	Policy No.	General Plan Policy	Analysis
Land Use Compatibility	LU 7.7	Review all proposed projects located within Airport Influence Areas for consistency with policies of the applicable airport land use compatibility plan.	The proposed project is not sited within an Airport Influence Area.
Community Design	LU 10.1	Encourage community outreach and stakeholder agency input early and often in the design of projects.	The proposed project was subjected to three opportunities for public review and testimony by the Altadena Town Council and an additional five opportunities for public review and testimony in the course of public hearings administered by the County, prior to its original approval by the Board. This EIR and associated conditional uses must also be subjected to public review in accordance with CEQA, prior to approval. The project applicant solicited design feedback before finalizing the design and responded to requests to reduce the footprint and height of the project, which had already been well within design parameters.
Community Design	LU 10.2	Design development adjacent to natural features in a sensitive manner to complement the natural environment.	The proposed project has been sensitively designed to minimize the footprint of development, introducing less than 3% of new impervious surface area to the project parcel; using the existing oak trees to help screen the home from view; utilizing coloration that blends the home into the environment; and minimizing oak tree removal.
Community Design	LU 10.3	Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing, or ornament.	The surrounding area contains a mix of architectural styles with corresponding variation in coloring, massing, façade material and vegetative screening. Of the four immediately adjacent homes along Canyon Crest Road, the frontage of three are as high or higher above the street grade plane than the project's frontage; the frontage of one is taller than the project's frontage, presenting a 2.5-story façade across its width; cladding coloration includes yellow, brown and off-white, of wood and stucco material. The project has considered this existing environment and was designed to present a visual massing from the road that is consistent with other one and two-story profiles these homes present to public vantages. The home transitions from a two-story profile to a one-story profile above the street grade plane and is designed in a contemporary, split-level style in order to comply with the HMA Sensitive Design Guidelines and minimize impacts to oak trees on the site.

Topic	Policy No.	General Plan Policy	Analysis
Community Design	LU 10.4	Promote environmentally-sensitive and sustainable design.	The proposed project exceeds modern efficiency standards and incorporates active and passive sustainability features, along with durable, long-lived materials.
Community Design	LU 10.5	Encourage the use of distinctive landscaping, signage and other features to define the unique character of districts, neighborhoods or communities, and engender community identity, pride and community interaction.	No distinctly characteristic landscaping, signage, or other features characterize the neighborhood, which contains a mix of residential and landscaping styles. The most distinctive feature or character of the neighborhood is the presence of oak trees and other vegetation throughout sloping terrain on residential lots and in close proximity to existing residences, with which the project remains consistent.
Community Design	LU 10.6	Encourage pedestrian activity through the following: • Designing the main entrance of buildings to front the street; • Incorporating landscaping features; • Limiting masonry walls and parking lots along commercial corridors and other public spaces; • Incorporating street furniture, signage, and public events and activities; and • Using wayfinding strategies to highlight community points of interest.	Because the project parcel land use designation and zoning would conflict with usage for pedestrian activity, the proposed project is not affected by, nor does it conflict with, this policy.
Community Design	LU 10.7	Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities.	Because the project parcel land use designation and zoning would conflict with usage for public spaces, the proposed project is not affected by, nor does it conflict with, this policy.

Topic	Policy No.	General Plan Policy	Analysis
Community Design	LU 10.8	Promote public art and cultural amenities that support community values and enhance community context.	Because the project parcel land use designation and zoning would conflict with usage for cultural amenities, the proposed project is not affected by, nor does it conflict with, this policy.
Community Design	LU 10.9	Encourage land uses and design that stimulate positive and productive human relations and foster the achievement of community goals.	Because the project parcel land use designation and zoning would conflict with community usage, the proposed project is not affected by, nor does it conflict with, this policy.
Community Design	LU 10.10	Promote architecturally distinctive buildings and focal points at prominent locations, such as major commercial intersections and near transit stations or open spaces.	To the extent the architecture of the proposed project is distinctive and sited adjacent to open space, it is consistent with this policy.
Community Design	LU 10.11	Facilitate the use of streets as public space for activities that promote civic engagement, such as farmers markets, parades, etc.	Because the project parcel land use designation and zoning would conflict with public usage, the proposed project is not affected by, nor does it conflict with, this policy.
Community Design	LU 10.12	Discourage gated entry subdivisions (“gated communities”) to improve neighborhood access and circulation, improve emergency access, and encourage social cohesion.	Because the project parcel land use designation and zoning would conflict with usage for a gated subdivision, the proposed project is not affected by, nor does it conflict with, this policy.
Community Design	LU 10.13	Discourage flag lot subdivisions unless designed to be compatible with the existing neighborhood character.	Because the project parcel land use designation and zoning would conflict with usage for a flag lot subdivision, the proposed project is not affected by, nor does it conflict with, this policy.
Energy Efficient Development	LU 11.1	Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies.	The proposed project incorporates an active roof-mounted solar system on roof facets that were optimized for solar performance, also incorporating passive ventilation techniques and windows with either low-E coating to minimize heat transfer or appropriate overhangs for passive shading and heating according to the season.
Energy Efficient Development	LU 11.2	Support the design of developments that provide substantial tree canopy cover, and utilize light-colored paving materials and energy-efficient roofing	The proposed project retains oak tree canopy that provide significant shading of the home and also incorporates an energy efficient, standing seam “cool roof.”

Topic	Policy No.	General Plan Policy	Analysis
		materials to reduce the urban heat island effect.	
Energy Efficient Development	LU 11.3	Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.	The proposed project has been designed with a "shed roof" profile of varying facets that were optimized for the extent and orientation of solar gain of the roof-mounted solar system.
Air Quality Element			
Air Pollutants	AQ 1.1	Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.	The construction and operation of a single-family home on a residentially zoned lot would not be expected to appreciably increase health risks from industrial toxic or hazardous air pollutant emissions.
Air Pollutants	AQ 1.2	Encourage the use of low or no volatile organic compound ("VOC") emitting materials.	All paints, fluids and other coatings for the project would be expected to low VOC pursuant to SCAQMD requirements.
Air Pollutants	AQ 1.3	Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.	The project parcel is currently vacant and requires no demolition activities. Inorganic and biological emissions would be expected to be minimized by performing all grading with hand elements, minimizing fugitive dust.
Air Pollutants	AQ 1.4	Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.	The project would be expected to contribute negligibly to inventories or conditions affecting air quality warnings and would be consistent with goals seeking to reduce air quality impacts, including reducing VMT.
Air Quality, Land Use and Transportation	AQ 2.1	Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities	The project parcel is not located in the vicinity of major sources of air pollution. The nearest freeway is U.S. Interstate 210, more than 1.7 miles southeast of the project parcel.

Topic	Policy No.	General Plan Policy	Analysis
		within proximity to major sources of air pollution, such as freeways.	
Air Quality, Land Use and Transportation	AQ 2.2	Participate in, and effectively coordinate the development and implementation of community and regional air quality programs.	The project would contribute negligibly to inventories or conditions affecting air quality and is consistent with goals seeking to reduce air quality impacts, including reducing VMT.
Air Quality, Land Use and Transportation	AQ 2.3	Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.	As the proposed project is designed to minimize the footprint of development to less than 5% of the project parcel, the removal of existing vegetation would be minimized to the extent feasible.
Air Quality, Land Use and Transportation	AQ 2.4	Coordinate with different agencies to minimize fugitive dust from different sources, activities, and uses.	Performing all grading with hand elements would minimize fugitive dust. Standard conditions applied as part of the drainage and grading plan check process would further minimize fugitive dust from disturbed soil areas.
Climate Change	AQ 3.1	Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.	The proposed project helps to implement many of the 26 CCAP local actions, including Green Building Development, Solar Installations, Electric Vehicle Infrastructure, and parts of other actions. As a net-zero, all-electric home, the proposed project would help to fulfill greenhouse gas emission reduction goals.
Climate Change	AQ 3.2	Reduce energy consumption in County operations by 20 percent by 2015.	The proposed project would help to implement this policy by adding a net-zero home without any additional net energy consumption.
Climate Change	AQ 3.3	Reduce water consumption in County operations.	Pursuant to County Green Building Code practices, all fixtures would be efficient, low-flow devices, and landscaping irrigation needs would be minimized with the use of drought-tolerance species.
Climate Change	AQ 3.4	Participate in local, regional and state programs to reduce greenhouse gas emissions.	As a private single-family residence, policies affecting programs to reduce greenhouse gas emissions would not be expected to be pertinent to the project.
Climate Change	AQ 3.5	Encourage energy conservation in new development and municipal operations.	The proposed project must comply with all state and County Green Building Code standards and has been designed as a net-zero energy home.

Topic	Policy No.	General Plan Policy	Analysis
Climate Change	AQ 3.6	Support rooftop solar facilities on new and existing buildings.	The proposed project has been designed with a "shed roof" profile of varying facets that were optimized for the extent and orientation of solar gain of the roof-mounted solar system.
Climate Change	AQ 3.7	Support and expand urban forest programs within the unincorporated areas.	Because the project parcel land use designation and zoning would conflict with usage for parkland comprising an urban forest, the proposed project is not affected by, nor does it conflict with, this policy.
Climate Change	AQ 3.8	Develop, implement, and maintain countywide climate change adaptation strategies to ensure that the community and public services are resilient to climate change impacts.	The proposed project would help to implement many of the 26 CCAP local actions, including Green Building Development, Solar Installations, Electric Vehicle Infrastructure, and parts of other actions. As a net-zero, all-electric home, the project would help to fulfill climate change reduction goals.
Conservation and Natural Resources Element			
Open Space Preservation and Conservation of Natural Areas	C/NR 1.1	Implement programs and policies that enforce the responsible stewardship and preservation of dedicated open space areas.	Because the project parcel land use designation and zoning conflicts with usage for open space, the proposed project is not affected by, nor does it conflict with, this policy.
Open Space Preservation and Conservation of Natural Areas	C/NR 1.2	Protect and conserve natural resources, natural areas, and available open spaces.	The proposed project footprint of development has been designed to avoid the more intact riparian habitat on the project parcel of moderate quality for some species. In addition, the home has been designed to minimize encroachment and removal of the oak woodlands on the project parcel, thus conserving this natural resource to the extent feasible for this zoned usage. The nearby Angeles National Forest and Arroyo Seco, as well as additional parcels in the vicinity of the project, have already been designated by the County or the City of Pasadena as protected open spaces. The siting of the proposed project retains views of the canyon from Canyon Crest Road, and the project was designed to descend with the topography to reduce its visual impacts. Sightlines across the volume of the proposed project are presently obscured to a substantial extent by oak tree canopy. The canyon itself would remain open space, unobstructed across the majority of public vantages across the project parcel.

Topic	Policy No.	General Plan Policy	Analysis
Open Space Acquisition	C/NR 1.3	Support the acquisition of new available open space areas. Augment this strategy by leveraging County resources in concert with the compatible open space stewardship actions of other agencies, as feasible and appropriate.	Because the project parcel land use designation and zoning conflicts with usage for open space, the project is not affected by, nor does it conflict with, this policy.
Open Space Acquisition	C/NR 1.4	Create, support and protect an established network of dedicated open space areas that provide regional connectivity, between the southwestern extent of the Tehachapi Mountains to the Santa Monica Mountains, and from the southwestern extent of the Mojave Desert to Puente Hills and Chino Hills.	The project is not sited in these areas of regional connectivity.
Open Space Acquisition	C/NR 1.5	Provide and improve access to dedicated open space and natural areas for all users that considers sensitive biological resources.	Because the project parcel land use designation and zoning conflicts with usage for open space, the proposed project is not affected by, nor does it conflict with, this policy.
Open Space Acquisition	C/NR 1.6	Prioritize open space acquisitions for available lands that contain unique ecological features, streams, watersheds, habitat types and/or offer linkages that enhance wildlife movements and genetic diversity.	Because the project parcel land use designation and zoning conflicts with usage for open space, the project is not affected by, nor does it conflict with, this policy.
Open Space Collaboration and Financing	C/NR 2.1	Establish new revenue generating mechanisms to leverage County resources to enhance and acquire available open space and natural areas.	Because the project parcel land use designation and zoning conflicts with usage for open space, the project is not affected by, nor does it conflict with, this policy.

Topic	Policy No.	General Plan Policy	Analysis
Open Space Collaboration and Financing	C/NR 2.2	Encourage the development of multi-benefit dedicated open spaces.	Because the project parcel land use designation and zoning conflicts with usage for open space, the proposed project is not affected by, nor does it conflict with, this policy.
Open Space Collaboration and Financing	C/NR 2.3	Improve understanding and appreciation for natural areas through preservation programs, stewardship, and educational facilities.	Because the project parcel land use designation and zoning conflicts with usage for educational facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Open Space Collaboration and Financing	C/NR 2.4	Collaborate with public, non-profit, and private organizations to acquire and preserve available land for open space.	The proposed project footprint of development has been designed on the eastern portion of the project parcel in order to avoid the SEA on the western portion of the project parcel, minimizing encroachment and removal of the oak woodlands on the project parcel and conserving natural resources to the extent feasible for this zoned usage. The proposed project conserves the vast majority of woodlands resources on the project parcel and permanently expands the spatial area and density of these resources.
Protection of Biological Resources	C/NR 3.1	Conserve and enhance the ecological function of diverse natural habitats and biological resources.	The proposed project would result in a net expansion of oak woodlands on the project parcel, enhancing this resource in an ecologically superior setting adjacent to a riparian corridor. The proposed project is sited adjacent to existing development at a similar offset to the riparian habitat on the project parcel and would not be expected to adversely impact this habitat.
Protection of Biological Resources	C/NR 3.2	Create and administer innovative County programs incentivizing the permanent dedication of SEAs and other important biological resources as open space areas.	The proposed project is not located within an SEA and would not be subject to SEATAC review. In addition, the home has been designed to minimize encroachment and removal of the oak woodlands on the project parcel, thus conserving this natural resource to the extent feasible for this zoned usage.
Protection of Biological Resources	C/NR 3.3	Restore upland communities and significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function - acknowledging the	The proposed project has been designed to avoid the riparian habitat and waters on the project parcel. While a portion of a stand of oak woodlands is affected by the proposed project, the existing condition of the oak woodlands is severely degraded by a history of residential impacts, and the proposed project's rehabilitation of these impacts and expansion of oak woodlands through compensatory plantings provide restoration.

Topic	Policy No.	General Plan Policy	Analysis
		importance of incrementally restoring ecosystem values when complete restoration is not feasible.	
Protection of Biological Resources	C/NR 3.4	Conserve and sustainably manage forests and woodlands.	In planting at least 10 oak trees, the proposed project would result in a net expansion of oak woodlands on the project parcel, enhancing this resource in an ecologically valuable setting adjacent to a riparian corridor.
Protection of Biological Resources	C/NR 3.5	Ensure compatibility of development in the National Forests in conjunction with the U.S. Forest Service Land and Resource Management Plan.	The proposed project is not sited in a National Forest.
Protection of Biological Resources	C/NR 3.6	Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.	The proposed project is not located within an SEA, wildlife corridor or nursery site and would not be subject to SEATAC review. In addition, the proposed project has been designed to minimize encroachment and removal of the oak woodlands on the project parcel, thus conserving this natural habitat to the extent feasible for this zoned usage.
Protection of Biological Resources	C/NR 3.7	Participate in inter-jurisdictional collaborative strategies that protect biological resources.	The proposed project footprint of development has been designed on the eastern portion of the project parcel in order to avoid the SEA on the western portion of the project parcel, conserving natural resources to the extent feasible for this zoned usage. The proposed project conserves the vast majority of woodlands resources on the project parcel and permanently expands the spatial area and density of these resources.
Site Sensitive Design	C/NR 3.8	Discourage development in areas with identified significant biological resources, such as SEAs.	The proposed project is not located within an SEA. While a portion of a stand of oak woodlands is affected by the proposed project, the existing condition of the oak woodlands is severely degraded by a history of residential impacts, and the proposed project's rehabilitation of these impacts and expansion of oak woodlands through compensatory plantings provide restoration.
Site Sensitive Design	C/NR 3.9	Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:	The proposed project footprint of development is not located within an SEA.

Topic	Policy No.	General Plan Policy	Analysis
		• Preservation of biologically valuable habitats, species, wildlife corridors and linkages; • Protection of sensitive resources on the site within open space; • Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats; • Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite); • Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity; • Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and • Consideration of the continuity of onsite open space with adjacent open space in project design.	
Site Sensitive Design	C/NR 3.10	Require environmentally superior mitigation for unavoidable impacts on biologically sensitive areas, and permanently preserve mitigation sites.	Because the project replacement plantings would be located in an SEA and protected in perpetuity by the Oak Tree Ordinance, and because the proposed project would build out the parcel to its permitted density, no further development affecting replacement plantings would be expected, and any further proposed development would be subject to further

Topic	Policy No.	General Plan Policy	Analysis
			discretionary approval and CEQA review ensuring continuity of mitigation and requiring satsisfaction of burdens of proof as to the necessity.
Site Sensitive Design	C/NR 3.11	Discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.	The proposed project has been designed to avoid the riparian habitat and waters on the project parcel. While a portion of a stand of oak woodlands is affected by the proposed project, the existing condition of the oak woodlands is severely degraded by a history of residential impacts, and the proposed project's rehabilitation of these impacts and expansion of oak woodlands through compensatory plantings provide restoration.
Woodland Preservation	C/NR 4.1	Preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with a goal of no net loss of existing woodlands.	While a portion of a stand of oak woodlands is affected by the proposed project, the existing condition of the oak woodlands is severely degraded by a history of residential impacts, and the proposed project's rehabilitation of these impacts and expansion of oak woodlands through compensatory plantings are restorative compensation that would ensure a net expansion of oak woodlands on the project parcel. In expressing the policy in terms of "net" loss, a balance of removal and replacement is acknowledged and expected to occur in projects affecting woodland.
Surface Water Protection	C/NR 5.1	Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.	The proposed project is subject to Low Impact Development ("LID") requirements, which include routing all stormwater flows through rain gardens into the same open drainage channel that presently collects sheet runoff and eliminating any impervious surfaces outside the small footprint of the home itself. The existing drainage pattern would thus remain substantially unaltered. As the proposed project design requires all loads to be borne through six piles, and not through any soil bearing surfaces, no permanent soil compaction would be required to implement the proposed project, and an additional mitigation measure has been formulated to remediate whatever marginal compaction occurs during construction staging, which is limited to an area that has already seen many years of use for parking, including by large trucks and other vehicles.
Surface Water Protection	C/NR 5.2	Require compliance by all County departments with adopted Municipal Separate Storm Sewer System	The proposed project is subject to LID requirements, which include routing all stormwater flows through rain gardens into the same open drainage channel that presently collects sheet runoff and eliminating any

Topic	Policy No.	General Plan Policy	Analysis
		("MS4"), General Construction, and point source NPDES permits.	impervious surfaces outside the small footprint of the home itself. The existing drainage pattern would thus remain substantially unaltered.
Surface Water Protection	C/NR 5.3	Actively engage with stakeholders in the formulation and implementation of surface water preservation and restoration plans, including plans to improve impaired surface water bodies by retrofitting tributary watersheds with LID types of BMPs.	The project is subject to Low Impact Development requirements, which include routing all stormwater flows through rain gardens into the same open drainage channel that presently collects sheet runoff and eliminating any impervious surfaces outside the small footprint of the home itself. The existing drainage pattern would thus remain substantially unaltered.
Surface Water Protection	C/NR 5.4	Actively engage in implementing all approved Enhanced Watershed Management Programs/Watershed Management Programs and Coordinated Integrated Monitoring Programs/Integrated Monitoring Programs or other County-involved TMDL implementation and monitoring plans.	Maintaining water quality and stormwater flow balance on the project parcel is consistent with the goals of regional watershed quality protection.
Surface Water Protection	C/NR 5.5	Manage the placement and use of septic systems in order to protect nearby surface water bodies.	The proposed project does not make use of a septic system.
Surface Water Protection	C/NR 5.6	Minimize point and non-point source water pollution.	The project is subject to LID requirements, which include routing all stormwater flows through rain gardens that filter pollutants prior to re-introduction into the same open drainage channel that presently collects sheet runoff. The construction and other operations of the home are not expected to generate significant water pollution.
Surface Water Protection	C/NR 5.7	Actively support the design of new and retrofit of existing infrastructure to accommodate watershed protection goals, such as roadway, railway,	Maintaining water quality and stormwater flow balance on the project parcel is consistent with the goals of regional watershed quality protection.

Topic	Policy No.	General Plan Policy	Analysis
		bridge, and other – particularly – tributary street and greenway interface points with channelized waterways.	
Groundwater Protection	C/NR 6.1	Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.	The project is subject to LID requirements, which include eliminating any impervious surfaces outside the small footprint of the home itself, thus maximizing the infiltration area preserved on the project parcel.
Groundwater Protection	C/NR 6.2	Protect natural groundwater recharge areas and regional spreading grounds.	The project is subject to LID requirements, which include routing all stormwater flows through rain gardens that filter pollutants prior to re-introduction into the same open drainage channel that presently collects sheet runoff. The construction and other operations of the home woould not expected to generate substantial water pollution.
Groundwater Protection	C/NR 6.3	Actively engage in stakeholder efforts to disperse rainwater and stormwater infiltration BMPs at regional, neighborhood, infrastructure, and parcel-level scales.	The project is subject to LID requirements, which include routing all stormwater flows through rain gardens into the same open drainage channel that presently collects sheet runoff and eliminating any impervious surfaces outside the small footprint of the home itself. The existing drainage pattern would thus remain substantially unaltered.
Groundwater Protection	C/NR 6.4	Manage the placement and use of septic systems in order to protect high groundwater.	The proposed project does not make use of a septic system.
Groundwater Protection	C/NR 6.5	Prevent stormwater infiltration where inappropriate and unsafe, such as in areas with high seasonal groundwater, on hazardous slopes, within 100 feet of drinking water wells, and in contaminated soils.	The project parcel is not characterized by high seasonal groundwater, any nearby water well or contaminated soils. While slopes are present on the project parcel, the project would not substantially alter the existing drainage pattern, as its rain gardens contain buffer capacity for design stormwater events, and the rain gardens route stormwater back into the same open drainage channel that presently collects sheet runoff.
Watershed Protection	C/NR 7.1	Support the LID philosophy, which mimics the natural hydrologic cycle using undeveloped conditions as a base, in public and private land use planning and development design.	The project is subject to LID requirements, which include routing all stormwater flows through rain gardens into the same open drainage channel that presently collects sheet runoff and eliminating any impervious surfaces outside the small footprint of the home itself. The existing drainage pattern would thus remain substantially unaltered.

Topic	Policy No.	General Plan Policy	Analysis
Watershed Protection	C/NR 7.2	Support the preservation, restoration and strategic acquisition of available land for open space to preserve watershed uplands, natural streams, drainage paths, wetlands, and rivers, which are necessary for the healthy function of watersheds.	Because the project parcel land use designation and zoning conflicts with usage for open space, the proposed project is not affected by, nor does it conflict with, this policy.
Watershed Protection	C/NR 7.3	Actively engage with stakeholders to incorporate the LID philosophy in the preparation and implementation of watershed and river master plans, ecosystem restoration projects, and other related natural resource conservation aims, and support the implementation of existing efforts, including Watershed Management Programs and Enhanced Watershed Management Programs.	The project is subject to LID requirements, which include routing all stormwater flows through rain gardens into the same open drainage channel that presently collects sheet runoff and eliminating any impervious surfaces outside the small footprint of the home itself. The existing drainage pattern would thus remain substantially unaltered.
Watershed Protection	C/NR 7.4	Promote the development of multi-use regional facilities for stormwater quality improvement, groundwater recharge, detention/attenuation, flood management, retaining non-stormwater runoff, and other compatible uses.	Maintaining water quality and stormwater flow balance on the project parcel would be consistent with the goals of regional watershed quality protection.
Energy Resources	C/NR 12.1	Encourage the production and use of renewable energy resources.	The proposed project incorporates an active roof-mounted solar system on roof facets that were optimized for solar performance, also incorporating passive ventilation techniques and windows with either low-E coating to minimize heat transfer or appropriate overhangs for passive shading and heating according to the season. The project would also incorporate an EV charging station in the garage.
Energy Resources	C/NR 12.2	Encourage the effective management of energy resources, such as ensuring adequate reserves to meet peak demands.	The project would be expected to generate more than its required electricity usage during existing periods of peak demand of the electrical utility (typically the afternoons of the hottest sunny days of the year,

Topic	Policy No.	General Plan Policy	Analysis
			when the project's southwest-facing solar array would be generating at or near peak capacity).
Energy Resources	C/NR 12.3	Encourage distributed systems that use existing infrastructure and reduce environmental impacts.	The proposed project would incorporate an active roof-mounted solar system for distributed energy generation.
Scenic Resource Protection	C/NR 13.1	Protect scenic resources through land use regulations that mitigate development impacts.	The proposed project is not within visual distance of any designated scenic highway, scenic vista, significant ridgeline, hiking or riding trial, public park, public garden or any other public scenic resource. The proposed project complies with all applicable land use regulations and meets the success criteria of the County Hillside Management Area Sensitive Design Guidelines.
Scenic Resource Protection	C/NR 13.2	Protect ridgelines from incompatible development that diminishes their scenic value.	The proposed project is not located on a ridgeline designated significant or otherwise by the General Plan or Altadena Community Standards and is sited at the rim of Millard Canyon adjacent to existing residential development. The proposed project incorporates recommended techniques from the County Hillside Management Area Sensitive Design Guidelines and meets their success criteria for a sensitive design compatible with the hillside setting.
Scenic Resource Protection	C/NR 13.3	Reduce light trespass, light pollution and other threats to scenic resources.	The proposed project is characterized by typical levels of light generation consistent with that of the adjacent single-family residences. Exterior materials for the proposed project are designed to eliminate glare and are colored to blend with the natural vegetation.
Scenic Resource Protection	C/NR 13.4	Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.	Exterior materials for the project would be colored to blend with the oak tree canopy, with doors and soffits of wood finishes that are consistent with the wooded surroundings.
Scenic Resource Protection	C/NR 13.5	Encourage required grading to be compatible with the existing terrain.	The proposed project was designed to follow the existing topography of the terrain without substantial re-grading to create a flattened pad. This plan policy drives the split-level nature of the home. The amount of grading would be nearly one hundred times lower than that required for a CUP in the Altadena Community Standards and nearly one thousand times lower than that required for a CUP in a Hillside Management Area.

Topic	Policy No.	General Plan Policy	Analysis
Scenic Resource Protection	C/NR 13.6	Prohibit outdoor advertising and billboards along scenic routes, corridors, waterways, and other scenic areas.	The proposed project is not within visual distance of any designated scenic highway, scenic vista, significant ridgeline, hiking or riding trial, public park, public garden or any other public scenic resource.
Scenic Resource Protection	C/NR 13.7	Encourage the incorporation of roadside rest stops, vista points, and interpretive displays into projects in scenic areas.	Because the project parcel land use designation and zoning conflicts with usage for roadside facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Hillside Management	C/NR 13.8	Manage development in HMAs to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.	The proposed project is consistent with all Hillside Management Area requirements and with the success criteria of the County Hillside Management Area Sensitive Design Guidelines. The proposed project meets all design requirements for Very High Fire Hazard Severity Zones, all Low Impact Development requirements and Building & Safety Best Management Practices for erosion control, and the geotechnical analysis for the project indicates the required factors of safety for static and dynamic stability are satisfied for the hillside on which the proposed project is sited.
Hillside Management	C/NR 13.9	Consider the following in the design of a project that is located within an HMA, to the greatest extent feasible: • Public safety and the protection of hillside resources through the application of safety and conservation design standards; • Maintenance of large contiguous open areas that limit exposure to landslide, liquefaction and fire hazards and protect natural features, such as significant ridgelines, watercourses and SEAs.	The proposed project is sited at street level amid existing development. The proposed project meets all design requirement for Very High Fire Hazard Severity Zones, all Low Impact Development requirements and Building & Safety Best Management Practices for control of exposure to landslide, liquefaction and fire hazards. The geotechnical analysis for the project indicates the required factors of safety for static and dynamic stability are satisfied for the hillside on which the proposed project is sited.
Hillside Management	C/NR 13.10	To identify significant ridgelines, the following criteria must be considered: • Topographic complexity;	The proposed project is not located within visual proximity of a significant ridgeline designated in the Altadena Community Standards District. The proposed project is located more than a half mile from the

Topic	Policy No.	General Plan Policy	Analysis
		• Uniqueness of character and location; • Presence of cultural or historical landmarks; • Visual dominance on the skyline or viewshed, such as the height and elevation of a ridgeline; and • Environmental significance to natural ecosystems, parks, and trail systems.	nearest designated significant ridgeline, the sight-lines to which are occluded by topography, vegetation and residential development.
Historic, Cultural, and Paleontological Resource Protection	C/NR 14.1	Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.	The proposed project would require a very small amount of grading, which is almost entirely limited to an area of fill that was already disturbed long after any resources of historic, cultural and paleontological value were deposited. Potential impacts would be further reduced through fulfillment of generally applicable 2035 County General Plan measures designed to ensure proper handling in the event such resources are discovered.
Historic, Cultural, and Paleontological Resource Protection	C/NR 14.2	Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.	The proposed project would require a very small amount of grading, which is almost entirely limited to an area of fill that was already disturbed long after any resources of historic, cultural and paleontological value were deposited. Potential impacts would be further reduced through fulfillment of generally applicable 2035 County General Plan measures designed to ensure proper handling in the event such resources are discovered.
Historic, Cultural, and Paleontological Resource Protection	C/NR 14.3	Support the preservation and rehabilitation of historic buildings.	The proposed project parcel is vacant. There are no historic buildings impacted by the project.
Historic, Cultural, and Paleontological Resource Protection	C/NR 14.4	Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).	Native American tribes that requested contact were properly notified and afforded the opportunity to agree that the project's impacts were not expected to be significant.

Topic	Policy No.	General Plan Policy	Analysis
Historic, Cultural, and Paleontological Resource Protection	C/NR 14.5	Promote public awareness of historic, cultural, and paleontological resources.	The proposed project would require a very small amount of grading, which is almost entirely limited to an area of fill that was already disturbed long after any resources of historic, cultural and paleontological value were deposited. Potential impacts would be further reduced through fulfillment of generally applicable 2035 County General Plan measures designed to ensure proper handling in the event such resources are discovered.
Historic, Cultural, and Paleontological Resource Protection	C/NR 14.6	Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.	The proposed project would require a very small amount of grading, which is almost entirely limited to an area of fill that was already disturbed long after any resources of historic, cultural and paleontological value were deposited. Potential impacts would be further reduced through fulfillment of generally applicable 2035 County General Plan measures designed to ensure proper handling in the event such resources are discovered.
Noise Element			
Reducing Noise Impacts	N 1.1	Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.	The proposed project is a single-family home on a residential lot in a residential neighborhood. As such, it is compatible with the identical adjacent usage and expected to generate similar noise levels during the period of occupancy.
Reducing Noise Impacts	N 1.2	Reduce exposure to noise impacts by promoting land use compatibility.	The proposed project is a single-family home on a residential lot in a residential neighborhood. As such, it is compatible with the identical adjacent usage and expected to generate similar noise levels during the period of occupancy.
Reducing Noise Impacts	N 1.3	Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies.	While compliance with the County Noise Ordinance would be expected to minimize impacts to adjacent sensitive receptors to reasonable levels, unexpected excursions would be rectified through fulfillment of generally applicable 2035 General Plan EIR measures designed to compensate for noise violations with reduced duty cycles, shielding, or other options.
Reducing Noise Impacts	N 1.4	Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior	While compliance with the County Noise Ordinance would be expected, unexpected excursions would be rectified through fulfillment of generally applicable 2035 General Plan EIR measures designed to compensate for noise violations with reduced duty cycles, shielding, or other options.

Topic	Policy No.	General Plan Policy	Analysis
		Noise Standards and other applicable noise standards.	
Reducing Noise Impacts	N 1.5	Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or L_{dn}) noise exposure contours.	The proposed project would comply with all provisions of the California Building Code relating to noise insulation.
Reducing Noise Impacts	N 1.6	Ensure cumulative impacts related to noise do not exceed health-based safety margins.	The proposed project would comply with all provisions of the County Code governing the short-term (construction) and long-term (operation) generation of noise in residential projects.
Reducing Noise Impacts	N 1.7	Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.	The proposed project is a single-family residence that would not be expected to create adverse traffic noise impacts from the introduction of 10 daily vehicle trips during the period of occupancy.
Reducing Noise Impacts	N 1.8	Minimize noise impacts to pedestrians and transit-riders in the design of transportation facilities and mobility networks.	While compliance with the County Noise Ordinance would be expected, unexpected excursions would be rectified through fulfillment of generally applicable 2035 General Plan EIR measures designed to compensate for noise violations with reduced duty cycles, shielding, or other options.
Reducing Noise Impacts	N 1.9	Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.	As attributed in Section 5.12, the proposed project would not expected to contribute to noise levels in excess of 65 dBA CNEL at any sensitive receptor, and unexpected excursions would be rectified through fulfillment of generally applicable 2035 General Plan EIR measures designed to compensate for noise violations with reduced duty cycles, shielding, or other options.
Reducing Noise Impacts	N 1.10	Orient residential units away from major noise sources (in conjunction with applicable building codes).	The proposed project is not sited adjacent to any major noise sources.

Topic	Policy No.	General Plan Policy	Analysis
Reducing Noise Impacts	N 1.11	Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.	The proposed project is not sited adjacent to any commercial/light industrial uses.
Reducing Noise Impacts	N 1.12	Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.	The proposed project is not sited adjacent to any major transportation facilities.
Safety Element			
Geotechnical Hazards	S 1.1	Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.	No known active faults cross the project parcel, which is not located within an Alquist-Priolo Fault Rupture Hazard Study Zone.
Geotechnical Hazards	S 1.2	Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.	No known active faults cross the project parcel, which is also not located within an Alquist-Priolo Fault Rupture Hazard Study Zone.
Geotechnical Hazards	S 1.3	Require developments to mitigate geotechnical hazards, such as soil instability and landsliding, in Hillside Management Areas through siting and development standards.	The proposed project would comply with all requirements of the County Department of Public Works Geotechnical and Materials Engineering Division plan check review process and with the recommendations of the geotechnical report dated April 4, 2014 and addendum dated March 7, 2016.
Geotechnical Hazards	S 1.4	Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural and human loss due to seismic hazards.	The proposed project does not impact any unreinforced masonry structure.

Topic	Policy No.	General Plan Policy	Analysis
Flood Hazards	S 2.1	Discourage development in the County's Flood Hazard Zones.	The proposed project is not sited within a designated Flood Hazard Zone.
Flood Hazards	S 2.2	Discourage development from locating downslope from aqueducts.	The proposed project is not located downslope from an aqueduct.
Flood Hazards	S 2.3	Consider climate change adaptation strategies in flood and inundation hazard planning.	The proposed project is not located in proximity to any hydrological feature that could be altered by climate change so as to affect the project with flooding or inundation.
Flood Hazards	S 2.4	Ensure that developments located within the County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.	The proposed project is not sited within a designated Flood Hazard Zone.
Flood Hazards	S 2.5	Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.	The proposed project would not be expected to be impacted by flooding.
Flood Hazards	S 2.6	Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.	The proposed project would not be expected to be impacted by flooding.
Flood Hazards	S 2.7	Locate essential public facilities, such as hospitals and fire stations, outside of Flood Hazard Zones, where feasible.	The proposed project is not sited within a designated Flood Hazard Zone.
Fire Hazards	S 3.1	Discourage high density and intensity development in VHFHSZs.	Although the proposed project is sited in a VHFHSZ, the development of a single home on a lot of more than one acre zoned for low to medium density development would not contribute substantially to higher density or intensity.
Fire Hazards	S 3.2	Consider climate change implications in fire hazard reduction planning for FHSZs.	The proposed project would comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, fire-rated wall assemblies and windows and Class A roof

Topic	Policy No.	General Plan Policy	Analysis
			coverings. The fuel modification zones for the proposed project already overlap nearly completely with those of existing residences, and no modification in the remaining area would be expected to be required.
Fire Hazards	S 3.3	Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.	The proposed project would comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, fire-rated wall assemblies and windows and Class A roof coverings, provisions that are not expected to impact biological or other resources. The fuel modifications zones for the project already overlap nearly completely with those of existing residences, and no modification in the remaining area would be expected to be required.
Fire Hazards	S 3.4	Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire-resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs.	The proposed project would comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, fire-rated wall assemblies and windows and Class A roof coverings.
Fire Hazards	S 3.5	Encourage the use of low-volume and well-maintained vegetation that is compatible with the area's natural vegetative habitats.	The proposed project would comply with all fuel modification standards designed to create defensible space around the structure and slow the spread of fire. The proposed project landscaping plan incorporates native oak woodlands understory species that are compatible with the existing oak woodlands on the project parcel.
Fire Hazards	S 3.6	Ensure adequate infrastructure, including entrance, exit, and peak load water supply availability for all projects located in FHSZs.	The proposed project's entrance/exit requirements are adequately served by Canyon Crest Road, and fire flow availability has been established for fire hydrants within 100 feet of the project parcel.
Fire Hazards	S 3.7	Site and design developments located within FHSZs, such as in areas located near ridgelines and on hilltops, in a sensitive manner to reduce the wildfire risk.	The proposed project is sited near street level amid existing development and would augment the defensibility of the space it occupies.
Fire Hazards	S 3.8	Support the retrofitting of existing structures in FHSZs to help reduce the	The proposed project would not affect any existing structures.

Topic	Policy No.	General Plan Policy	Analysis
		risk of structural and human loss due to wildfire.	
Fire Hazards	S 3.9	Adopt by reference the County of Los Angeles Fire Department Strategic Fire Plan, as amended.	The proposed project would not affect the adoption of the County of Los Angeles Fire Department Strategic Fire Plan.
Fire Hazards	S 3.10	Map oak woodlands in Los Angeles County as part of implementation of the Oak Woodlands Conservation Management Plan.	The proposed project would not affect the mapping of oak woodlands in the County.
Fire Hazards	S 3.11	Support efforts to address unique pest, disease, exotic species and other forest health issues in open space areas to reduce fire hazards and support ecological integrity.	Because the project parcel land use designation and zoning conflicts with usage for open space, the proposed project is not affected by, nor does it conflict with, this policy.
Fire Hazards	S 3.12	Support efforts to incorporate systematic fire protection improvements for open space, including facilitation of safe fire suppression tactics, standards for adequate access for firefighting, fire mitigation planning with landowners and other stakeholders, and water sources for fire suppression.	Because the project parcel land use designation and zoning conflicts with usage for open space, the proposed project is not affected by, nor does it conflict with, this policy.
Public Services and Facilities Element			
Sufficient Infrastructure	PS/F 1.1	Discourage development in areas without adequate public services and facilities.	The proposed project is sited in a residential neighborhood with all required utilities available adjacent to the project parcel, and public services and facilities are sized in anticipation of this zoned usage.
Sufficient Infrastructure	PS/F 1.2	Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.	The proposed project is sited in a residential neighborhood with all required utilities available adjacent to the project parcel, and existing public services and facilities are sized in anticipation of this zoned usage.

Topic	Policy No.	General Plan Policy	Analysis
Sufficient Infrastructure	PS/F 1.3	Ensure coordinated service provision through collaboration between County departments and service providers.	The proposed project is sited in a residential neighborhood with all required utilities available adjacent to the project parcel, and existing public services and facilities are sized in anticipation of this zoned usage.
Sufficient Infrastructure	PS/F 1.4	Ensure the adequate maintenance of infrastructure.	The proposed project would facilitate the maintenance of the sewer siphon spanning Millard Canyon by providing a manhole for access with less impact on traffic.
Sufficient Infrastructure	PS/F 1.5	Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages development.	Because the project parcel land use designation and zoning conflicts with usage for public infrastructure, the project is not affected by, nor does it conflict with, this policy.
Sufficient Infrastructure	PS/F 1.6	Support multi-faceted public facility expansion efforts, such as substations, mobile units, and satellite offices.	Because the project parcel land use designation and zoning conflicts with usage for public facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Sufficient Infrastructure	PS/F 1.7	Consider resource preservation in the planning of public facilities.	Because the project parcel land use designation and zoning conflicts with usage for public facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Water Conservation	PS/F 2.1	Support water conservation measures.	The proposed project would make use of water-efficient fixtures as required by the County Green Building Code.
Water Conservation	PS/F 2.2	Support educational outreach efforts that discourage wasteful water consumption.	Because the project parcel land use designation and zoning conflicts with usage for public education, the proposed project is not affected by, nor does it conflict with, this policy.
Water Supply	PS/F 3.1	Increase the supply of water though the development of new sources, such as recycled water, gray water, and rainwater harvesting.	The proposed project would incorporate rain gardens to buffer stormwater discharge from the small impervious area of the project, facilitating groundwater recharge and well supply of the local water purveyor.
Water Supply	PS/F 3.2	Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.	The proposed project would incorporate rain gardens to buffer stormwater discharge in the small impervious area of the project, facilitating groundwater recharge and well supply of the local water purveyor. The use of graywater would not be well-suited to the seasonally intermittent irrigation required of native vegetation existing and proposed for establishment on the project parcel.

Topic	Policy No.	General Plan Policy	Analysis
Sanitary Sewers	PS/F 4.1	Encourage the planning and continued development of efficient countywide sewer conveyance treatment systems.	Because the project parcel land use designation and zoning conflicts with usage for wastewater treatment, the proposed project is not affected by, nor does it conflict with, this policy.
Sanitary Sewers	PS/F 4.2	Support capital improvement plans to improve aging and deficient wastewater systems, particularly in areas where the General Plan encourages development, such as TODs.	Because the project parcel land use designation and zoning conflicts with usage for wastewater systems, the proposed project is not affected by, nor does it conflict with, this policy.
Sanitary Sewers	PS/F 4.3	Ensure the proper design of sewage treatment and disposal facilities, especially in landslide, hillside, and other hazard areas.	The proposed project does not make use of an onsite wastewater treatment system, instead connecting to the existing County sewer main adjacent to the southeast corner of the project parcel.
Sanitary Sewers	PS/F 4.4	Evaluate the potential for treating stormwater runoff in wastewater management systems or through other similar systems and methods.	The proposed project would incorporate rain gardens to filter stormwater discharge in the small impervious area of the project, facilitating groundwater recharge and well supply of the local water purveyor.
Waste Management	PS/F 5.1	Maintain an efficient, safe and responsive waste management system that reduces waste while protecting the health and safety of the public.	Because the project parcel land use designation and zoning conflicts with usage for waste management systems, the proposed project is not affected by, nor does it conflict with, this policy.
Waste Management	PS/F 5.2	Ensure adequate disposal capacity by providing for environmentally sound and technically feasible development of solid waste management facilities, such as landfills and transfer/processing facilities.	Because the project parcel land use designation and zoning conflicts with usage for solid waste management facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Waste Management	PS/F 5.3	Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.	The proposed project is not sited near a solid waste disposal facility.

Topic	Policy No.	General Plan Policy	Analysis
Waste Diversion	PS/F 5.4	Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.	Because the project parcel land use designation and zoning conflicts with usage for solid waste management facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Waste Diversion	PS/F 5.5	Reduce the County's waste stream by minimizing waste generation and enhancing diversion.	Pursuant to SC-USS-1, the proposed project would comply with the County Construction and Demolition Recycling and Reuse Program requirements to minimize the amount of construction waste generated, and would not be expected to generate waste inefficiently.
Waste Diversion	PS/F 5.6	Encourage the use and procurement of recyclable and biodegradable materials.	The project's wooden framing, insulation and metal cladding would be either biodegradable or recyclable.
Waste Diversion	PS/F 5.7	Encourage the recycling of construction and demolition debris generated by public and private projects.	Pursuant to SC-USS-1, the proposed project would comply with the County Construction and Demolition Recycling and Reuse Program requirements to minimize the amount of construction refuse generated and corresponding impacts to landfill resources.
Waste Diversion	PS/F 5.8	Ensure adequate and regular waste and recycling collection services.	Because the project parcel land use designation and zoning conflicts with usage for recycling services, the proposed project is not affected by, nor does it conflict with, this policy.
Waste Diversion	PS/F 5.9	Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.	As attributed in Section 5.17, trash and recyclables containers would be available from the purveyor serving the project parcel.
Utility Infrastructure	PS/F 6.1	Ensure efficient and cost-effective utilities that serve existing and future needs.	The proposed project is sited in a residential neighborhood with all required utilities available.
Utility Infrastructure	PS/F 6.2	Improve existing wired and wireless telecommunications infrastructure.	Because the project parcel land use designation and zoning conflicts with usage for telecommunications facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Utility Infrastructure	PS/F 6.3	Expand access to wireless technology networks, while minimizing visual impacts through co-location and design.	Because the project parcel land use designation and zoning conflicts with usage for telecommunications facilities, the proposed project is not affected by, nor does it conflict with, this policy.

Topic	Policy No.	General Plan Policy	Analysis
Utility Infrastructure	PS/F 6.4	Protect and enhance utility facilities to maintain the safety, reliability, integrity and security of utility services.	Because the project parcel land use designation and zoning conflicts with usage for utility facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Utility Infrastructure	PS/F 6.5	Encourage the use of renewable energy sources in utility and telecommunications networks.	Because the project parcel land use designation and zoning conflicts with usage for utility and telecommunications facilities, the proposed project is not affected by, nor does it conflict with, this policy.
Utility Infrastructure	PS/F 6.6	Encourage the construction of utilities underground, where feasible.	The existing electrical utilities in the vicinity are above grade, and the proposed project eschews a subterranean lateral to minimize impacts to oak trees from trenching.
Utility Infrastructure	PS/F 6.7	Discourage above-ground electrical distribution and transmission lines in hazard areas.	Because the existing electric utility line is located above grade, and because trenching of any utility lateral would be located in the protected zone of oak trees, the proposed project design elects to minimize overall impacts from the use of an above-ground service drop, like all of the other residences in the vicinity.
Utility Infrastructure	PS/F 6.8	Encourage projects that incorporate onsite renewable energy systems.	The proposed project would incorporate an active roof-mounted solar system on roof facets that were optimized for solar performance, also incorporating passive ventilation techniques and windows with either low-E coating to minimize heat transfer or appropriate overhangs for passive shading and heating according to the season. The proposed project would also incorporate an EV charging station in the garage.
Utility Infrastructure	PS/F 6.9	Support the prohibition of public access within, and the limitation of access in areas adjacent to natural gas storage facilities and oil and gas production and processing facilities to minimize trespass and ensure security.	Because the project parcel land use designation and zoning conflicts with usage for natural gas storage, the proposed project is not affected by, nor does it conflict with, this policy.
Utility Infrastructure	PS/F 6.10	Encourage utility siting to be localized and decentralized to reduce impacts; reduce transmission losses; promote local conservation by connecting users to their systems more directly; and reduce system malfunctions.	Because the project parcel land use designation and zoning conflicts with usage for utility facilities, the proposed project is not affected by, nor does it conflict with, this policy.

Altadena Community Plan

The consistency analysis in Table 5-12: Altadena Community Plan Policy Consistency Analysis evaluates the compliance of the project with the policies that implement the Altadena Community Plan's goals. Because a Community Plan considers a range of development with many impacts and considerations that are not intended for or applicable to single-family residences, some Community Plan topics contain policies that are uniformly irrelevant to this analysis. These include: Community-Wide Commercial, Lake Avenue Commercial, Other Commercial Districts, Industrial Developments, Circulation Improvements, Street Maintenance, Water System, Economic Development, Crime, Recreation, Schools, Community Center, and Health Services. Other Community Plan topics contain a mix of policies that are applicable and inapplicable, and these topics are addressed with any irrelevant policies attributed as such.

Table 5-12: Altadena Community Plan Policy Consistency Analysis

Topic	Policy No.	Community Plan Policy	Analysis
Land Use			
Land Use Mix	LUM 1	Preserve existing residential neighborhoods, commercial districts, community facilities, institutions, and environmental amenities.	The proposed project is a single-family home on a residential lot in a residential neighborhood. As such, it is compatible with and preserves the existing usage of its surroundings.
Land Use Mix	LUM 2	Provide for new development which is compatible with and complements existing uses.	The proposed project is a single-family home on a residential lot in a residential neighborhood. As such, it is compatible with and preserves the existing usage of its surroundings.
Land Use Mix	LUM 3	Allow the intensification of land uses only as it does not adversely impact existing uses, neighborhoods, and the prevailing low-density character of the Altadena community.	The proposed project is designated by the Altadena Community Plan for lower-intensity usage of one dwelling unit per acre. As the project parcel is more than one acre in size and the proposed project is a single dwelling unit, the proposed project conforms to the low density specified in the Altadena Community Plan.
Land Use Mix	LUM 4	Preserve and enhance existing land uses and areas of historical and/or unique importance (e.g., Pacific Electric Substation No. 8 and Keys Bungalow, etc.).	The proposed project is not sited in an area of historical importance.
Land Use Mix	LUM 5	Provide for the strengthening of existing corridors and clusters of commercial, industrial, and public uses (library, parks, senior citizens facilities, etc.) as principal activity centers of the Altadena community.	The proposed project would not impact any existing corridor or cluster of commercial, industrial or public use.
Land Use Mix	LUM 6	Provide for the evolution of Lake Avenue, between Calaveras Street and Altadena Drive, as the principal core of the Altadena community, containing retail and office commercial, restaurants, entertainment, moderate density residential, and community facilities.	The proposed project would not impact Lake Avenue.

Topic	Policy No.	Community Plan Policy	Analysis
Preservation of Single-Family Character	SFC 1	Preserve and maintain existing residential units which are structurally sound.	The proposed project site is vacant. The proposed project would not impact any existing residential unit.
Preservation of Single-Family Character	SFC 2	Rehabilitate and renovate structurally sound residential units which exhibit non-structural deterioration.	The proposed project site is vacant. The proposed project would not impact any existing residential unit.
Preservation of Single-Family Character	SFC 3	Rehabilitate residential units which are structurally deteriorated, unless economically infeasible.	The proposed project site is vacant. The proposed project would not impact any existing residential unit.
Preservation of Single-Family Character	SFC 4	Replace residential units which cannot be economically rehabilitated with those of a size and density which are consistent with those of the surrounding residential neighborhood.	The proposed project site is vacant. The proposed project would not impact any existing residential unit.
Preservation of Single-Family Character	SFC 5	Continue and/or initiate programs to provide financial assistance, as funding is available, to owners and tenants for the renovation and rehabilitation of residential units.	The proposed project site is vacant. The proposed project would not impact any existing residential unit.
Preservation of Single-Family Character	SFC 6	Promote accessibility to housing opportunities by all households, regardless of income, race, color, religion, sex, marital status, age, household size, or physical disability.	The construction of a home on a vacant residentially zoned parcel would be supported by this goal of promoting accessibility to housing opportunities.
Preservation of Single-Family Character	SFC 7	Provide opportunities for new, moderate density residential units to serve senior citizen needs in proximity to local-serving· commercial uses, community facilities, and public transit.	The proposed project is not located in an area zoned for moderate density or tailored to senior citizen needs.
Preservation of Single-Family Character	SFC 8	Ensure that residential neighborhoods are supported by adequate open space, community facilities, and amenities.	The nearby Angeles National Forest and Arroyo Seco, as well as additional parcels in the vicinity, have been designated by the United States, County or City of Pasadena as protected open spaces. The siting of the proposed project retains views of the canyon from Canyon Crest Road, and the project was designed to descend with the topography to reduce its visual impacts. Sightlines across the volume of the proposed project are presently occluded to a significant extent by oak tree canopy. The

Topic	Policy No.	Community Plan Policy	Analysis
			canyon itself would remain open space, unobstructed across the majority of public vantages across the project parcel. The proposed project is served by existing utilities and would not be expected to add a burden to any other shared facilities or amenities, such as parks, schools or libraries.
Preservation of Single-Family Character	SFC 9	Permit developers to utilize innovative residential construction and siting techniques, provided that they maintain physical safety and health and are compatible with existing land use and the environmental setting.	The propsoed project is a single-family home on a residential lot in a residential neighborhood. As such, it is compatible with and preserves the existing usage of its surroundings. The proposed project design incorporates Hillside Management Area Sensitive Design Guidelines techniques, including footprint minimization, profiling of the existing terrain, presenting a minor axis as street frontage, and siting development as far offset from sensitive resources as possible. The preservation of existing oak trees on the project parcel, which serve to screen the home and better preserve the existing character; the use of cladding coloration that blends with the environment; and the establishment of a native oak woodlands understory around the home would ensure that the project is compatible with the existing environmental setting of wooded residential development. Standard conditions and technical requirements of new homes would ensure that the physical safety and health of adjacent residents, future project residents and construction workers would not be endangered.
Infrastructure Improvements			
Sewer System	SS 1	Develop a program to encourage residential connection to the County sewer system and apply for Community Development Block Grant Funds with the County of Los Angeles for possible funding assistance.	The proposed project would connect to the County sewer system from the existing main located adjacent to the southeast corner of the project parcel.

Topic	Policy No.	Community Plan Policy	Analysis
Sewer System	SS 2	Provide new underground storm drainage facilities in the West Altadena Drainage System, Altadena Channel, Fair Oaks Storm Drain and other areas where capacity is necessary to supplement the existing storm system.	The proposed project would not be served by existing storm drainage facilities, and stormwater runoff in the vicinity is channeled into Millard Canyon.
Sewer System	SS 3	Continue extension of the sanitary sewage system in northeast Altadena, foothill areas and other isolated un-sewered areas in order to serve all existing and planned developments and eliminate septic tank disposal.	The proposed project would connect to the County sewer system from the existing main located adjacent to the southeast corner of the project parcel.
Overhead Utility Lines	OUL 1	Encourage placement of utility and communications lines underground as funding becomes available through the Public Utilities Commission.	Because the existing electric utility line is located above grade, and because trenching of any utility lateral would be located in the protected zone of oak trees, the proposed project design elects to minimize overall impacts from the use of an above-ground service drop, like all of the other residences in the vicinity.
Curbs and Gutters	CG 1	Develop a program for installation of curbs and gutters for improved drainage in the West Altadena Drainage Systems, Altadena Channel, and other areas where specific problems exist as identified by the Public Works Department.	The proposed project is not sited in a location that has been identified by the Public Works Department as having problematic drainage.
Public Services			
Fire Hazard	FH 1	Continue the efficient level of fire protection commensurate with the population and values invested in the community.	The proposed project would comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, landscape maintenance, fire-rated wall assemblies and windows and Class A roof coverings.
Fire Hazard	FH 2	Maintain brush clearance standards and require new construction to incorporate fire-retardant materials to reduce the risks of fire hazard.	The proposed project would comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, landscape maintenance, fire-rated wall assemblies and windows and Class A roof coverings.

Topic	Policy No.	Community Plan Policy	Analysis
Fire Hazard	FH 3	Continue recommendations for fire safety as contained in the County's Safety Element.	The proposed project would comply with all development standards required by Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including fire sprinklers, landscape maintenance, fire-rated wall assemblies and windows and Class A roof coverings.
Aesthetics and Urban Design			
Preservation of Altadena's Character	PAC 1	Encourage interested and qualified organizations to assist the Los Angeles County Landmarks Commission in surveying and identifying additional structures and sites for designation as historical places.	The proposed project would not impact any structures or sites that could be identified as historic.
Preservation of Altadena's Character	PAC 2	Seek designation of Christmas Tree Lane as an historical landmark.	The proposed project is not located on or near Christmas Tree Lane.
Preservation of Altadena's Character	PAC 3	Provide landscaped median strips with appropriate left-turn lanes on all major and secondary highways.	The proposed project would not impact any major or secondary highways.
Preservation of Altadena's Character	PAC 4	Require new subdivisions to install underground utilities where feasible.	Because the existing electric utility line is located above grade, and because trenching of any utility lateral would be located in the protected zone of oak trees, the proposed project design elects to minimize overall impacts from the use of an above-ground service drop, like all of the other existing residences in the vicinity. The only other required public utility (sewer) connection not already made on the project parcel would be located underground.
Preservation of Altadena's Character	PAC 5	Require Discretionary Site Review by the Los Angeles County Regional Planning Commission of any new private development, excluding refurbishment, occurring within the Angeles National Forest to ensure compatibility with the visual resources of the San Gabriel Mountains.	The proposed project is not sited within the Angeles National Forest and has been reviewed, and will be re-reviewed by the County Regional Planning Commission.

Topic	Policy No.	Community Plan Policy	Analysis
Urban Design in Altadena	UD 1	Establish a community-based Architectural Review Board to create architectural guidelines which express consistency and creativity in construction and rehabilitation of all commercial structures. Proposed guidelines should also create a unique character for each commercial district. The guidelines shall be prepared by the community Architectural Review Board and forwarded to the Department of Regional Planning for review.	The proposed project would not impact any commercial structures.
Urban Design in Altadena	UD 2	Establish a Community Standards or Special Design District for the Lake Avenue commercial core, as the primary commercial center in Altadena, to implement major design and streetscape improvements (benches, outdoor planters, landscaped median, pavement treatments, lighting, uniform signage, etc.) approved by the Architectural Review Board.	The proposed project is not located on or near Lake Avenue.
Urban Design in Altadena	UD 3	Provide unique public signage and other identifying elements (e.g., landscaping) at key entry points to Altadena (Figure 8).	The proposed project would not impact any key entry points in Altadena.
Urban Design in Altadena	UD 4	Formulate a design plan for the improvement of public spaces and establishment of a unique identity for each commercial district (West Altadena Redevelopment Project, Fair Oaks/Woodbury Road and Los Robles/Woodbury Road intersections) which may include the introduction of a unifying and distinctive signage program and provision of streetscape amenities (street trees, planters, paving materials, street furniture, pedestrian-oriented lighting, etc.) along existing sidewalks, expanded intersections, street crossings, and/or medians.	The proposed project would not impact any commercial districts.

Topic	Policy No.	Community Plan Policy	Analysis
Urban Design in Altadena	UD 5	Provide visual consistency and identity for commercial and industrial areas through architectural review and uniform landscaping.	The proposed project would not impact any commercial or industrial areas.
Urban Design in Altadena	UD 6	Prohibit future outdoor advertising billboards.	The proposed project would not impact any advertising billboards.
Environmental Resources			
Environmental Resources	ER 1	Continued reliance on the County Zoning Ordinance to regulate the location, setbacks, heights, bulk, type and intensity of land uses which might impact environmental resources.	The proposed project would be consistent with the County Code governing zoning parameters, as attributed in this section.
Environmental Resources	ER 2	Utilize the environmental review procedure to mitigate projects impacting the environmental resources of Altadena (refer to Appendix C for the Preliminary Evaluation of Environmental Effects associated with implementation of the proposed Community Plan).	The proposed project has been subjected to the County's environmental review procedure, and to this EIR.
Environmental Resources	ER 3	Require compliance with state interior noise standards and Noise Element of the County-wide General Plan for sensitive land uses.	As attributed in Section 5.12, the proposed project would comply with state interior noise standards and the Noise Element of the 2035 County General Plan.
Environmental Resources	ER 4	Provide that new development must be compatible with adjacent land uses and environmental resources.	The proposed project is a single-family home on a residential lot in a residential neighborhood. As such, it is compatible with and preserves the existing usage of its surroundings. The preservation of existing oak trees on the project parcel, which serve to screen the home and better preserve the existing character; the use of cladding coloration that is meant to blend with the oak tree canopy; the use of wooden doors and soffits; and the establishment of a native oak woodlands understory around the home would ensure that the project is compatible with the existing environmental setting.
Environmental Resources	ER 5	Provide adequate setbacks, landscaping, walls, and other buffers between residential, commercial, industrial, and public uses.	The proposed project would be consistent with the County Code governing zoning parameters, including setbacks and landscaping.

Topic	Policy No.	Community Plan Policy	Analysis
Environmental Resources	ER 6	Require adequate vehicular access to all parcels and the mitigation of any adverse traffic impacts on adjacent uses.	As attributed in Section 5.16, the proposed project would maintain adequate vehicular access and would not be expected to have a significant effect on traffic.
Environmental Resources	ER 7	Provide that new development incorporate sufficient open space to serve the needs of the tenant(s) and a compatible relationship with adjacent uses.	The nearby Angeles National Forest and Arroyo Seco, as well as additional lots in the vicinity, have been designated by United States, the County or City of Pasadena as protected open spaces, adequately providing for this resource. The siting of the proposed project retains views of the canyon from Canyon Crest Road, and the proposed project was designed to descend with the topography to reduce its visual impacts. Sightlines across the volume of the proposed project are presently obscured to a substantial extent by oak tree canopy. The canyon itself would remain open space, unobstructed across the majority of public vantages across the project parcel.
Environmental Resources	ER 8	Restrict the development of residential, schools, health facilities, and other noise sensitive uses in areas exposed to noise levels exceeding an L_{dn} of 65 dB(A), unless adequate mitigation measures can be implemented.	The proposed project is not sited in an area that would expose future residents to noise levels in excess of this threshold. Measurements of ambient noise in the vicinity did not exceed 65 dBA CNEL and therefore did not exceed 65 dBA L_{dn}.
Environmental Resources	ER 9	Prevent adverse light and glare effects of a land use on adjacent properties.	The proposed project would be expected to be characterized by typical levels of light generation consistent with that of the adjacent residences. Exterior materials for the proposed project are designed to minimize glare and colored to blend with the surroundings.
Environmental Resources	ER 10	Require that all obnoxious odors and smoke be contained to the site where it is generated.	The proposed project would not be expected to generate obnoxious odors or smoke.
Environmental Resources	ER 11	Prohibit the disruption of riparian corridors and other significant environmental habitats in the San Gabriel Mountain foothills.	The proposed project has been designed to avoid the riparian habitat and waters on the project parcel. While a portion of a stand of oak woodlands is affected by the proposed project, the existing condition of the oak woodlands is severely degraded by a history of residential impacts pre-dating the project. The proposed project's rehabilitation of these impacts and expansion of oak

Topic	Policy No.	Community Plan Policy	Analysis
			woodlands through compensatory plantings would serve as restoration for these existing impacts.
Environmental Resources	ER 12	Continue standards that minimize grading in foothill areas.	The proposed project was designed to follow the existing topography of the terrain without substantial re-grading to create a flattened pad. It is this plan element that drives the split-level nature of the home. The amount of grading required to implement the proposed project would be two orders of magnitude below that required for a Conditional Use Permit in the Altadena Community Standards District.
Environmental Resources	ER 13	Require new development in foothill areas minimize siltation of streams and canyons.	The proposed project would meet LID design requirement and be conditioned by Building & Safety Best Management Practices for control of erosion and siltation.
Environmental Resources	ER 14	Maintain view corridors of the San Gabriel Mountains and Los Angeles basin by controlling the siting, height, and density of new development.	The siting of the proposed project would retain views of the canyon from Canyon Crest Road, and the project was designed to descend with the topography to reduce its visual impacts. Sightlines across the volume of the proposed project are presently obscured to a substantial extent by oak tree canopy. The canyon itself would remain open space, unobstructed across the majority of public vantages across the project parcel. The height of the proposed project would present a two-story profile at the northeast street frontage that transitions to a one-story profile above the street grade plane at the southeast street frontage.
Environmental Resources	ER 15	Recognize all policies and standards contained in the County's Seismic Safety Element.	The proposed project would comply with all requirements of the Geotechnical and Materials Engineering Division plan check review process and with the recommendations of the geotechnical report dated April 4, 2014 and addendum dated March 7, 2016.

Minor Conditional Use Permit

The proposed project is required to satisfy all required findings for issuance of a Minor Conditional Use Permit. When an ordinance authorizes an agency to approve a conditional use upon making specified findings, the Lead Agency is not barred from stating those findings in the language of the ordinance and is not obliged to support them with sub-findings. *Topanga Assn. for a Scenic Community v. County of Los Angeles* (1989) 214 Cal.App.3d 1348, 1363; *Jacobson v. County of Los Angeles* (1977) 69 Cal.App.3d 374, 376. Nevertheless, sub-findings and evidentiary support are attributed in Table 5-13: Minor Conditional Use Permit Findings Analysis.

Table 5-13: Minor Conditional Use Permit Findings Analysis

Section	Finding[419]	Analysis
1	The proposed use will be consistent with the adopted General Plan for the area.	As attributed in this section of the EIR, the proposed project is consistent with the policies of the General Plan, the Altadena Community Plan, and all permitted zoning parameters for one single-family home. Therefore, the proposed use will be consistent with the adopted General Plan.
2(a)	The requested use at the location proposed will not: Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area	As attributed in Sections 5.12, 5.3, and 5.8, the proposed project would not be expected to result in significant impacts to the surrounding vicinity from noise, air quality, or hazards. Together, these impact areas of analysis represent the vectors for the transmission of an adverse effect impacting the health, peace, comfort or welfare of persons in the surrounding area. As it relates to effects that are characteristic of certain permitted activities to some degree, e.g. vehicular noise, emissions, and roadway use, and pursuant to Public Resources Code Section 21083(b)(3), an "adverse" effect is "significant." Because the proposed project would not be expected to have any significant impacts, the proposed project would not be expected to have any adverse effects.
2(b)	The requested use at the location proposed will not: Be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the project parcel	As attributed in Section 5 of this EIR, the proposed project would not be expected to have any significant impacts on the project parcel or surrounding residences that would be materially detrimental to use or enjoyment of adjacent properties. As attributed in this section of the EIR, the proposed project is consistent with the policies of the General Plan, the Altadena Community Plan, and all permitted zoning parameters for one single-family home. As such, all associated impacts typical of a compliant single-family home would reasonably be expected of this use, and reasonably be reflected in the valuation of surrounding properties. The proposed project would be screened to a significant extent from neighboring residences by oak tree canopy to remain and colored to blend with the natural vegetation. As attributed in Section 5.1 and Section 11 Appendix C, the proposed project complies with the success criteria of the Hillside Management Area Sensitive Design Guidelines, which "ensure[s] that development preserves the physical integrity and scenic values of HMAs, provides open space, and enhances community character." Therefore, the proposed project would not be materially detrimental to use, enjoyment or valuation of other properties.
2(c)	The requested use at the location proposed will not: Jeopardize, endanger, or otherwise constitute a menace to the public	As attributed in Sections 5.8, 5.6 and 5.16, the proposed project would not be expected to create any hazards, including exposure of people or resources to inadequate service systems or physical access, flood, landslide, liquefaction/mud flow, erosion, slope instability, fire, and toxic or other hazardous substances that would affect safety on the project parcel or in the surrounding area. Therefore, the proposed project would not be expected to jeopardize, endanger, or otherwise constitute a menace to the public health, safety or general welfare.

[419] Source: County Code Section 22.160.050(B)

Section	Finding[419]	Analysis
	health, safety or general welfare.	
3	The proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and development features prescribed	The proposed project complies with all applicable land use regulations in the Altadena Community Standards District and is consistent with the Hillside Management Area Sensitive Design Guidelines. As such, the project parcel would accommodate the required yard setbacks, fencing along a distance of approximately 35 feet to separate the proposed home from 3589 Canyon Crest Road, two parking spaces required, and necessary staging area. Less than 5% of the project parcel would be developed by the proposed project's structural footprint and driveway. Therefore, the proposed site is adequate in size and shape.
4(a)	The proposed site is adequately served: By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate	As attributed in Section 5.11, the addition of one new residence with a connecting driveway in an area that has been used for parking for decades would not be expected to substantially impact traffic along Canyon Crest Road to service the two additional cars and approximately 10 trips/day that a single-family home of this size would be expected to generate. In addition, Canyon Crest Road intersects Lincoln Avenue, a proposed Class III Bike Path and an existing Secondary Highway. Therefore, the proposed site is adequately served by highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic the proposed project would generate.
4(b)	The proposed site is adequately served: By other public or private service facilities as are required	As attributed in Sections 5.17 and 5.14, the proposed project would be adequately served through private lateral connections to public utilities including water, sewer and electricity. Existing public services including fire protection, police, schools and parks also serve the project parcel. Therefore, the proposed site would be adequately served by all typical public and private service facilities.

Oak Tree Permit

The proposed project is required to satisfy the findings for issuance of an Oak Tree Permit. When an ordinance authorizes an agency to approve a conditional use upon making specified findings, the Lead Agency is not barred from stating those findings in the language of the ordinance and is not obliged to support them with sub-findings. *Topanga Assn. for a Scenic Community v. County of Los Angeles* (1989) 214 Cal.App.3d 1348, 1363; *Jacobson v. County of Los Angeles* (1977) 69 Cal.App.3d 374, 376. Nevertheless, sub-findings and evidentiary support are attributed in Table 5-14: Oak Tree Permit Findings Analysis.

Table 5-14: Oak Tree Permit Findings Analysis

No.	Finding[420]	Analysis
1	The proposed construction or proposed use will be accomplished without endangering the health of the remaining trees subject to Title 22 regulations, if any, on the subject property	An arborist certified by the International Society of Arboriculture in Tree Risk Assessment has analyzed that all trees approved for encroachment have a "high probability" of sustaining the impacts required to implement the project, in consideration of the level of impacts, their existing conditions and rehabilitating features proposed by the Applicant. Pursuant to the Oak Tree Report in Section 11 Appendix E, no encroached oak tree exceeds general ANSI pruning standards for the amount of canopy removal typically recommended for one growing season. No root removal would occur within a conservatively defined "critical root zone" extending out to five times the mean diameter at breast height of any oak tree.[421] No root removal would occur at a distance less than half of the radius of the protected zone of any tree, or on opposing sides of the tree. County Code Section 22.174.060(C) states that "relocation [of oak trees] is not prohibited [by the Oak Tree Ordinance.]" When a mature oak tree is relocated, 90-95% of its roots are removed, typically with 30 to 70 percent canopy removal to better preserve balance in the root to crown ratio.[422] As such, encroachment is permissible. Because any encroachment, however slight, introduces some probability of "endangering" the tree, the term "remaining trees" is congruously those trees that remain outside the scope of the entitlement, for which no mechanism of monitoring and contingency replacement is put in place. The nearest oak tree on the subject property that is not requested for encroachment and monitoring is more than 150 feet distant and not down-grade of the project. No credible vectors of impact were identified by the consulting arborist. Therefore, the proposed construction would not reasonably be expected to endanger the health of the remaining trees subject to the Oak Tree Ordinance on the project parcel.
2	The removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated	The oak tree proposed for removal is part of oak woodlands in which the root system of other oak trees to remain would function to preserve soil cohesion. The project must comply with the Best Management Practices and design provisions of the County Department of Public Works grading and drainage plan check review process. The proposed project would not divert any channeled flow on the project parcel and would route stormwater runoff through rain gardens located outside the protected zones of all encroached oak trees, back into the same open drainage swale that presently collects sheet runoff. Therefore, the removal of oak tree #7 would not be expected to result in soil erosion through diversion or increased flow of surface waters that cannot be satisfactorily mitigated.

[420] Source: County Code Section 22.174.060(B)
[421] Source: Costello, L., Hagan, B., Jones, K. 2011. Oaks in the Urban Landscape: Selection Care and Preservation. University of California Press.
[422] Source: United States Forest Service: Status of Transplanted Coast Live Oaks (*Quercus Agrifolia*) in Southern California. Available at: https://www.fs.fed.us/psw/publications/documents/psw_gtr160/psw_gtr160_04b_dagit.pdf.

3(a)(i & ii)	The removal or relocation of the oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or use of the subject property to such an extent that: i. alternative development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive, or ii. placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized	The proposed project was designed to minimize the amount of encroachment to the existing oak trees on the project parcel through sensitive design techniques including footprint minimization and the use of pervious surfaces, including a driveway comprised of a tree root protection system. The Applicant has explored many alternative designs, a few of which are documented in this EIR, which would however increase the extent of impact to oak trees. The removal of oak tree #7 would also be required of the design alternatives considered in Section 7. Therefore, the removal of oak tree #7 is necessary as the continued existence of oak tree #7 at its present location would frustrate the planned improvement or use of the subject property, precluding the reasonable and efficient use of such property for its zoned purpose.
4	The removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure	The purpose of the oak tree permit is to recognize oak trees as significant historical, aesthetic and ecological resources, and as one of the most picturesque trees in Los Angeles County, and to create favorable conditions for the preservation and propagation of oak trees, particularly heritage oak trees, for the benefit of current and future residents of Los Angeles County. The oak tree being removed is identified in the Oak Tree Report in Section 11 Appendix E as #7, and is also identified as a non-heritage tree with the lowest health grade of the encroached trees, somewhat below average. As the number of oak trees removed was minimized compared to the much larger project that would have been permitted on the site, and because most of the oak trees on the project parcel would be preserved, and because numerous additional oak trees would be planted to permanently expand this resource, the proposed project would not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

Table 5-15: Oak Tree Permit Materials Analysis

No.	Material[423]	Analysis
1(a)	a site plan showing: Proposed construction, excavation, grading and/or landfill. Where a change in	In the Oak Tree Report in Section 11 Appendix E, all impacts of any kind are plotted within the protected zone of all encroached oak trees subject to the Oak Tree Ordinance.

[423] Source: County Code Section 22.174.040

No.	Material[423]	Analysis
	grade is proposed, the change in grade within the protected zone of each plotted tree shall be specified.	
1(b)	a site plan showing: The location of all oak trees subject to this Chapter proposed to be removed, damaged, encroached, or relocated, or within 200 feet of proposed construction, grading, landfill or other activity. Each tree shall be assigned an identification number on the plan, and a corresponding permanent identifying tag shall be affixed to the north side of each tree in the manner prescribed by Section 22.174.070 (Conditions of Approval). These identifications shall be utilized in the Oak Tree Report and for physical identification on the property where required. The protected zone shall be shown for each plotted tree.	The Oak Tree Report in Section 11 Appendix E contains an exhibit map portraying all oak trees that were to be encroached by the project's footprint, staging area, driveway, and utility laterals. In addition, the Oak Tree Report contains an exhibit map portraying those oak trees that are more than 150 feet distant in the riparian portion of the project parcel. These maps portray the trunk dimension and canopy extent, and the dimensions of these irregular areas may be derived from the scale evident in the maps themselves. All trees were tagged as a part of the survey. The protected zones for all trees are shown on the exhibit map. The current iteration of the County Code does not specify whether trees within 200ft. on other parcels are intended to be tagged or surveyed, thought the previous iteration of the Oak Tree Ordinance, in effect through 2019, did specify that all informational requirements were confined "to the subject property." Trees exist within 200ft. of the proposed project that are behind fences and parcels posted with "No Trespassing" signs. Certain off-site trees were surveyed by a registered surveyor, as permitted by California Penal Code Section 602.8(c), and are visible on the Oak Tree Report exhibit maps for the project. However, an arborist is not permitted the right of passage on private property, and so this provision is constructed to apply only to the subject parcel. The intent of this provision is to provide sufficient context to evaluate those oak trees that should be monitored, and to understand what oak resources are present in the vicinity. This EIR includes aerial imagery and annotation that map this extent.
1(c)	a site plan showing: Location and size of all proposed replacement trees.	The areas for replacement plantings are annotated in the site plan. Because replacements are to be implemented with clusters of seedlings, only some of which will be permitted to mature, precise locations will be established only in the course of the Applicant's reporting to the County. Pursuant to CDFW guidance, trees will be established from acorn or plantings of no more than 5 gallons, such that a "size" of some larger planting need not be confirmed.
1(d)	a site plan showing: Location of all surface drainage systems.	The proposed project site plan contains an annotation of the only additional surface drainage features introduced by the project – rain gardens located outside the protected zone of any oak tree.
2(a)	An Oak Tree Report certified to be true and correct shall be prepared by an individual with expertise acceptable to the Director and the Fire Department. The Oak Tree	The Oak Tree Report in Section 11 Appendix E contains the specified information and was prepared by an individual with proper expertise.

No.	Material[423]	Analysis
	Report, as deemed acceptable by the Director and the Fire Department, shall identify each oak tree on the site plan as required by Subsection B.1, above, and shall contain [specified information]:	
2(b)	The requirement for an Oak Tree Report may be waived by the Director where a single tree is proposed for removal in conjunction with the use of a single-family residence listed as a permitted use in the zone, and/or such information is deemed unnecessary for processing the applications.	The Oak Tree Report in Section 11 Appendix E is deemed to provide all pertinent information necessary to fulfill the intent of the County Oak Tree Ordinance for the proposed project, which requests removal of a single tree in conjunction with the use of a single-family residence on a single-family residential parcel. Any further information is deemed unnecessary for processing the application.

Hillside Management Ordinance

The proposed project is exempt from the County Hillside Management Area ("HMA") Ordinance pursuant to County Code Section 22.104.030(A), as a single lot with grading not exceeding 15,000 cubic yards. Therefore, no HMA CUP or HMA Sensitive Design Guidelines analysis are required. Nevertheless, the proposed project's compliance with the Ordinance's findings and the Sensitive Design Guidelines is discussed as additional substantial evidence of the aesthetic compatibility of the proposed project design in its vicinity.

Table 5-16: Hillside Management Area Findings Analysis

No.	Finding[424]	Analysis
A/B(1)	That the proposed development [preserves the physical integrity and scenic values of HMAs to the greatest extent feasible], by: 1. Locating development outside of HMAs to the extent feasible;	The project parcel is characterized by steep slopes that may not be completely avoided. In addition, the flat area at street grade is located in the protected zone of oak trees, in which permanent, irremediable impacts are discouraged. The proposed project has been sited to minimize the number of oak tree removals and extent of encroachment upon oak trees to remain.
A/B(2)	That the proposed development preserves the physical integrity of HMAs to the greatest extent feasible, resulting in lesser impacts to hillside resources, by: 2. Locating development in the portions of HMAs with fewer hillside constraints;	The project parcel is characterized by steep slopes that may not be completely avoided. In addition, the flat area at street grade is located in the protected zone of oak trees, in which permanent impacts are discouraged. The proposed project has been sited to minimize the number of oak tree removals and extent of encroachment upon oak trees to remain.
A/B(3)	That the proposed development preserves the physical integrity of HMAs to the greatest extent feasible, resulting in lesser impacts to hillside resources, by: 3. Using sensitive hillside design techniques tailored to the site requirements.	The proposed project incorporates sensitive hillside design techniques including footprint minimization; orientation such that the minor axis faces the street; design of the roofline profile to echo the grade; articulation of the roof and walls of the building with variable facets; and using exterior materials, colors, and landscaping to blend the structure into the natural environment to the extent feasible. The compliance of the project with the success criteria of the HMA Sensitive Design Guidelines is attributed in Section 11 Appendix C.
C	That the proposed development is compatible with or enhances community character, and provides open space as required in the ordinance.	The preservation of existing oak trees on the project parcel, which serve to screen the home and better preserve the existing character; the use of cladding coloration and accents that are aesthetically compatible with a wooded environment; and the establishment of a native oak woodlands understory around the home ensure that the project is compatible with the existing environmental setting.

[424] Source: County Code Section 22.104.060

No.	Finding[424]	Analysis
E	That the proposed development is in substantial compliance with the Hillside Design Guidelines.	Pursuant to the Analysis in Section 11 Appendix C, the proposed project meets the success criteria of the Hillside Management Ordinance Sensitive Design Guidelines.

Significant Ecological Areas Ordinance

The proposed project is exempt from the Significant Ecological Areas ("SEA") Ordinance pursuant to County Code Section 22.102.040(I), (L), and/or (P) because the only "development," as defined in the SEA Ordinance, proposed to occur within the SEA on the project parcel is: (1) the planting of SEA Native Trees (whether required under Title 22, as for this project, or as a project design feature acknowledging their aesthetic and ecological quality, as is also characteristic of this project), and (2) fire safety fuel modification, where any is warranted, in areas of the parcel that already completely overlap with pre-existing requirements for the surrounding residential development. Pursuant to County Code Section 22.102.030(B), the SEA Ordinance only applies to "activities that meet the definition of development herein where occurring within all areas designated in the General Plan and related maps as SEAs." Because the only activity within the SEA would be exempt, no SEA CUP would be required to approve the proposed project, and the proposed project would not be bound to any SEA Design Guidelines. Nevertheless, consistency with the Ordinance's findings and Design Guidelines is analyzed as additional substantial evidence of the compatibility of the design.

Table 5-17: Significant Ecological Area Findings Analysis

No.	Finding[425]	Analysis
1	The proposed development is highly compatible with the SEA Resources, including the preservation of natural open space areas and providing for the long-term maintenance of ecosystem functions	The proposed project would maintain approximately 95% of the project parcel free of traditional development, including the imposition of hardscapes or grading, with limited landscaping of native, compatible species, preserving this large majority of the project parcel as natural open space. The proposed project is sited to avoid the SEA on a portion of the project parcel. Therefore, the proposed project would be highly compatible with the SEA Resources, including the preservation of natural open space areas and provision for long-term maintenance of ecosystem functions.
2	The proposed development avoids or minimizes impacts to the SEA Resources and wildlife movement through one or more of the following: a. Avoiding habitat fragmentation; b. Minimizing edge effects; or c. Siting	The relatively intact riparian corridor and associated woodlands cover that provide the only moderate quality habitat on the project parcel would be preserved, with the proposed project sited as distant as would be reasonably feasible on this project parcel, adjacent to existing residences, while also minimizing impacts to oak trees not located within the SEA.

[425] Source: County Code Section 22.102.080(D)

No.	Finding[425]	Analysis
	development in the least sensitive location.	Therefore, the proposed project would avoid habitat fragmentation, minimize edge effects, and site development in the least sensitive location.
3	Important habitat areas are adequately buffered from development by retaining sufficient natural vegetation cover and/or natural open spaces and integrating sensitive design features.	The relatively intact riparian corridor and associated woodlands cover that provide the only moderate quality habitat on the project parcel would be preserved, with the proposed projet sited as distant as would be reasonably feasible on this project parcel, adjacent to existing residences, while also minimizing impacts to oak trees not located within the SEA. Therefore, the proposed project would buffer important habitat areas from development by retaining natural areas and integrating sensitive design features.
4	The proposed development maintains ecological and hydrological functions of water bodies, watercourses, and their tributaries.	The proposed project would not alter the flow of any hydrological feature, whether jurisdictional or only channeling of surface drainage. Therefore, the proposed project would maintain the ecological and hydrological functions of water bodies, watercourses and their tributaries.
5	The proposed development ensures that roads, access roads, driveways, and utilities do not conflict with Priority Biological Resources, habitat areas, migratory paths, or wildlife corridors.	The proposed project would not place any road or access road within an SEA, and the less than 1,000 square feet of driveway would be comprised of an open-celled tree root protection system with a layer of mulch to maintain a high degree of compatibility with existing trees and vegetation. Therefore, the proposed project would ensure that roads, access roads, driveways and utilities would not conflict with Priority Biological Resources, as defined in County Code Section 22.102.020, habitat areas, or migratory paths within the SEA.
6	The proposed development promotes the resiliency of the SEA to the greatest extent possible. For purposes of this finding, SEA resiliency is not promoted when the proposed development may cause any of the following: a. Significant unmitigated loss of contiguity or connectivity of the SEA; b. Significant unmitigated impact to a Priority Biological Resource; c. Removal of habitat that is the only known location of a new or rediscovered species; and/or d. Other factors as identified by SEATAC.	The proposed project would not affect the contiguity or connectivity of the Altadena Arroyos and Foothills SEA, which is maintained in the riparian canyon bottom, or significantly impact any biological resources, as attributed in Section 5.4. Therefore, the proposed project would promote the resiliency of the SEA to the greatest extent possible.

Table 5-18: Significant Ecological Area Design Guidelines Analysis[426]

No.	Guideline	Analysis
1	Locate new development as close to existing development and roadways as possible.	The proposed project footprint of development is sited as close to Canyon Crest Road as is feasible while minimizing impacts to oak trees that are also located immediately adjacent to the roadway.
2	Cluster structures and infrastructure within 25% or less of the lot area (including roads, utilities, landscaping, and fire management requirements) and maintain the remaining portions of the site in a natural undisturbed state.	The proposed project footprint of development would occupy approximately 5% of the project parcel, or less than 10% when including native landscaping that is highly compatible with the existing biota, and which would augment the ecological value of the oak woodlands resources present on the project parcel.
3	Place utilities underground and adjacent to roadways (i.e. within the right of way).	The proposed project would place its utility laterals in locations designed to minimize impacts to existing oak trees.
4	Avoid placing development on slopes greater than 25%, unless the outcome is biologically superior (e.g. avoids impacts to sensitive biological resources). See the Hillside Management Area Ordinance (Chapter 22.104) for hillside design requirements in areas with 25% or greater natural slopes.	The project parcel is possessed of only limited areas with less than 25% slope, and the proposed project is sited to both use the flatter areas near street level and minimize impacts to biological resources. Inasmuch as wildlife corridor cost functions measuring the quality of connectivity are inversely proportional to slope, the placement of development on slopes greater than 25% is not *ipso facto* undesirable.
5	Locate development away from wildlife corridors and use only wildlife permeable fencing outside of development to allow wildlife to move easily through the undeveloped portion of the project site.	The relatively intact riparian corridor and associated woodlands cover that provide the only moderate quality habitat on the project parcel would be preserved, with the proposed project sited as distant as would be reasonably feasible on this project parcel, while also minimizing impacts to oak trees not located within the SEA. To the extent that wildlife may attempt passage up the steep canyon walls to the residential areas to the east, the proposed project would not fence the frontage of the parcel, maintaining permeability.
6	Locate development away from the most sensitive natural resources and protect those resources and contiguous natural areas as open space.	The relatively intact riparian corridor and associated woodlands cover that provide the only moderate quality habitat on the project parcel would be preserved, with the proposed project sited as distant as would be reasonably feasible on this project parcel, while also minimizing impacts to oak trees not located within the SEA.
7	Do not alter, grade, build upon, fill or divert water from any wetland area. Maintain minimum buffers	The proposed project would not impact the wetland feature on the project parcel in the bottom of Millard Canyon, located more than 150 feet distant from the

[426] Source: County SEA Ordinance Implementation Guide. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/SEA-IG-6-30-20_Full.pdf.

No.	Guideline	Analysis
	around such areas, as specified in the SEA Development Standards.	downslope edge of the project footprint of development.
8	Do not alter, grade, fill or build within any part of the 100-year flood plain of a river or stream.	The proposed project would not impact any part of a 100-year flood plain of a river or stream.
9	Avoid removal of native trees, such as oak, walnut, sycamore, juniper, and Joshua trees (see SEA Protected Tree List in Appendix A).	The proposed project would minimize oak tree removal to the extent reasonably feasible on the project parcel.
10	Landscape with plant materials that are locally indigenous and drought-tolerant. Do not landscape with invasive species listed in the Invasive Species List (Appendix C) or listed as invasive by California Invasive Plant Council.	The proposed project would landscape exclusively with native, drought-tolerant plants that are listed as being compatible with coast live oak trees and which form alliance naturally with oak woodlands and California sagebrush.
11	Direct outdoor lighting downward and away from adjacent natural areas.	The proposed project would use minimal exterior lighting complying with all applicable regulations to limit light pollution.
12	Use non-glare/non-reflective glass and/or other methods for preventing collisions of birds with window glass.	The proposed project would use non-glare glass in complying with all applicable regulations to limit glare.

Altadena Community Standards and Development Regulations

The Altadena Community Standards District tightens the otherwise applicable County Code to protect the light, air and privacy of adjacent residences in the Altadena Community Standards District. A comparison of the County and Altadena regulations for the project parcel is provided in Table 5-19: Development Standards Tightened in Altadena Community Standards.

Table 5-19: Development Standards Tightened in Altadena Community Standards

Standard	County	Code Section	Altadena	Code Section
Square footage (square feet)	Unlimited	N/A	9,000	22.306.070(A)(4)(c)
Grading (cubic yards)	15,000 (w/o CUP)	22.104.030(A)	2,500 (w/o CUP)	22.306.060(B)(1)(b)(ii)
Front yard (feet)	10 (50% of 20)	22.18.040 (B)	10 (50% of 20)	22.306.070(A)(1)
Side yard (feet)	5	22.18.040(B)	15 (height > 23 feet) and 8.64 (height < 23 feet)	22.306.070(A)(1)(c)
Rear yard (feet)	15	22.18.040(B)	35	22.306.070(A)(1)(a)
Height above grade (feet)	35	22.18.040(C)(1)	35 (lot size > 20,000 square feet)	22.306.070(2)(a)
Stories above grade (count)	3	101.3	2	22.306(2)(c)

As it relates to the assessment of the project's compatibility with both the existing neighborhood and all applicable regulations, the existing condition embodied in the residences along Canyon Crest Road is one of uniform non-compliance with the present Altadena Community Standards. Every residence in Altadena within 300 feet of the home was constructed prior to adoption or enforcement of regulations governing front yard, side yard, rear yard, height, and/or number of stories above grade constraints, such that each of these residences violates at least one of these constraints. (*See* Table 5-20: Comparison of Zoning Parameters of Residences Within 300 Feet of Project).

Height

The proposed project complies with all applicable regulations governing the height of structures.

Pursuant to County Code Section 22.306.070(A)(2)(a) and Table 22.306.070-B, the maximum height of any structure on a lot that is more than 20,000 square feet in size is 35 feet. Pursuant to County Code Section 22.306.070(A)(1)(c), "[e]xcept as provided in Section 22.110.090 (Projections into Yards), no portion of any structure shall exceed 23 feet in height where located within 15 feet of any property line." Therefore, a structure may be as much as 35 feet in height where it is 15 feet or more from the parcel boundary and is limited to 23 feet in height where it is less than 15 feet from the lot boundary (and not located in a side yard).

Height is measured vertically as a plumb line. Pursuant to County Code Section 22.14.080, "[m]easurement of the height of building or structure shall be the plumb line distance from the point being measured to the grade." Webster's Third New International Dictionary (2002) defines "plumb" most relevantly as "straight down or up." *See also Leavitt v. County of Madera* (2004) 123 Cal.App.4th 1502, 1514 (dictionary definition gives the usual meaning of a word). The permitted volume describes an envelope with respect to the grade – an extrusion of the surface of the ground along the vertical direction by the height limit. Nowhere does the proposed project exceed 35 feet in height.

To the extent smaller lots in Altadena use a height limit of 30 feet, only a small fraction of the home's footprint exceeds 30 feet in height, in the portions of the building footprint that are more down-grade, at lower absolute elevations to public vantages along the roadway and to adjacent residences.

Number of stories above grade

The proposed project complies with all applicable regulations governing the number of stories above grade of structures.

Pursuant to County Code Section 22.306.070(A)(2)(c), in the Altadena Community Standards District, "[t]he maximum number of stories above grade shall be two. A "basement" as defined in Section 22.14.020 of Division 2 (Definitions) shall be considered a story above grade, while a "cellar" as defined in Section 22.14.030 of Division 2 (Definitions), shall not be considered a story above grade."

Pursuant to County Code Section 22.14.190 of Division 2 (Definitions), a "story" is "that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the roof above. This term includes "basement" but shall not include cellar." The County Code does not define the term "floor," but Webster's Third New International Dictionary (2002) defines "floor" most relevantly as "the level base of a room." *See also Leavitt v. County of Madera* (2004) 123 Cal.App.4th 1502, 1514 (dictionary definition gives the usual meaning of a word).

Pursuant to County Code Section 22.14.020, a "basement" is "that portion of a building between floor and ceiling, that is partly below and partly above grade, but so located that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling."

Pursuant to County Code Section 22.14.020, a "cellar" is "that portion of a building between floor and ceiling which is wholly or partly below grade and so located that the vertical distance from grade to the floor below is equal to or greater than the vertical distance from grade to ceiling."

Pursuant to County Code Section 22.14.070 of Division 2 (Definitions), "grade" is "the approved grade of a lot or parcel of land at the time such lot or parcel is created, except when excavation is proposed. When excavation occurs after the lot or parcel is created, the grade of the excavated area shall be the grade after the excavation. Where fill material has been placed on a lot or parcel after such lot or parcel is created, grade shall be determined by the director. Grade within the perimeter of a structure shall be considered to transition uniformly from the lowest to the highest points of grade at the perimeter of the structure."

As this is a circular definition, Webster's Third New International Dictionary (2002) defines "grade" most relevantly as "the level at which the ground intersects the foundation of a building." *See again Leavitt v. County of Madera* (2004) 123 Cal.App.4th 1502, 1514 (dictionary definition gives the usual meaning of a word). Where no building yet exists, this definition simplifies to the existing surface of the ground.

As it relates to "grade within the perimeter of a structure," when a building exists and a story is to be added, the surface of the ground within the perimeter of a house cannot be measured directly by a topographical survey, as is possible for vacant land. As such, it would be assumed to transition linearly i.e. uniformly, from the lowest to highest points of grade along the perimeter, using some equitable grid to create a grade surface. This form of approximation is not necessary where no structure is yet present because the topographical survey fully describes the surface of the ground. As the proposed project requires no grading outside the footprint of the home, the grade is the existing surface of the ground.

Webster's Third New International Dictionary (2002) defines "portion" most relevantly as "a part or limited quantity of anything." In the context of a structure, the "part" of a building comprising a "basement" or "cellar" is some volume of that building. The terms "basement" and "cellar" colloquially delineate a relationship of a part of a building to the grade.

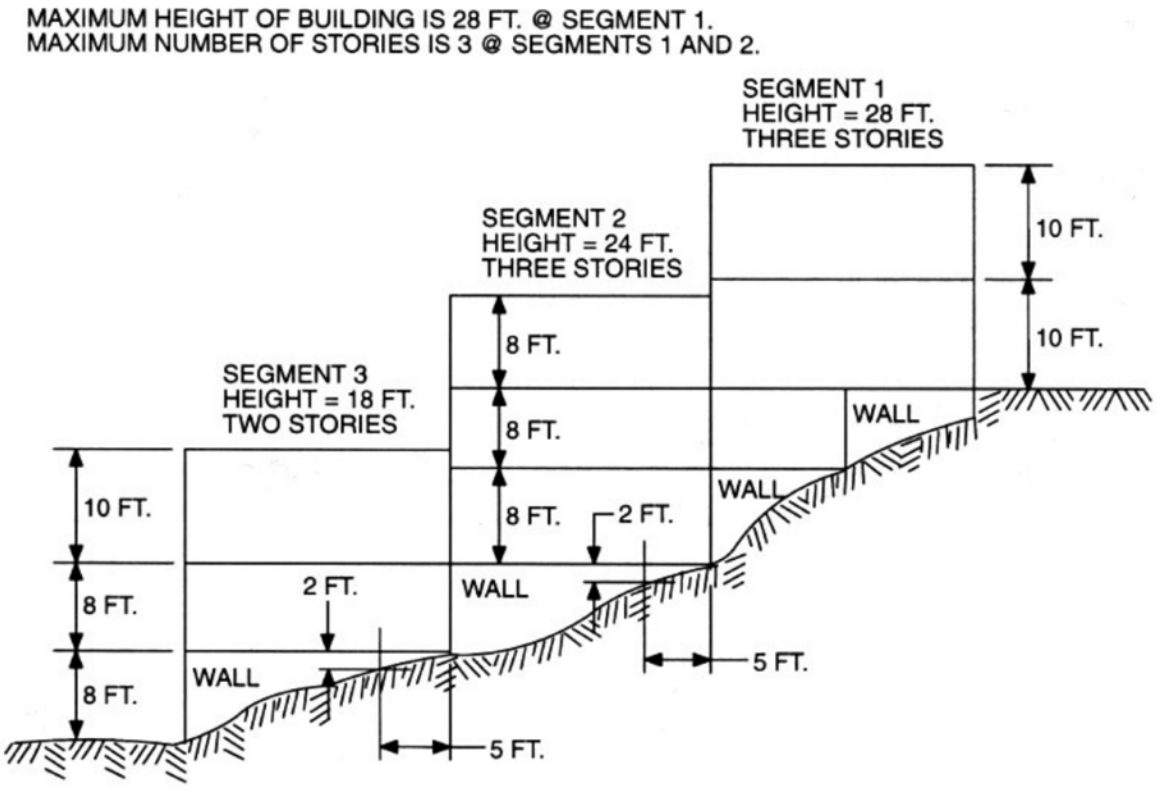
Because a "story" is defined relative to the "floor next above" or the "roof above," the unit of assessment in a terraced building is each building segment, where a different building segment is defined by some change in the floor or roof levels of the home. (*See* Figure 5-22: Uniform Building Code Measurement of Height and Number of Stories in a Terraced Building and Figure 5-23: International Building Code Measurement of Height and Number of Stories in a Terraced Building). This was also explained in the Uniform Building Code Section 209-H, which stated that "[t]he height of a stepped or terraced building is the maximum height of any segment of the building." The Uniform Building Code was a foundational building code in use throughout California and the western United States, before it was subsumed into the International Building Code in 2000, and therefore reflects the regulation of most of the existing structures in California. The Uniform Building Code is also referenced as a code authority in several instances by CEQA (see, e.g., State CEQA Guidelines Section 15369; Appendix G Geology and Soils Section, question (d)). While the County Code does not possess any explicit guidance pertaining to the measurement of height or number of stories in terraced buildings, these codes, upon which the California Building Code and the County Code are based,[427] do provide such guidance, to which this analysis defers. County Code Title 26, Chapter 1, Section 101.3 states that "the building standards contained in the International Building Code of the International Code Council, which are published in the California Building Standards Code, are applicable to all occupancies and uses throughout the County of Los Angeles."

That the County Code both limits the number of stories above grade to two and also encourages a stepped or terraced design in the Hillside Management Area Sensitive Design Guidelines and in 2035 County General Plan policy C/NR 13.5 is further evidence of the intent that a story above grade should be assessed vertically across the building footprint. *See Pacific Palisades Bowl Mobile Estates, LLC v. City of Los Angeles* (2012) 55 Cal.4th 783, 805 (general principles of statutory interpretation require us to first " 'harmonize statutes, reconcile seeming inconsistencies in them, and construe them to give force and effect to all of their provisions.' ")

A stepped or terraced design is widely encouraged in hillside settings as a project design feature. The City of Los Angeles listed in its "CEQA Thresholds Guide," in effect from 2006 until a re-integration with State CEQA Guidelines Appendix G in 2018, as a "Sample Mitigation Measure" in its "Aesthetics and Visual Resources" Guidelines to "[d]esign structures to conform to the existing natural terrain (e.g. multi-level structures on hillsides which are "stepped" in line with the slopes)."[428] *See Smith v. North* (1966) 244 Cal.App.2d 245, 247-249 ("split-level" single-family home of "five floors," or five building segments each of descending elevation, complied with regulation that limited homes to two stories above grade because the levels were not stacked anywhere more than two above grade; the project complied with the intent of the regulation to limit occlusion better than flattening the structure to a smaller number of elevated levels would have; and the portion of the home where three levels were stacked complied with the regulation because the lowest level was more than 50% below grade and was therefore not a floor above grade under the UBC). *See also Protect Telegraph Hill v. City and County of San Francisco* (2017) 16 Cal.App.5th 261, 264 (upholding CUP for single approximately 12,000 square-foot

[427] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.8-4 and 5.14-2. Available at:
[428] Source: City of Los Angeles: CEQA Thresholds Guide, page A.2-4. Available at: https://planning.lacity.gov/eir/CrossroadsHwd/deir/files/references/A07.pdf

structure of three condominiums designed to look like "three separate single-family homes with each just below the 40-foot height limit as they step down the hill with the natural topography."); *Armato v. City of Manhattan Beach* (2018) Cal.App.Unpub, case # B267734 (upholding CUP for four-level home subject to a three-story height limit because where four levels were stacked, the lowest level did not meet the definition of a "story," using an equivalent definition of a story as being more above grade than below; and upholding the classification of one portion of a single level as a story above grade and the other portion as below grade). "The planning manager observed that a "level" is different from a "story." She explained, "in the beach area, we have double basements. We'll have three stories above grade and two basement levels below, so we actually have five levels." Thus, the number of levels present in a home is not the relevant number - the relevant number is the number of those levels which qualify as stories. As set forth in [the municipal code], [volumes more below grade than above that do not conform to the definition of a "story"] and decks do not count as stories." *Id.* at fn. 16.



Terraced Building

Figure 5-22: Uniform Building Code Measurement of Height and Number of Stories in a Terraced Building[429]

Pursuant to County Code Section 22.306.070(A)(2)(c), a "cellar" is not a story above grade. In other words, where the lowest level of a building segment is more below grade than above, it is not a story above grade.

A Lead Agency may rely on the expertise of its planning staff in considering questions of interpretation of its own code or of planning practice. *Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 907. "An agency's view of the meaning and scope of its own ordinance is entitled to great weight." *Friends of Davis v. City of Davis* (2000) 83 Cal.App.4th 1004, 1015. In addition, the agency "has a comparative interpretive advantage" in resolving technical questions. *Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal.4th 1, 12. Senior County officials, including a Hearing Officer well-versed in zoning enforcement, concurred that height and number of stories above grade have been correctly assessed in accordance with zoning intent. *Id*. at p. 13 (greater deference is warranted when, among other things, there has been "careful consideration by senior agency officials.").

Included in the administrative record for the project is additional evidence from one of the authors of the International Building Code Handbook, attributing the separate assessment of height and stories above grade in each building segment as the "time-honored" approach, in large part owing to the practical consideration that exit and fire access requirements that are distinguishable for basements/cellars, first, and second stories above grade must stay referenced to the grade. Given its foundations in the Uniform and International Building Codes, the agency has applied a "long-standing" approach that is therefore entitled to additional deference for this external support, above and beyond that inherent to its own view of the scope and meaning of its ordinance. *Tower Lane Properties v. City of Los Angeles* (2014) 224 Cal.App.4th 262, 278.

[429] Source: Handbook to the Uniform Building Code: An Illustrative Commentary, International Conference of Building Officials (1998)

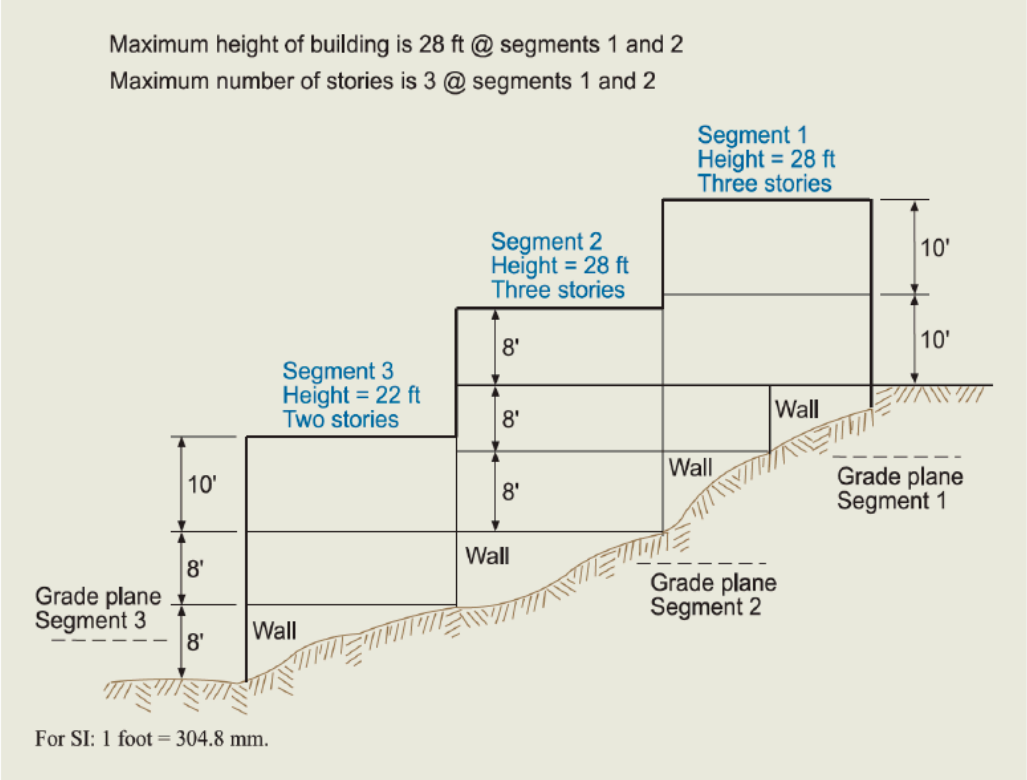


Figure 202-15
Terraced building.

Figure 5-23: International Building Code Measurement of Height and Number of Stories in a Terraced Building[430]

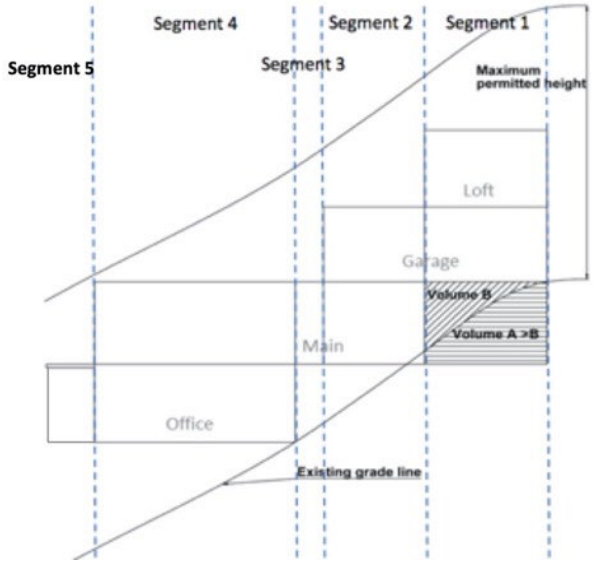


Figure 5-24: Assessment of Stories in Each of Project's Building Segments[431]

[430] Source: International Building Code Handbook, International Code Council (2012)
[431] Source: Applicant

Building segment 1 contains three levels, building segments 2 and 4 contain two levels, and building segment 3 and 5 contain one level. In segments 2-4, each level is a story above grade, as the volume of each level is completely or nearly completely above the surface of the ground. In each of these segments, the number of stories above grade is fewer than or equal to two. In building segment 1, the lowest of the three levels is more below grade than above, being completely beneath the level of the driveway and garage, and is comprised only of windowless bathroom, closet and hallway space in the footprint of the storage loft.

This lowest level of building segment 1 would meet the County Code definition of a "cellar," and is therefore not a story above grade. (*See* Figure 5-25: Intersection of Cellar Volume with the Grade). As building segment 1 would contain an area of approximately 190 square feet, and the distance between floor and ceiling of the main level in this building segment would be 8 feet, the volume of the portion of the home that exists in the footprint of the loft would be approximately 1,500ft.^{3}. This volume would intersect more than 900 ft.^{3} of the existing grade and is therefore more below grade than above. (See Figure 5-25: Intersection of Cellar Volume with the Grade).

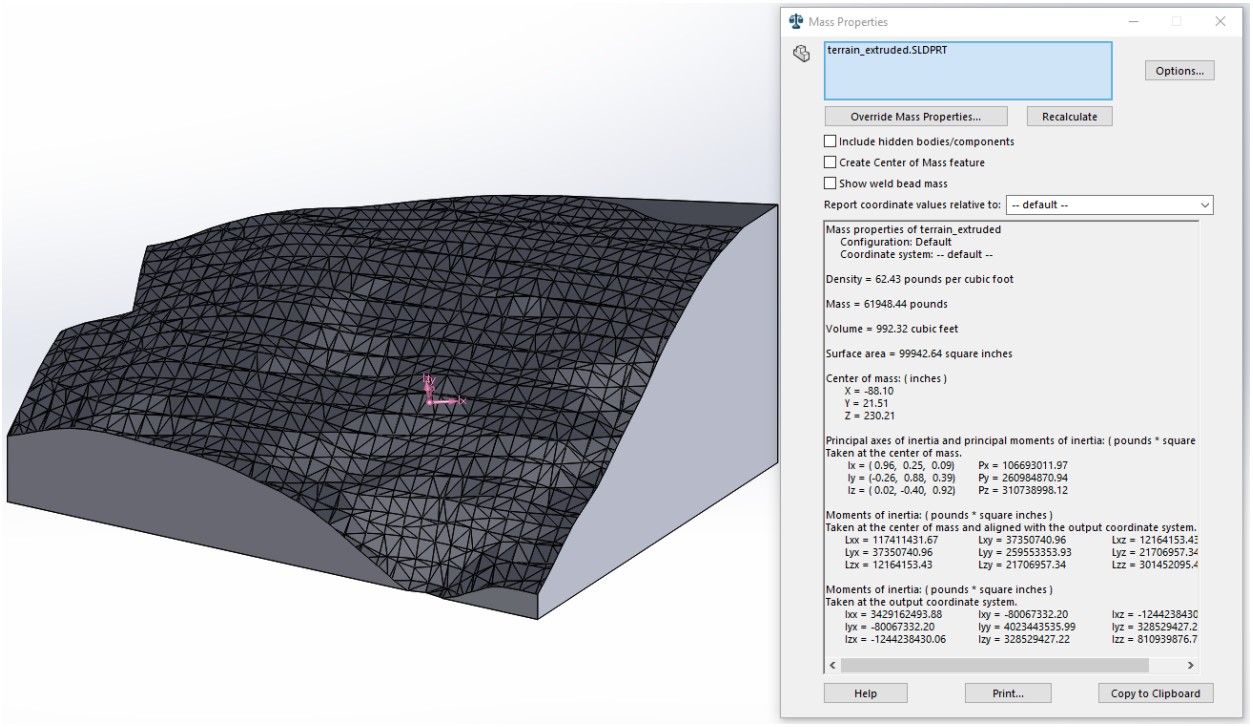


Figure 5-25: Intersection of Cellar Volume with the Grade[432]

In addition, nearly all of the loft would be located above a covered overhang that is exterior to the home. Given the design element of this covered overhang and entryway, the loft volume comprising an area of 190 square feet would exist whether the Applicant elected to make it usable floorspace or not. Because analysis under CEQA is confined to the external effects of a project on the public, the configuration of a structure's interior floor partitions is irrelevant. Inasmuch as the regulation of the number of stories above grade is regulated distinctly from the height above grade in tiered proximity to lot boundaries (which limits govern massing and

[432] Source: Applicant

obstruction of air, light and views), the intent of this limitation is to maintain the geometric effectiveness of conforming privacy fences, such that a third story above grade may not peer over the fence and down into a neighboring yard. The window in the garage loft would provide a vantage that is equivalent to a second story above a flat grade and would look out only onto the street through obscuring oak tree canopy and up to residences across the street with windows sited at higher absolute elevations and similar heights above grade, on an ascending slope. Other windows in the home would similarly be situated at heights equivalent to a first or second story above a flat grade and look up to the surrounding fenced residences, not down. Therefore, the proposed project would comply with both the letter and the spirit of regulation prohibiting structures with windows that would defeat a privacy fence.

Yard Setbacks

The proposed project complies with all applicable regulations governing the yard setbacks of structures.

Pursuant to County Code Section 22.306.070(A)(1)(a) and Table 22.306.070-A, the minimum front yard distance in linear feet for parcels greater than 20,000 square feet in size is equal to the "[s]mallest front yard same block (min. 20)."

Pursuant to County Code Section 22.110.080(B)(3), "[t]he required front yard of a lot or parcel of land need not exceed 50 percent of the depth required in a zone where the difference in elevation between the curb level and the natural ground at a point 50 feet from the highway line, measured midway between the side lot lines, is 10 feet or more; or, if there is no curb, where a slope exists of 20 percent or more from the highway line to a point on natural ground 50 feet from said highway line. Measurement in all cases shall be made from a point midway between the side lot lines." Pursuant to County Code Section 22.110.020(A), this regulation "shall apply to development in all zones, unless superseded by more specific regulations in this Title 22." The Altadena Community Standards supersedes specifically enumerated provisions of County Code Section 22.110, but does not supersede this provision. The slope of the site set back 50 feet from the frontage property boundary at a point halfway between the northern and southern property boundaries exceeds 20 percent. As such, the "depth required in a zone" for this parcel in the Altadena Community Standards zone is 20 feet, and 50 percent of this is 10 feet.

Pursuant to County Code Section 22.14.250 (Definitions), ""front yard" means a "yard that extends across the full width of the lot. The depth of the required front yard shall be a specified horizontal distance between the highway line of the parkway, highway, or street on which the lot fronts, and a line parallel to the lot, except as otherwise provided for a flag lot in Section 22.110.170 (Flag Lots). On corner lots, the front yard shall be located across the narrower frontage of the lot. A yard shall not be deemed a front yard if there is no right of access of any kind, pedestrian or vehicular, from the adjoining parkway, highway, or street, except in Zones C-H or C-1."

Pursuant to County Code Section 22.14.250, ""yard" means an "open space on the same lot or parcel of land, other than a court, unoccupied and unobstructed from the ground upward, except as otherwise permitted by this Title 22."

The front yard is therefore that area extending across the full width (all of the frontage) of the lot without any structure (obstruction) from the ground upward. Detached garages can therefore not exist in front yards. Therefore, for those houses with detached garages nearer the road than the main structure, the front yard depth is measured from the edge of the detached garage.

Five residences exist on the same side of the street on the same block, to the north of the project parcel. Their front yard setbacks are approximately 10 feet, four feet, three feet, three feet, and 92 feet, respectively, proceeding northwards. The average of these setbacks is 22.4 feet. As the smallest front yard setback on the same block is 3ft, the minimum required front yard setback is 50% of 20 feet, or 10 feet.

The minimum actual front yard setback of the proposed project of approximately 26 feet is greater than 10 feet. (*See* Figure 3-6: Proposed Project Site Plan). Therefore, the proposed project complies with the front yard setback development standard.

Pursuant to County Code Section 22.306.070(A)(1)(a) and Table 22.306.070-A, the minimum interior side yard distance in linear feet for parcels greater than 20,000 square feet in size is equal to "10 percent of average lot width (min. 5)."

Pursuant to County Code Section 22.14.250, "Interior side yard" means a "yard extending from the required front yard, or the highway line on which the property fronts where no front yard is required, to the required rear yard or to the rear lot line where no rear yard is required on other than a corner side yard. The width of a required interior side yard shall be a specified horizontal distance between each such side lot line parallel thereto on the lot or parcel of land."

Since the shape of the lot is irregular, the average width is computed by drawing the smallest rectangle able to fit the lot entirely within its border. This yields a shape for which depth and width have meaning. The length of this rectangle is then measured to compute a depth. Dividing this depth by the area of the lot results in an average width.

Pursuant to Figure 5-26: Project Site Average Width, the average width of the project parcel is 44,390 square feet divided by 514 feet, which equals 86.4 feet. 10% of this average width is 8.64 feet.

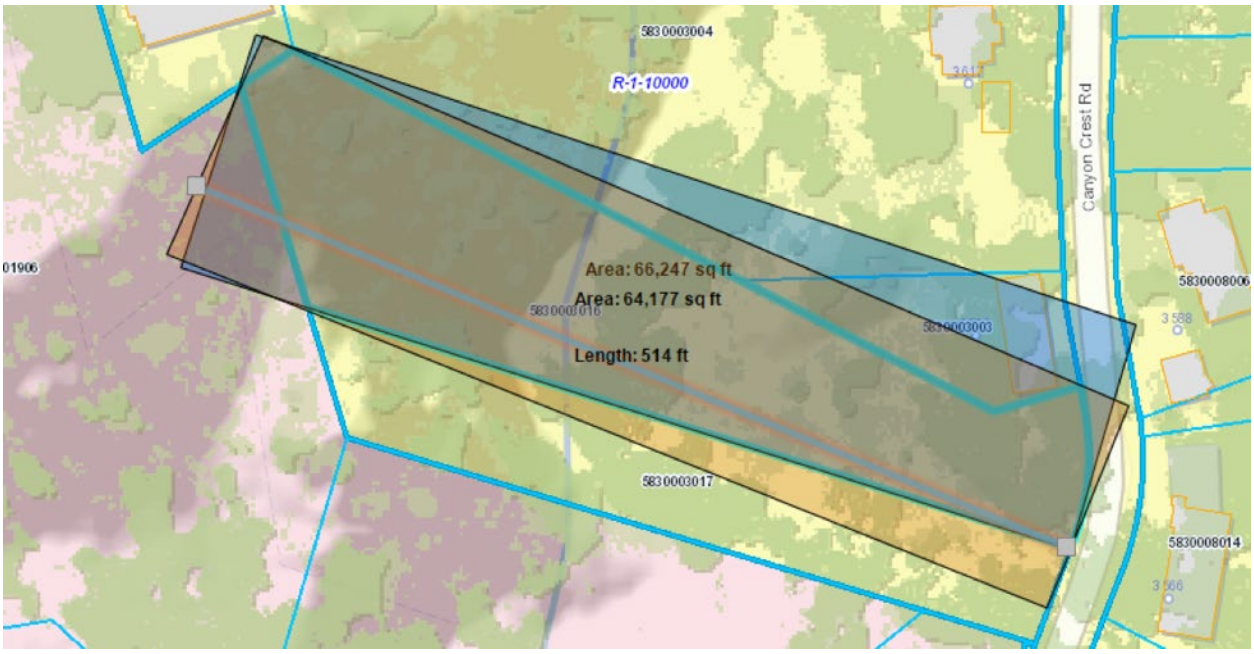


Figure 5-26: Project Site Average Width[433]

The minimum actual side yard setback of approximately 14 feet is greater than 8.64 feet. (*See* Figure 3-6: Proposed Project Site Plan).

Pursuant to County Code Section 22.306.070(A)(1)(a) and Table 22.306.070-A, the minimum rear yard distance in linear feet for parcels greater than 20,000 square feet in size is equal to 35 feet. The minimum actual rear yard setback of more than 400 feet is greater than 35 feet.

That the proposed project does not violate the County's developmental height and setback standards, which together define a permissible incursion of the existing field of view, would be sufficient to conclude that the project complies with all applicable land use regulations that have the "purpose of avoiding or mitigating an environmental effect."

Gross Structural Area and Lot Coverage

The proposed project complies with all applicable regulations governing gross structural area and lot coverage.

Pursuant to County Code Section 22.306.070(A)(4)(a), "[t]he gross structural area (GSA) of a residence includes the total floor area of all enclosed areas, including storage, but excluding cellars and garages or carports designed and used for the storage of automobiles. Lot coverage shall include all structures erected on the property."

Pursuant to County Code Section 22.306.070(A)(4)(b), "[t]he maximum GSA or lot coverage shall be determined by the following formula: GSA or lot coverage = (.25 x net lot area) + 1,000

[433] Source: Applicant

square feet." In addition, the Altadena Community Plan designates a lot coverage not to exceed 30%. For the subject property, this calculation yields (.25 x 44,390) + 1,000 = 12,097 square feet, which is less than 30% lot coverage. However, pursuant to County Code Section 22.306.070(A)(4)(c), "[t]he maximum GSA or maximum lot coverage shall not exceed 9,000 square feet." Therefore, the maximum GSA or lot coverage for the project parcel is 9,000 square feet. As the project has a gross structural area of 1,555 square feet and a lot coverage of 1,159 square feet, the proposed project complies with the gross structural area and lot coverage development standards.

Table 5-20: Comparison of Zoning Parameters of Residences Within 300 Feet of Project[434] [435] [436]

Address	GSA[437] (sq. ft.)	Max. Height (at least, ft.)	Max. Height above street grade plane (at least, ft.)	# of levels	Max # stories above grade	Min. Front Yard Setback (ft.)	Min. Side Yard Setback (ft.)
Project	1,555	~33'	25'	4	2	26'	15'
3556 Canyon Crest Rd.*	2,276	27'2"	36'3"	2	2	14'*	-7'*
3566 Canyon Crest Rd.*	2,105		25'7"	1	1	13'*	6'*
3588 Canyon Crest Rd.*	1,259		28'10"	1	1	16'*	-1'*
3589 Canyon Crest Rd.*	958			1	1	10'*	2'*
3535 Canyon Ridge Dr.*	4,683	36'8"*	36'8"	4	3*	23'	6'*
3617 Canyon Crest Rd.*	1,978			2	2	4'*	2'*
3637 Canyon Crest Rd.*	1,605			1	1	3'*	1'*
3665 Canyon Crest Rd.*	1,616			1	1	3'*	50'

[434] Source: Applicant. Note: Height measurements of other residences are derived from LiDAR. (See also Section 11 Appendix B).
[435] Note: * denotes violation of the Altadena Community Standards if proposed today
[436] Note: ** denotes not subject to Altadena Community Standards, because the residence is located in the City of Pasadena
[437] Source: County Assessor. Available at: https://maps.assessor.lacounty.gov/m/.

Address	GSA[437] (sq. ft.)	Max. Height (at least, ft.)	Max. Height above street grade plane (at least, ft.)	# of levels	Max # stories above grade	Min. Front Yard Setback (ft.)	Min. Side Yard Setback (ft.)
3624 Canyon Crest Rd.*	1,262					17'*	-4'*
3550 Canyon Crest Rd.*	1,237					120'	-3'*
3506 Canyon Crest Rd.*	1,920					15'*	2'*
3500 Canyon Crest Rd.*	1,509					32'	-2'*
3483 Canyon Ridge Dr.*	1,842					36'	-2'*
3497 Canyon Ridge Dr.*	2,188					46'	-1'*
3551 Canyon Ridge Dr.*	3,000					2'*	-5'*
3410 Florecita Dr.**	1,431						
3425 Florecita Dr.**	3,756						
4001 Canyon Dell Rd.*	1,834					N/A[438]	2'*
4003 Canyon Dell Rd.*	2,442					N/A	6'*[439]
Average:	2,047						

Parking Spaces

The proposed project complies with all applicable regulations governing the provision of parking spaces.

Pursuant to County Code Section 22.112.030, "[a]ny single-family residence…on a lot having an area of one acre or more per dwelling unit shall be exempt from Section 22.112.070 (Required

[438] Note: flag lots have a uniform yard setback of 10'

[439] Note: As a flag lot, this may denote either a rear or a side yard setback.

Parking Spaces" and Section 22.112.080.E (Paving)" These sections, in conjunction with County Code Table 22.306.070-E, require two covered parking spaces for a single-family residence with four or fewer bedrooms, along with an improved driveway capable of bearing vehicular traffic without rutting or fouling the roadway in the vicinity. Pursuant to County Code Section 22.306.070(A)(5)(b), any additional parking spaces beyond the two covered for single-family residences with a larger number of bedrooms may be uncovered. Therefore, while the proposed project is exempt from any parking or paving requirements, the two covered parking spaces in the garage and the Tree Root Protection System driveway would fulfill the requirement.

Permit Application Processing

The proposed project is consistent with all applicable regulations governing permit application processing.

The Minor CUP and Oak Tree Permit applications date from 2014. On March 21, 2017, these permits were approved by the County Board of Supervisors at a public hearing, in accordance with all applicable County regulations in effect at the time.

On December 14, 2017, the County received a letter from the Applicant requesting the County vacate and set aside then current project entitlements approvals in order to end litigation challenging those approvals. Assenting to this request, on February 27, 2018, the County Board of Supervisors vacated and set aside their approvals. The vacation was not a "final action" by the County, as a denial or revocation would have been, and neither did the Applicant request his permit application be withdrawn. The letter from Regional Planning recommending the action to the Board stated that "the Applicant's permit application will remain on file with the Department. If the Applicant seeks to pursue the project further, it will be processed in compliance with all applicable laws and regulations."[440]

The County Code does not prohibit the continued processing of a permit application that had been vacated and set aside, nor does it establish any time limits for discretionary processing of permit applications. The County has approved permit entitlements under applications that were more than 15 years old, with Applicants sometimes electing to analyze the project under current regulations.[441] The County has re-approved previously approved permit applications that had been vacated and set aside in response to litigation.[442]

After vacation, the permit application and associated hearing processes reverted to the procedures described in the County Code. Pursuant to the authority granted the County Regional Planning Commission in County Code Section 22.222.120 (Public Hearing Procedure), the

[440] Source: County Board of Supervisors, February 27, 2018 Resolution, page 2. Available at: http://file.lacounty.gov/SDSInter/bos/supdocs/121018.pdf.
[441] See, e.g. Specific Plan No. 02-232, for the Centennial project, approved in December of 2018 from a permit application dating originally to 2002, as attributed in: http://planning.lacounty.gov/case/view/specific_plan_no_02_232_centennial_specific_plan.
[442] See, e.g. CUP No. 94-087-(5), for the Newhall Ranch Specific Plan project, approved in March of 1999 from a permit application dating originally to 1994, though in response to litigation, "the Board set aside its approval of CUP No. 94-087-(5)", and subsequently reapproved that same CUP on May 20, 2003, as attributed in: http://lacounty.info/bos/sop/supdocs/5484.pdf.

Applicant's request to re-approve the project would properly be heard by the Commission at a hearing initiated on its own authority.

"An agency's view of the meaning and scope of its own ordinance is entitled to great weight." *Friends of Davis v. City of Davis* (2000) 83 Cal.App.4th 1004, 1015. The County's own planning and zoning ordinances must be read together with California Planning and Zoning Law, Government Code Section 65000, *et seq*. Pursuant to Government Code Section 65010(b), "no action….by any public agency or its legislative body…shall be held invalid or set aside by any court…by reason of any error [or] irregularity…as to any matter…of procedure…unless the court finds that the error was prejudicial and that the party complaining or appealing suffered substantial injury from that error and that a different result would have been probable if the error had not occurred." The prejudicial error rule of the California Constitution (Cal. Const., art. VI, § 13) likewise permits judicial override of any process only to remedy a miscarriage of justice.

Continued processing of the permit application would not be prejudicial to any environmental analysis, as compared to a new permit application. The proposed project has not been analyzed any differently than a new permit application submitted on the date of the Notice of Preparation would have been and would be subject to the same processes of public hearing and review codified in the County Code.

At the request of the Applicant, this EIR has analyzed the project according to all rules and regulations in effect at the time of the Notice of Preparation, as a new permit application would have been, instead of those in effect at the time of application in August of 2014. Pursuant to the 2035 County General Plan, the "applicant may choose whether the application will be reviewed for consistency with the previously adopted General Plan or with this General Plan" and thus is granted discretion to make this decision.[443]

- **Threshold 5.10-5**: Conflict with established recreational, educational, religious or scientific uses of the area.

The project would be expected to result in no adverse impacts from conflict with established recreational, educational, religious or scientific uses of the area.

Project-specific Analysis

As a vacant parcel in a residential neighborhood that is zoned for single-family use, no existing public recreational, educational, religious or scientific uses have been identified on the project parcel, and the proposed use of the project parcel for its zoned purpose would not, therefore, conflict with any such use.

Level of Significance Before Application of Mitigation Measures

[443] Source: County Department of Regional Planning: 2035 County General Plan, Chapter 2, page 16. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/2.0_gp_final-general-plan-ch2.pdf.

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The proposed project complies with all current development standards and is consistent with the County General Plan and with the Altadena Community Plan. The proposed project is compatible with its zoning and with the existing residential usage in the area. The project had already completed review of all applicable regulatory provisions predicate to issuance of a building permit, pursuant to RCM-LU-1. In addition, the Applicant has proposed PDF-LU-1 to facilitate the understanding of neighboring residents, with a simplified summary of the constraints imposed on the project, as well as an avenue to orderly channel any complaints that might issue by providing appropriate contact information for himself and for those authorities tasked with oversight. *See also Berkeley Hillside Preservation v. City of Berkeley* (2015) 241 Cal.App.4th 943, 959 (distribution to neighbors of a notice describing the constraints of a project is a commonsensical courtesy that does not amount to mitigation). As a result, no significant land use impacts would be expected.

Eaton Fire recovery activities, including rebuilding of many structures in Altadena concurrently over several years, are reasonably foreseeable to take place during construction and occupancy of the proposed project. However, interaction of the proposed project with these activities would be expected to be limited. Only four residences on or tributary to Canyon Crest Road burned and are reasonably foreseeable to be rebuilt in the coming years, along with renovations of smoke-affected residences. Eaton Fire recovery activities will be spread in time and produce typical residential construction impacts that are mostly localized to the immediate vicinity of re-construction, predominantly east of Lincoln Avenue. Adequate resources for this effort, including building supplies and labor, are expected to be sourced from throughout the Los Angeles metropolitan area. All affected residential roadway and utility infrastructure necessary to construction or occupancy of the proposed project has been or is in the process of being maintained or repaired as needed, and no material infrastructure deficiencies are reasonably foreseeable at the start of project construction. Nearly all Eaton Fire debris cleanup by the United States Army Corps of Engineers and/or private contractors was completed in 2025, before commencement of proposed project construction activities. The project impacts of one single-family residence are not cumulatively considerable in the context of reasonably foreseeable Eaton Fire recovery activities.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to land use and planning would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "implementation of the [2035 County General Plan] would not conflict with existing land use plans, policies, or regulations of agencies with jurisdiction over the [County]. Therefore, the Proposed Project would not contribute to a significant cumulative impact."[444] The proposed project is subject to and has been analyzed to be consistent with these regulations.

Past projects have been consistent with land use designation and have not contributed to any impacts from land use incompatibility. To the extent that nearby residences were constructed prior to current zoning regulations in the community, and all in the vicinity violate one or more of those regulations, the proposed project does not contribute to any further degradation inuring from these violations because it complies with all current regulations. Also, many of these violations (such as those governing side and rear yard setbacks) materially affect only the adjacent private residence(s), not any publicly accessible vantage, and are therefore outside the scope of CEQA analysis of publicly perceptible impact on the environment.

Other closely related present and future projects would be expected to be consistent with applicable land use and planning regulations or to be subjected to a conditional use process requiring substantiation of burdens of proof of land use compatibility, or the imposition of appropriate conditions, if any, to ensure those burdens are met.

[444] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.10-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.11 Mineral Resources

5.11.1 Introduction

This section of the EIR evaluates the project's potential impacts to mineral resources. This evaluation includes an assessment of whether a loss of any significant mineral resource zone, oil or natural gas resource would result from implementation of the project.

5.11.2 Regulatory Framework

State and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to mineral resources.

State Regulation

Surface Mining and Reclamation Act: California Public Resources Code Sections 2710 et seq.

The Surface Mining and Reclamation Act of 1975 ("SMARA") is the primary regulator of onshore surface mining in the State. It delegates specific regulatory authority to local jurisdictions. The act requires the State geologist (California Geological Survey) to identify all mineral deposits within the State and to classify them as: (1) containing little or no mineral deposits; (2) significant deposits; or (3) deposits identified, but further evaluation is needed. Lands where such deposits are identified are designated Mineral Resource Zone ("MRZ") 1, 2, 3, or 4, respectively. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. A particular concern of state legislators in enacting SMARA was the premature loss of minerals and protection of sites threatened by development practices that might preclude future mineral extraction.

Mineral Resource Classification

The California Geological ("CGS") Survey Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the State that contain regionally significant mineral resources as mandated by the SMARA. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of the SMARA, which requires all cities and counties to incorporate in their general plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves the determination of Production-Consumption (P-C) Region boundaries, based on identification of active aggregate operations (Production) and the market area served (Consumption). The P-C regional boundaries are modified to include only those portions of the region that are urbanized or urbanizing and are classified for their aggregate

content. An aggregate appraisal further evaluates the presence or absence of significant sand, gravel, or stone deposits that are suitable sources of aggregate. The classification of these mineral resources is a joint effort of the State and local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zones ("MRZs"), Scientific resource Zones ("SZs"), or Identified Resource Areas ("IRAs"), described below.

- MRZ-1: A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2: A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present or a likelihood of their presence and development should be controlled.
- MRZ-3: A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- MRZ-4: A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.
- SZ Areas: Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.
- IRA Areas: County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant minerals are present.

As part of the classification process, an analysis of site-specific conditions is utilized to calculate the total volume of aggregates within individually identified Resource Sectors. Resource Sectors are those MRZ-2 areas identified as having regional or statewide significance. Anticipated aggregate demand in the P-C Regions for the next 50 years is then estimated and compared to the total volume of aggregate reserves identified within the P-C Region.

Department of Conservation, Division of Oil, Gas & Geothermal Resources

The Division of Oil, Gas, and Geothermal Resources ("DOGGR") is a subdivision of the California Department of Conservation. DOGGR oversees the drilling, operation, maintenance, and closing of oil, natural gas, and geothermal wells. The division is intended to protect the environment, prevent pollution, and ensure public safety. It functions as an information repository but also regulates oil and gas extraction activities consistent with state regulations that include Section 3000 *et seq.* of the State Public Resources Code and Title 14, Division 2, Chapter 4 of the California Code of Regulations. These codes include provisions regulating the distribution of oil wells.

Local Regulation

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to mineral resources, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.11.3 Existing Conditions

The project parcel is located within a designated Mineral Resources Zone 3.[445] The MRZ-3 designation is shared throughout much of Altadena and likely reflects underlying alluvial sand and gravel deposits that could be used as aggregate, though this designation indicates that the significance of any deposits cannot be evaluated from available data.

Mineral resources of county-wide significance are described in the Natural Resources element of the County General Plan. As such, the nearest designated mineral resource is more than 500 feet to the west of the project parcel, and the nearest designated oil and natural gas resource is more than 10 miles to the southwest of the project parcel.[446] The Altadena Community Plan does not contain any specific provisions in its Environmental Resources element that address mineral resources.

5.11.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.11-1**: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
  - For purposes of analysis in this EIR, a known mineral resource is a Mineral Resource Zone 2, Scientific Resource Zone or Identified Resource Area.

- **Threshold 5.11-2**: Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan
  - For purposes of analysis in this EIR, a locally important mineral resource recovery site is a Mineral Resource Zone or Oil and Gas Resource mapped by the 2035 County General Plan.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

No significance criteria exist for this area of analysis.

[445] Source: State Department of Conservation, Division of Mines and Geology. Available at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_143/PartIV/Plate_4-1.pdf.
[446] Source: County Department of Regional Planning: 2035 County General Plan, Figure 9.6. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

5.11.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to mineral resources first identifies whether any class of known mineral resources may be affected by the project. This includes examination of the state-designated resources identified by the California Geological Survey and the County-designated resources identified in the General Plan. The significance assessment also considers the viability of any commercial development of that resource.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

There are no standard conditions or regulatory compliance measures specifically relied upon in this area of analysis.

Impact Discussion

- **Threshold 5.11-1**: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state
- **Threshold 5.11-2**: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

The project would be expected to result in no adverse impacts under these thresholds from the loss in availability of any known or delineated mineral resource.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[447] in all Planning Areas except portions of the Antelope Valley.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with mineral resources, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The County, through the Land Use Element of the General Plan, has designated the project parcel and those surrounding it for residential use. Therefore, any deposits are not available for

[447] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

commercial mining operations. In addition, as attributed in Section 5.11.3, there are no designated mineral resources affected by the project.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The project would not impact any mineral resource with the potential for significance, and the project parcel is not zoned to permit the extraction of any mineral resource.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to mineral resources would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[c]umulative projects in combination with buildout of the [2035 County General Plan] would contribute to significant cumulative impacts in the Antelope Valley Planning Area….Cumulative impacts would be less than significant in the remaining 10 Planning Areas."[448] The proposed project is located in the San Gabriel Valley Planning Area and is not located over any known mineral resources.

Past projects have not impacted any mineral resources in the area so designated in modern times, which the project also does not impact.

[448] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Other closely related present and future projects would be expected to be consistent with all applicable land use policies prohibiting such usage and therefore would not affect these resources.

5.12 Noise

5.12.1 Introduction

This section of the EIR evaluates the project's potential impacts relating to noise. Noise includes both auditory sounds generated as a result of construction and operation of the project, as well as any sub-auditory vibrations. The existing noise conditions and proximity of sensitive receptors are documented. Vectors for changes to this existing condition are then assessed, including (1) noise from construction activities at the project parcel; (2) construction-related traffic noise; (3) ground borne vibration during construction; (4) noise from the period of occupancy of the project parcel; (5) traffic noise during the period of occupancy of the project parcel; and (5) the cumulative considerability of the increase in noise levels during construction and operation.

Fundamentals

Sound is a pressure wave transmitted through air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz ("Hz") or cycles per second), and duration. The standard unit of measurement of sound is the decibel ("dB"). Unlike units of measure that are computed with arithmetic functions, decibels are measured and processed on a logarithmic scale. An increase of 10dB is 10 times more energetic than 1dB, a 20dB increase is 100 times more energetic, etc.

Changes between 1dB and 3dB are detectable only under quiet, controlled conditions, and changes of 1dB or less are considered to be indiscernible. A 3dB change in noise levels is considered the minimum change that is detectable with human hearing in exterior environments and corresponds to approximately a doubling or halving of sound energy. A change of 5dB is readily discernible to most people in an exterior environment, and a 10dB change is perceived as a doubling or halving in human psychoacoustical perception of volume. As such, sound energy and volume do not equate. For example, the increase in sound operating two co-located pieces of the same equipment, compared to a single piece, is approximately 3dB, because two pieces are twice as energetic as one. However, the increase in volume is perceived as approximately 10% greater. For this reason, noise levels are typically a function of the loudest noise source in an environment. For instance, if a 73dB piece of equipment operates simultaneously with a 67dB piece of equipment, the resulting noise level will be 74dB, an imperceptible increase compared to the louder piece of equipment operating alone.

Noise is defined as unwanted sound and is known to have adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects, federal, state, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities. Extended periods of noise exposure above 85-90dBA introduce the risk of permanent hearing damage.

As the adversity of noise is typically expressed in terms of human health and annoyance, the measurement of noise typically employs "A-weighting," which approximates the human perception of sound with the application of a curve of positive or negative gain to noise generated at frequencies within the range of human hearing (between 20Hz and 20,000Hz),

nulling sounds outside these frequencies. Such noise measurements are expressed in A-weighted decibels ("dBA").

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equivalent to the energy content over a time period (L_{eq}) or as a statistical description of the sound level that is exceeded over some fraction of a given observation period. Equivalent noise levels may be calculated for any time period but are typically expressed in 1-hour or 24-hour equivalent noise levels (L_{eq}(1-hr) or L_{eq}(24-hr)). Statistical descriptions are annotated with the percentage to which the statistic corresponds. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time, discretized to one hour. Similarly, the $L_{1.6}$, $L_{8.3}$, and L_{25} values represent the noise levels that are exceeded for 1, 5, and 15 minutes per hour. The L_{max} noise level is the maximum instantaneous measurement obtained over the measurement period, representing the root of the mean of the square of noise levels over a given time constant usually ranging from one eighth of a second to one second.

Some common noise measurement approaches also penalize sound generated during evening and night-time hours with positive gain during hours when human sensitivity is greater and sleep is the probable activity. The Community Noise Equivalent Level ("CNEL") is the equivalent A-weighted noise level during 24 hours, penalized with 5dB of positive gain for noise generated during the evening hours (7p.m. to 10p.m.) and 10dB of positive gain during the nighttime hours (10p.m. to 7a.m.) hours. L_{dn} is identical to CNEL with the exception that it lacks the evening penalty. In wilderness areas, CNEL noise levels can be below 35dBA. In small towns or wooded residential areas, levels are usually between 50 and 60dBA. Levels between 70 and 75dBA are more common in busy urban areas, and levels up to 85dBA occur near major freeways and airports.

Sound levels decrease as the distance from their source increases. If noise is produced by a point source, such as a piece of equipment, sound levels decrease proportionally to the inverse of the square of the distance traveled. In the logarithmic decibel system, this corresponds to an idealized change of approximately 6dB for a doubling or halving of distance from the source, across terrain that can be idealized as "hard," or reflective of noise, including smooth or paved surfaces. Across "soft" surfaces capable of absorbing noise, including vegetated or textured terrain, a doubling of distance is associated with as much as 7.5dB for a doubling or halving of distance from the source. If noise is produced by a line source, such as highway traffic, the sound decreases proportionally to the inverse of the distance traveled. In the logarithmic decibel system, this corresponds to an idealized change of approximately 3dB for a doubling or halving of distance from the source on a hard surface, and a somewhat larger figure on soft surfaces. Ground and terrain effects can result in greater attenuation rates. Sound levels of reference activities are provided in Table 5-21: A-weighted Sound Levels of Typical Noise Sources and Noise Environments.

Table 5-21: A-weighted Sound Levels of Typical Noise Sources and Noise Environments[449]

Noise Source (at given distance)	dBA (L_{max})	Noise Environment	Human Judgment of Loudness (relative to 70dBA)
First stage of Saturn V rocket (50 feet)	190-200+	Launch pad	Shock waves, lung damage, death
Military Jet Take-off with After-burner (50 feet)	140	Carrier flight deck	Risk of burst eardrum [128 times as loud]
Civil defense siren (100 feet)	130	Restricted area	Noticeably painful [64 times as loud]
Commercial jet takeoff (200 feet)	120	Restricted area	Threshold of pain [32 times as loud]
Rock concert	110	In proximity to amplification	[16 times as loud]
Ambulance siren (100 feet) Power lawn mower (3 feet)	100	Residential environment	Very loud [8 times as loud]
Motorcycle (25 feet) Helicopter flyover (500 feet) Diesel truck, 40mph (50 feet)	90	Residential environment	[4 times as loud]
Garbage disposal (3 feet)	80	Residential environment	[2 times as loud]
Living room stereo (15 feet) Vacuum cleaner (3 feet)	70	Residential environment	Moderately loud [Reference loudness]
Normal conversation (5 feet) Air Conditioning Unit (100 feet)	60	Residential environment	[1/2 as loud]
Light traffic	50	Residential environment	[1/4 as loud]
Distant bird calls	40	Lower limit of urban ambient sound	Quiet [1/8 as loud]
Soft whisper (5 feet)	30	Quiet bedroom	Very quiet [1/16 as loud]

[449] Source: Compiled from various published sources and widely used references including The Handbook of Acoustical Measurements and Noise Control, Third Edition, edited by C.M. Harris, 1991; Federal Agency Review of Selected Airport Noise Analysis Issues, 1992, Modified by The Louis Berger Group, Inc, 2004, and Noise and Vibration Control, Second Edition, edited by L.L. Beranek, 1988 Institute of Noise Control Engineering.

Breathing	20	Recording studio	
	0		Threshold of hearing

Noise may be attenuated by the placement of a barrier between the source of noise and a shielded, or shadowed, volume. Commonly used barriers include earth, masonry, and certain types of insulation (e.g. rockwool, fiberglass). When deployed as an enclosure, the performance of barriers continues to improve as mass is added because no diffraction occurs around the barrier. When deployed as a directional shield, such as a fence, noise reductions can range from approximately 5dB where the direct noise path is just blocked to an asymptotic limit of approximately 20dB where noise shadowing is great.[450] Attenuation of noise with barrier geometry is a function of the straight-line distance added to the path through which a noise disturbance must propagate, as compared to the direct noise path. This relationship can be expressed with a dimensionless constant borrowed from the field of optics called the Fresnel number. Reductions below 5dB also occur for partial blockage, such as short barriers or effectively convex surfaces.

Vibration is on oscillating movement of solid matter, such as the earth or a physical object. Unlike noise, vibration typically propagates at a frequency that is felt rather than heard. Vibration can be either natural (as in the form of earthquakes, volcanic eruptions, sea waves, or landslides) or manmade (as from explosions, combustion engines, or the passage of heavy vehicles such as trains). Both natural and manmade vibration may be continuous, such as from operating machinery, or transient, such as from a single impact event. As with noise, vibration can be described by both its amplitude and frequency. Typically, peak particle velocity (measured in inches per second) and/or acceleration (measured in earth gravities, or g's) are used to describe vibration.

5.12.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Aircraft Noise Standards

The Federal Aviation Administration ("FAA") Advisory Circular Number 150 5020 2, entitled "Noise Assessment Guidelines for New Helicopters" recommends the use of a cumulative noise measure, the 24-hour equivalent sound level (L_{eq}(24-hr)), so that the relative contributions of the heliport and other sound sources within the community may be compared. The L_{eq}(24-hr) is similar to the L_{dn} used in assessing the impacts of fixed-wing aircraft. The helicopter L_{eq}(24-hr) values are obtained by logarithmically adding the single-event SEL values over a 24-hour period.

[450] Source: California Department of Transportation: Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol, page 2-41. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf.

Public Law 96-193 also directs the FAA to identify land uses that are "normally compatible" with various levels of noise from aircraft operations. Because of the size and complexity of many major hub airports and their operations, FAR Part 150 identifies a large number of land uses and their attendant noise levels. However, since the operations of most heliports and helistops tend to be much simpler and the impacts more restricted in area, Part 150 does not apply to heliports/helistops not located on airport property. Instead, the FAA recommends exterior noise criteria for individual heliports based on the types of surrounding land uses. In suburban residential areas, a figure of 57dBA L_{eq}(24-hr) is used.

Highway Noise Standards

The Federal Highway Administration ("FHWA") is the agency responsible for administering the Federal-Aid highway program in accordance with federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, applies to highway construction projects where a state department of transportation has requested federal funding for participation in the project. The regulation requires the highway agency investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design.

State and local governments have the authority to regulate land use planning or the land development process. The FHWA and other federal agencies encourage state and local governments to practice land use planning and control in the vicinity of highways to avoid future noise impacts and the need to provide noise abatement for future highway projects. The federal government advocates use of local government authority to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. For interstate freeways and for state routes, these noise investigations are coordinated through the California Department of Transportation ("Caltrans").

State Regulation

State of California Building Code

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility of that new construction from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit

interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45dBA CNEL.

State of California Roadway-Related Noise and Vibration

FHWA approved the California DOT noise policy ("Protocol") for new or reconstruction highway projects. This Protocol became effective on July 13, 2011 for all Federal-Aid projects. This noise protocol is mandated by the revised Title 23, Part 772 Federal Code (which became effective a year earlier on July 13, 2010. This Protocol contains many new provisions including the criteria for grandfathering existing projects currently under development.

Additionally, the Technical Noise Supplement ("TeNS") to the Traffic Noise Analysis Protocol was updated. As of July 2011, 23 CFR 771 requires the use of the official Traffic Noise Model ("TNM") analysis for all Activity Category Land Uses. This document contains Caltrans noise analysis procedures, practices, and other useful technical background information related to the analysis and reporting of highway and construction noise impacts and abatement. It supplements and expands on concepts and procedures referred to in the Traffic Noise Analysis Protocol, which in turn is required by federal regulations in 23 CFR 772. Most methods and procedures recommended by Caltrans are in conformance with industry standards and practices.

As with transportation-related noise, Caltrans addresses roadway vibration in its Transportation and Construction Vibration Guidance Manual. This manual provides practical guidance to engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects.

California Noise/Land Use Compatibility Matrix

The California Office of Noise Control has prepared a land use compatibility chart for community noise[451] to provide a tool to gauge the compatibility of land uses relative to existing and future noise levels. This land use compatibility chart identifies "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land uses. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design to shield future occupants. By comparison, a normally acceptable designation indicates that standard construction assemblies are acceptable with no special noise reduction requirements.

For residential low-density construction, existing noise levels up to 60dBA CNEL are considered "normally acceptable," and noise levels up to 70dBA CNEL are considered "conditionally acceptable."

Local Regulation

[451] Source: California Office of Planning and Research: State of California 2017 General Plan Guidelines, page 374. Available at: https://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.

Los Angeles County Noise Ordinance (Title 12.08)

Construction Noise

Pursuant to County Code Section 12.07.570(D), construction is exempt from Part 3 of the Noise Ordinance. Like many jurisdictions in California, the County explicitly separates construction activity from other types of land use activities that might create excessive noise, crafting different thresholds of acceptability to accommodate the inherently temporary and fluctuating nature of construction noise.

Construction noise is governed by County Code Section 12.08.440(B)(1), which quantifies permitted exterior noise levels during working hours "at residential structures," immediately adjacent to any habitable envelope, such as an exterior wall or window. The maximum levels of equipment and activity noise permitted are described in Table 5-22: Threshold Exterior Noise Levels (dBA) at Nearby Residential Structures for Construction Activities.

Table 5-22: Threshold Exterior Noise Levels (dBA) at Nearby Residential Structures for Construction Activities[452]

	7a.m. to 8p.m., daily excepting federal holidays and Sundays	**8p.m. to 7a.m. daily, and on federal holidays and Sundays**
Mobile Noise Source ("intermittent")	75	60
Fixed Noise Source (operated for "periods of 10 days or more")	60	50

County Code Section 12.08.090 defines "construction" as "any site preparation, assembly, erection, substantial repair, alteration, or similar action, for or of public or private rights-of-way, structures, utilities, or similar property." County Code Section 12.08.150 defined "fixed noise source" as a "stationary device which creates sounds while fixed or motionless, including but not limited to residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners and refrigerator equipment." County Code Section 12.08.220 defines a "mobile noise source" as "any noise source other than a fixed noise source."

Pursuant to County Code Sections 12.08.440(A) and 12.08.230, construction generating a "noise disturbance" does not adhere to the standards in Table 5-22: Threshold Exterior Noise Levels (dBA) at Nearby Residential Structures for Construction Activities and is prohibited except in cases of emergency work or issuance of a variance by the public health officer.

Ambient Noise

[452] Source: County Code Section 12.08.440(B)

County Code Section 12.08.390 establishes acceptable ambient noise levels to regulate intrusive non-exempt noises within specific land use zones. Thresholds for violation are expressed in terms of both magnitude and duration in the span of an hour. L_{50} represents the noise levels not to be exceeded for more than 30 minutes in an hour, L_{25} those not to be exceeded for more than 15 minutes in an hour, etc. L_0 represents the levels not to be exceeded at any time.

Table 5-23: Threshold Exterior Ambient Noise Levels for Residential Properties (dBA L_{max})[453]

Standard	Daytime (7a.m. to 10p.m.)	Nighttime (10p.m. to 7a.m.)
L_{50}	50	45
L_{25}	55	50
$L_{8.35}$	60	55
$L_{1.71}$	65	60
L_0	70	65

Other Applicable Exemptions

Pursuant to County Code Section 12.08.570(D)(5), "[r]esidential air conditioning or refrigeration equipment" is exempt from the Noise Control Ordinance.

Pursuant to County Code Section 12.08.570(H) "utility…construction operations at any time on public right-of-way" are exempt from the Noise Control Ordinance.

Pursuant to County Code Section 12.08.570(I), "all legal vehicles of transportation operating in a legal manner in accordance with local, state and federal vehicle-noise regulations within the public right-of-way…or on private property" are exempt from the Noise Control Ordinance.

Pursuant to County Code Section 12.08.570(L), "[n]oise sources associated with the minor maintenance of residential real property" are exempt from the Noise Control Ordinance, provided said activities occur between 8:00 a.m. and 6:00 p.m. (7:00 p.m. during Daylight Savings Time) on any day except Sunday, when such activities may take place between the hours of 9:00 a.m. and 6:00 p.m.

Framework of Measurement

Pursuant to County Code Section 12.08.420, decibel measurements specified in Part 3 of County Code Section 12.08 shall be "A-weighted" to simulate human hearing and shall be made four to five feet above the ground.

Pursuant to County Code Section 12.08.370, decibel measurements specified in Part 3 of County Code Section 12.08 shall be made with a "slow response," except that "impulsive sound levels and vibrations" shall be made with a "fast response." These correspond to time constants of one

[453] Source: County Code Section 12.08.390

second and 125 milliseconds, respectively.[454] Impulsive noise is associated with impacts that occur in a fraction of a second, like a pile driver, jackhammer or powder-actuated tool.

Pursuant to County Code Section 12.07.570(D), construction noise is exempt from Part 3 of the Noise Ordinance and is "exclusively regulated" by Part 4 of County Code Section 12.08, which does not state a framework of measurement. The existing setting of this residential neighborhood is characterized by both healthy, unsaturated L_{eq}(1-hr) and CNEL noise levels as well as excursions of L_{max} well above a 75dBA threshold, such as from passing trucks, motorcycles, and helicopters. (*See* Table 5-24: Measured Total Ambient Noise Levels (dBA)). Because noise is measured in the aggregate, existing excursions of L_{max} above permitted levels of construction would result in violation that was entirely attributable to ambient sources. For this reason, the L_{eq}(1-hr) noise measurement used by the California Department of Transportation in their analysis guidelines for the measurement of construction noise under CEQA[455] is the preferred and most appropriate metric for construction noise.[456]

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to noise, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.12.3 Existing Conditions

Exposure of Persons to or Generation of Noise

Within the County, the major noise sources are generally transportation-related (i.e., vehicles, railroads, and aircraft). In addition, stationary noise sources (air conditioning units, loading docks, mechanical equipment, rail yards, machinery, etc.) from commercial and industrial activity also contribute to the ambient noise environment.

Within a 500-foot radius of the project are 52 single-family residences and six vacant single-family lots that have been identified as sensitive receptors, which are locations subject to an impact resulting from any potential temporary or permanent increases in noise levels related to

[454] Source: California Department of Transportation, Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol, page 3-27. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf.
[455] Source: California Department of Transportation; Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Barrier Retrofit Projects, page C-7. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/traffic-noise-protocol-april-2020-a11y.pdf.
[456] This metric was also used in analyzing construction noise impacts in the recent EIR for the Centennial project (https://case.planning.lacounty.gov/assets/upl/case/sp_02-232_pm060022_05-12-noise.pdf, page 5.12-32) which is also governed by the County of Los Angeles Noise Ordinance.

the project (*see* Figure 4-4: Existing Land Use). Pursuant to County Code Section 12.08.440(B)(1), construction noise shall be assessed at the habitable envelope of sensitive receptors.

Because instances of the same construction activity and different types of construction activities would be expected to occur at varying locations on the project parcel, it is not possible to give a single distance from the project to nearby sensitive receptors. However, distances from the centroid of the project footprint to the nearest exterior wall containing habitable space of residences in each direction provide support for reductions in the scope of impact analysis. To the south, the nearest point of the single-family residence at 3425 Florecita Drive is approximately 240 feet from the project centroid, for attenuation of more than 13dB compared to a distance of 50 feet. To the west, the nearest point of the single-family residence at 4001 Canyon Dell Road is approximately 460 feet from the project centroid, for attenuation of more than 19dB compared to a distance of 50 feet. To the north, the nearest point of the single-family residence at 3589 Canyon Crest Road is approximately 50 feet from the project centroid. To the east, the nearest point of the single-family residence at 3566 Canyon Crest Road is approximately 100 feet from the project centroid, for attenuation of 6dB compared to a distance of 50 feet.

Ambient Noise Levels

Representative baseline conditions on the project parcel over a 24-hour period were established during an autumn weekday, when traffic levels are higher than on the weekend. Noise levels were collected using a calibrated IEC 61672 Type 2 Sound Level Data Logger set to acquire 1Hz A-weighted measurements using a "slow" response time constant of 1s, since noises in a residential neighborhood are not predominantly impulsive.

Ambient noise on the project parcel is dominated by vehicular traffic and also includes noise from aviation, landscaping equipment, mechanical equipment and speakers associated with adjacent residential development, wind, other residential renovations in the vicinity, human voices, animals and insects, and other scattered sources. Noise was monitored at a location set back from the road by approximately 25 feet (an offset that is reasonably representative of the same traffic noises at nearby sensitive receptors) at a height above ground of approximately 4 feet. Peak (L_{max}) recorded noise levels were attributable to roadway and aerial traffic, including the passage of large trucks, motorcycles, and helicopters.

Table 5-24: Measured Total Ambient Noise Levels (dBA)[457]

Interval Start	L_{eq}(1-hr)	L_{max}	L_{min}	$L_{1.6}$	$L_{8.3}$	L_{25}	L_{50}
0:00	44.5	56.2	43.4	46	44.7	44.5	44.3
1:00	44.4	59	43.4	45.4	44.7	44.4	44.2
2:00	44.4	48.7	43.2	46.6	45.6	44.5	44
3:00	44.6	61.5	43.4	45.8	44.6	44.2	44

[457] Source: Applicant.

4:00	44.4	59.9	43.2	46.3	45.3	44.4	44
5:00	44.6	58.5	43.2	47.1	44.9	44.5	44.2
6:00	50	73.5	43.7	56.3	47.5	45.1	44.5
7:00	49.3	67.7	39.8	59.3	51.3	46	44.9
8:00	49.6	68.2	39.9	59.1	52.7	46.8	44.5
9:00	51.7	73.5	39.4	62	54.6	46.9	43.9
10:00	53	76.3	39.3	61.4	52.6	45.7	43.7
11:00	50.5	72.8	39.3	59.2	52.9	46.2	43.8
12:00	51.1	75.7	39.3	59.1	53.3	46.2	43.8
13:00	51	72	39.3	59.9	54.3	47.5	44.4
14:00	52.2	73.7	39.5	59.9	56.2	48.9	45
15:00	58.7	85.4	39.3	61.3	53.8	46.5	44.2
16:00	57.5	87.5	39.5	59.3	53.1	46.7	44.5
17:00	48.8	68.1	39.3	57.6	52.2	46.4	43.9
18:00	50.4	74.7	39.3	57.2	51.2	46.3	44
19:00	49.3	63.4	43.7	55.8	52.6	50.2	47.3
20:00	50.5	74.7	43.8	57.3	53.5	48.8	45.5
21:00	46.9	60.4	43.8	52.7	49.6	46.8	44.8
22:00	45.9	61.4	43.5	52.1	46.7	45.1	44.6
23:00	44.9	57.4	43.5	48.5	45.3	44.6	44.3
CNEL:	**54.5**						

While some of these L_{max} (L_0) levels exceed what is permitted pursuant to Table 5-23: Threshold Exterior Ambient Noise Levels for Residential Properties (dBA Lmax), peak measurements were attributable to roadway vehicles, presumably operating in accordance with all applicable regulations, which are exempt from the County Noise Control Ordinance. These fractional intensity levels are also consistent with the healthy levels envisioned by the County Code. All levels would be within expectations for a project located in a wooded residential neighborhood far from any freeway or other heavily trafficked arterial, adjacent to a residential collector roadway with a modest number of trips, but not few trips (like a cul-de-sac). Because these levels conform to expectation and, as attributed subsequently, establish a baseline for which substantially higher ambient noise levels could be tolerated without becoming significant, additional sampling of variability from day to day or throughout the year would not be warranted.

The 2035 County General Plan mapped 60, 65 and 70dBA CNEL noise contours throughout Altadena, the nearest of which to the project is aligned with Lincoln Avenue, a principal north-south arterial roadway in Altadena collecting thousands of Altadena residences to the I-210 freeway. The 60dBA CNEL noise contour centered on Lincoln Avenue terminates approximately 900 feet southeast of the project.

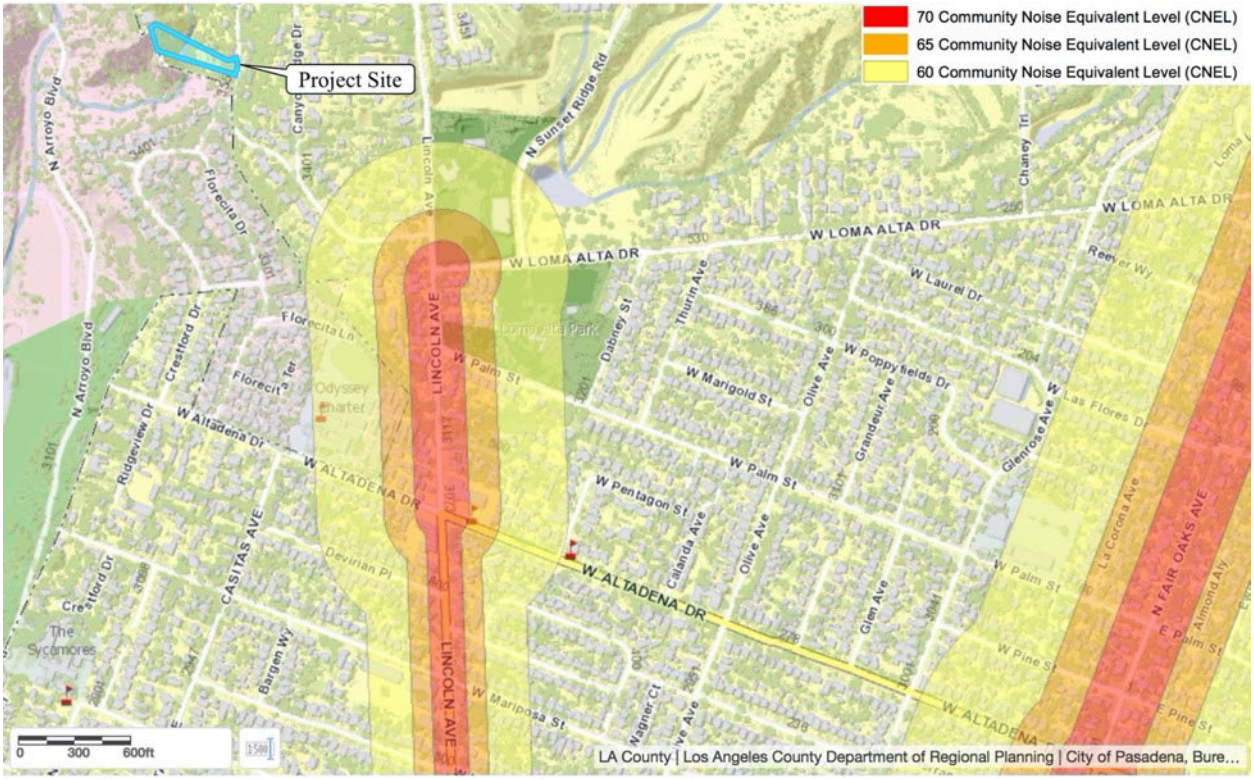


Figure 5-27: Existing Noise Contours Mapped by 2035 County General Plan[458]

5.12.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would result in:

- **Threshold 5.12-1**: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
  - For purposes of analysis in this EIR, a cumulatively considerable permanent increase in ambient noise levels in the environment is as defined in the program EIR governing the project,[459] as any increase to a level above 70dBA CNEL that is also greater than the threshold of human perception of 3dBA CNEL, for a substantial number of sensitive receptors.

[458] Source: County Department of Regional Planning: 2035 County General Plan, Figure 11.2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[459] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.12-55. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

- For purposes of analysis in this EIR, a substantial permanent increase in ambient noise levels in the environment is as defined in the program EIR governing the project[460] as 5dBA CNEL, a "readily perceptible" increase, where exterior noise levels do not increase above 65dBA CNEL, for a substantial number of sensitive receptors. 2035 County General Plan Noise Element policy N-1.9 and Altadena Community Plan policy ER-8 state that noise attenuation barriers are required to reduce exterior noise levels at sensitive receptors below 65dBA CNEL, thereby defining the acceptable exposure level. *See also Schaeffer Land Trust v. San Jose City Council* (1989) 215 Cal.App.3d 612, 624-625 (threshold is supported by substantial evidence when based on standards expressed in governing plan).[461] *See also Mission Bay Alliance v. Office of Community Investment & Infrastructure* 6 Cal.App.5th 160, 192-194 (upholding this threshold in construction of an arena)
- For purposes of analysis in this EIR, a substantial temporary or periodic increase in ambient noise levels in the environment in excess of standards established is violation of County Code Section 12.08 for a substantial number of sensitive receptors. There were no standards asserted in the program EIR governing the project apart from the County Noise Control Ordinance. The County Noise Control Ordinance considered and formulated context-specific thresholds and exceptions that are different for the construction and period of occupancy of one single-family residence, in consideration of the times of day, duration, intermittency and magnitude of noise impacts, and of the existing condition.

- **Threshold 5.12-2**: Generation of excessive ground-borne vibration or ground-borne noise levels
  - For purposes of analysis in this EIR, excessive ground-borne vibration or noise levels are as defined in the program EIR governing the project[462] as those greater than a root-mean-square velocity of 0.08 in./sec.
    - Pursuant to the California Department of Transportation, studies of "vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 inches per second, with the worst combinations of heavy trucks. This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)."[463]

- **Threshold 5.12-3**: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels

[460] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.12-56. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[461] Note: Interior noise levels would be expected to be lower than 45dBA CNEL for an exterior noise level of 65dBA CNEL given typical residential construction methods that attenuate by at least 20dBA, and analysis of the significance of exterior noise levels is therefore dispositive of interior noise levels.
[462] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[463] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.12-103. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.12-4**: Increase substantially the ambient noise levels for adjoining areas
  - For purposes of analysis in this EIR, this threshold is as defined in Threshold 5.12-1.

5.12.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to noise first identifies the sensitive receptors and existing ambient noise levels in the vicinity of the project parcel, as well as mediation of the pre-existing regulatory framework. The magnitude and duration of expected noise sources during construction and operation of the project are compared against significance thresholds derived from the 2035 County General Plan and its EIR.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-NOI-1: The project shall comply with all of the applicable provisions of County Code Section 12.08, including:

- Construction and operational noise emissions shall adhere to standards limiting the time of day, magnitude and duration of noise emissions.
- All mobile or stationary internal-combustion-engine powered equipment or machinery shall be equipped with suitable exhaust and air-intake silencers in proper working order.

Impact Discussion

- **Threshold 5.12-1**: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- **Threshold 5.12-4**: Increase substantially the ambient noise levels for adjoining areas

The project would be expected to result in no adverse impact from the generation of noise excursions outside the parameters that have been established to protect existing uses, and less than significant impacts from the generation of noise.

Construction and Temporary Noise

<u>General Analysis</u>

The 2035 County General Plan EIR formulated GPMM-NOI-1 to mitigate for an increase in construction-related noise levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[464] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. GPMM-NOI-1 stipulates that "[m]itigation measures such as installation of temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive structures, equipping construction equipment with mufflers, and reducing non-essential idling of construction equipment to no more than five minutes shall be incorporated into the construction operations to reduce construction-related noise to the extent feasible."[465] RCM-NOI-1, RCM-AQ-2, SC-BIO-1 and MM-NOI-1 together implement this mitigation measure.

The 2035 County General Plan EIR formulated GPMM-NOI-2 to mitigate for an increase in County noise levels, though the effect was found to be significant and unavoidable because "[n]o feasible mitigation measures are available to further reduce traffic noise impacts to existing noise sensitive receptors," and "exterior noise levels may still exceed the County noise land use compatibility criteria, despite exterior noise attenuation (i.e., walls and/or berms)." GPMM-NOI-2 stipulates that projects sited "along major roadways and freeways" i.e. within noise contours that exceeded 65dBA CNEL "shall retain an acoustical engineer to conduct an acoustic analysis," with the intent of providing design features to mitigate for excessive interior noise levels where indicated. However, the project is sited in a lightly trafficked residential neighborhood with existing ambient noise levels well below 65dBA CNEL (*see* Table 5-24: Measured Total Ambient Noise Levels (dBA)) and so transcends this mitigation measure and the associated finding of unavoidable significance.

The project must adhere to the County Noise Control Ordinance, Title 12, Section 12.08 of the County Code. Pursuant to County Code Section 12.08.670, violation of the County Noise Control Ordinance is a misdemeanor, and the County health officer is empowered to abate any violation by intervening to bring the project into compliance, or by hearing a request for variance in accordance with the County Noise Control Ordinance. As for other categorically exempt new single-family residences in the County, these procedures anticipated and are deemed adequate to mediate noise generation for one single-family residence.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with noise excursions, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Two types of construction noise impacts would be expected to occur.

[464] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[465] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.12-106. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

First, the transport of workers, equipment and building materials to the construction site would incrementally increase noise levels along site access roadways. The properly maintained operation of such vehicles on public or private land is exempt from the County Noise Control Ordinance and would not therefore be expected to violate the County Noise Control Ordinance. In addition, the threshold for perception of noise increase of 3dBA CNEL[466] is realized by a doubling of sound energy, corresponding to a doubling of traffic levels. The addition of 6-7 trips/day to the existing level of service accommodating more than 200 other single-family residences would increase traffic levels on Canyon Crest Road by less than 1%, resulting in an imperceptible increase in CNEL noise levels.

Second, noise would be generated in the course of operation of on-site construction equipment, power tools and hand tools. The use of power tools and hand tools would be expected to be characteristic of "minor maintenance" of residential structures in the vicinity, as well as renovations or additions that are categorically exempt from CEQA because they " '*do not* have a significant effect on the environment.' (§ 21084, subd. (a), italics added; [Citations.])." *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1101. For this reason, hand-held power tools and hand tools are not typically modeled in a noise analysis, and reasonably expected use of these tools would not be expected to result in significant noise impacts. Moreover, all foundation anchors have been designed to be cast-in-place, such that use of a hammer drill to create anchor holes would not be expected.

Excessive noise from construction equipment is generally attributed to earthmoving and percussive equipment (e.g. bulldozer, jackhammer, pile driver, blasting, etc.). However, pursuant to SC-BIO-1, the 40 cubic yards of cut is required to be performed by hand without the aid of equipment and would not be expected to generate substantial levels of noise.

The types of construction equipment required, including delivery vehicles, a non-percussive pile augering drill rig, hand-held concrete vibrator, and backhoe for utility connections would be expected to be intermittent, and no required construction equipment would be expected to be operated for continuous "periods of 10 days or more." All construction equipment would comport with the criteria in County Code Section 12.08.440(B) as a "mobile source," with permitted noise levels during working hours of 75 dBA. These typical types of equipment would not be expected to be or require being in use simultaneously, with the possible exception of brief transients operating a concrete truck and concrete vibrator on the completed portions of a pour in progress. The Applicant also expects to use self-consolidating concrete on most pours, which requires no vibration.

Environmental analyses generally attribute[467] various sources of published noise levels for these commonly used types of construction equipment, including the Federal Highway Administration

[466] Source: California Department of Transportation. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/traffic-noise-protocol-april-2020-a11y.pdf.
[467] See, e.g., 2035 County General Plan EIR, Table 5.12-17, using figures cited in the FTA Noise and Vibration Guidance Handbook, themselves derived from the FHWA Roadway Construction Noise Model and other similar sources. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

in their Roadway Construction Noise Model[468] ("RCNM") and the Federal Transportation Administration in their Noise and Vibration Guidance Handbook.[469] However, these references have generally conducted measurements for purposes of assessing and managing noise generated in the construction and operation of highways, and mobile sources are represented at their peak noise emissions levels, moving at highway speeds. Therefore, figures provided for pickup trucks, flatbed trucks, and concrete trucks are taken at speeds, throttle levels, and assumed usage factors that result in higher levels of engine (lower frequency) and tire/roadway interaction (higher frequency) noise than is characteristic of entrance and exit of the project parcel at a crawl. In addition, some figures, such as those for an auger drill rig, are measured using equipment that is substantially larger than the particular variant that would be used to implement the project, with characteristically greater levels of noise generation. As such, these figures would be expected to be excessively conservative in describing the project.

Table 5-25: Roadway Construction Noise Model Projected Construction Equipment Noise Levels

Type of Equipment	Assumed Usage Factor (%)[470]	Expected Sound Levels (dBA L_{eq} (1-hr)), at 50 feet	Actual Sound Levels (dBA L_{max}), at 50 feet[471]	Closest Distance to Nearest Residential Structure (feet)	Unattenuated Sound Levels (dBA L_{eq}(1-hr)), at that Residential Structure	Unattenuated Sound Levels (dBA L_{max}), at that Residential Structure	Exempt from County Code Title 12.08?
Pickup Truck	40	71	75	~25	77	81	Yes
Flat Bed Truck	40	70.3	74.3	~25	76.3	80.3	Yes
Concrete Truck	40	74.8	78.8	~25	80.8	84.8	Yes
Backhoe	40	74	78	~50	74	78	Yes
Concrete Vibrator	20	69	76	~40	70.9	77.9	No
Drill Auger Rig	20	77.4	84.4	~40	79.3	86.3	No

With the unrepresentative assumptions in these published figures, even a pickup truck would exceed 75dBA without attenuation, though the existing condition had been characterized by the entrance and exit of a pickup truck from the project parcel, as well as light and heavy trucks moving on Canyon Crest Road at similar or reduced offsets to existing residences compared to the project. However, these vehicles would be expected to enter and exit at a crawl over a period

[468] Source: Federal Highway Administration: Roadway Construction Noise Model (version 1.1) Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/.
[469] Source: Federal Transportation Administration: Noise and Vibration Guidance Handbook. Available at: https://www.fhwa.dot.gov/ENVIRONMENT/noise/construction_noise/handbook/handbook09.cfm.
[470] Source: Federal Highway Administration: Roadway Construction Noise Model (version 1.1) Handbook, Chapter 9. Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm.
[471] Source: Federal Highway Administration: Roadway Construction Noise Model (version 1.1) Handbook, Chapter 9. Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm.

of tens of seconds, with no more than a few such occurrences in a given day, at noise levels that are lower than those included in Table 5-25: Roadway Construction Noise Model Projected Construction Equipment Noise Levels. In their brevity, such excursions, like the existing peak traffic noise levels measured in the existing condition, would not be expected to dominate CNEL or 1-hour equivalent noise levels.

While truck operation is exempt from the Noise Control Ordinance, even with the conservative assumption that a truck entering or exiting the site would generate 85 dBA L_{max}, one minute of such noise would correspond to approximately 67 dBA L_{eq}(1-hr) in the existing ambient average. The volumetric concrete mixer truck the Applicant intends to use for its flexibility and reduced footprint as compared to a full barrel mixer does not generate the increased noise associated with rotation of the drum at a greater rate to dispense a load. Because working times are increased, and because concrete is dispensed on demand, a volumetric mixer truck may be feasibly used for a fraction of any given work hour as needed. The typical use of lifts of no more than a couple feet, allowed to partially set in order to reduce loads on formwork before the next lift, tends to create this pattern natively. As attributed in Table 3-1: Expected Construction Equipment and Trips, the total number of such trips would be expected to be approximately 15, and each trip would be expected to result in approximately 30-120 minutes of total operational noise, depending on the pour. Therefore, noise associated with this type of equipment would be a small fraction of one percent of the construction hours for the project.

For that remaining non-exempt equipment, measurements were undertaken during representative equipment usage on another residential construction site. This equipment includes a handheld electric concrete vibrator and a limited access drill rig powered by a 4-cylinder diesel engine smaller than that of a typical roadway vehicle. Noise levels were collected using an IEC 61672 Class 2 Sound Level Data Logger, at a distance of 50 feet on level ground at a height of approximately four feet above the ground. Usage factors are “actual” in that they were derived from the difference in directly measured L_{max} and L_{eq}(1-hr) over the span of a full hour of operation during representative conditions, according to the following relation:

$L_{eq} = L_{max} + 10\log([\text{usage factor in \%}]/100)$

The usage factor also embodies differences in noise levels due to inherent variability in attenuation during the operation (e.g. a concrete vibrator operating exposed to free air, submerged in contact with only concrete, and submerged in contact with formwork or steel).

Table 5-26: Best Estimated Construction Equipment Noise Levels

Type of Equipment	Actual Usage Factor (%)	Expected Sound Levels (dBA L_{eq} (1-hr)), at 50 feet	Actual Sound Levels (dBA L_{max}), at 50 feet	Closest Distance to Nearest Residential Structure (feet)	Unattenuated Sound Levels (dBA L_{eq}(1-hr)), at that Residential Structure	Unattenuated Sound Levels (dBA L_{max}), at that Residential Structure
Concrete Vibrator	23%	61.8	68.2	~40	63.7	70.1

Drill Auger Rig	29%	65.3	70.7	~40	67.2	72.6

These acoustical usage factors of 23% and 29%, respectively, are consistent with figures of 20% used by the Roadway Construction Noise Model for equipment larger in size but similar in nature to that expected to be used on the project.

As indicated in Table 5-26: Best Estimated Construction Equipment Noise Levels, all non-exempt construction equipment reasonably modeled in a noise analysis would be expected to comply with the County Noise Control Ordinance without consideration of attenuation. In addition, while noise emanating from the staging area near the northeast corner of the home would be expected to be attenuated only slightly from the soft intervening terrain and intermittent mass separating the project from residences to the north and east, the terrain of the site would effectively function as an earth berm between the pile augering locations and adjacent residences, further reducing expected noise levels with 5-15dBA of attenuation, according to the variable topography at each pile location. Pile locations for the proposed project also range from a minimum offset of approximately 40 feet to as much as 70 feet, and noise levels at the nearest sensitive receptor would be further reduced at the more distant pile locations (by ~2dB at 50 feet, ~3.5dB at 60 feet, and ~5dB at 70 feet, as compared to the minimum distance of ~40 feet).

The existing condition is characterized by noise levels of 54.5 dBA CNEL. The CNEL noise level may be generalized with the following relation:

$CNEL = 10\log(1/24)((A \times 10^{La/10}) + (B \times 10^{Lb/10}) + (C \times 10^{(Lc+5)/10}) + (D \times 10^{(Ld+5)/10}) + (9 \times 10^{(Le+10)/10}))$, where:

A = the number of construction hours between 7a.m. and 7p.m.,
La = L_{eq} during the hours described by A,
B = the number of non-construction hours between 7a.m. and 7p.m.,
Lb = L_{eq} during the hours described by B,
C = the number of construction hours between 7p.m. and 8p.m.,
Lc = L_{eq} during the hours described by C,
D = the number of non-construction hours between 7p.m. and 10p.m.,
Ld = L_{eq} during the hours described by D,
Le = L_{eq} during the hours between 10p.m. and 7a.m.

Using a nine-hour workday with a one-hour break, even were maximum expected construction noise levels of approximately 70dBA L_{eq}(1-hr) at the nearest residential structure to be sustained for each hour throughout the workday, noise levels would not exceed 65.5dBA CNEL. This would represent an edge case that would not be expected to characterize any of the construction interval. Rough grading by hand, concrete formwork, the pouring of concrete, stripping of forms, framing, installation of cladding and roofing, installation of doors and windows, interior trades, and finishing work would all be expected to entail only the use of hand and similar tools characteristic of residential remodeling and maintenance, much of which would become attenuated by the structure of the proposed project itself.

Nevertheless, MM-NOI-1 fulfills generally applicable mitigation under the 2035 General Plan EIR. *See also Mount Shasta Bioregional Ecology Center v. County of Siskiyou* (2012) 210 Cal.App.4th 184, 204-216 (discussing sufficiency of nearly identical noise mitigation measure for an expansion of an industrial facility with an electricity cogeneration plant in close proximity to existing residences).

Should the project unexpectedly exceed the noise levels permitted, or should the Applicant wish to act pre-emptively, attenuation figures of 10dBA or more would be feasible of a barrier constructed with some of the rockwool insulation for the home, or other suitable material. In the unexpected event that valid, credible complaints were received and measurements taken indicating a violation, the most desirable approach under those particular, unanticipated circumstances would be left to the judgment of the contractor and Applicant, working with the County health officer pursuant to the enforcement procedures in the County Noise Control Ordinance. The County maintains guidance for noise complaints, including contact information, at: http://www.publichealth.lacounty.gov/eh/community/noise.htm. This existing regulatory framework is deemed adequate to serve the project, as for other single-family residences newly constructed or renovated throughout the County.

Operational and Ambient Noise

The project would be expected to result in no adverse impacts under these thresholds from the generation of ambient noise outside the parameters that have been established to protect existing uses, and less than significant impacts from the generation of ambient noise.

General and Project-specific Analysis

Long-term ambient noise levels in the project area would be expected to be similar to other similar single-family residential neighborhoods. If future residents or any surrounding neighbors should engage in activities that result in temporary loud noise levels that exceed the noise limits set forth in Table 5-23: Threshold Exterior Ambient Noise Levels for Residential Properties (dBA Lmax), including from any noise amplification, the County is empowered to take actions to abate that activity, pursuant to the County Noise Control Ordinance. As such, future residents of the project would not be expected to be exposed to or generate significant noise sources or violate the County Noise Control Ordinance.

The threshold for perception of noise increase of 3dBA CNEL[472] is realized by a doubling of sound energy, corresponding to a doubling of traffic levels. The addition of 10 trips/day to the existing level of service accommodating more than 200 other single-family residences would increase traffic and associated sound energy levels on Canyon Crest Road by less than 1%, resulting in an imperceptible increase in noise. Other increases in long-term noise associated with the residential use would occur as a result of outdoor activities or leakage from indoor activities and would be expected to be typical of the existing residential noise sources. The modern exterior equipment for the proposed project (e.g., the HVAC compressor) is rated below

[472] Source: California Department of Transportation. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/traffic-noise-protocol-april-2020-a11y.pdf.

the ambient noise limits in the County Noise Control Ordinance, and such operation would also be exempt from the County Noise Control Ordinance. The proposed project incorporates exterior rockwool insulation with sound-deadening properties, and portions of the living space are also constructed with sound-deadening concrete walls. If future residents should engage in activities that result in temporary loud noise levels that exceed the ambient noise limits set forth in Table 5-23: Threshold Exterior Ambient Noise Levels for Residential Properties (dBA Lmax), including from any noise amplification, the County is empowered to take actions to abate that activity, pursuant to the County Noise Control Ordinance.

Because the existing conditions are characterized by a noise level of 54.5 dBA CNEL, and because the project would not be expected to exceed a perceptible increase of 3dBA CNEL that would correspond to a doubling of energy levels, the proposed project would not be expected to perceptibly increase ambient noise levels in the project vicinity above 65dBA CNEL during its period of occupancy.

- **Threshold 5.12-2**: Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels

The project would be expected to result in no adverse impacts from the generation of vibration outside the parameters that have been established to protect existing uses, and less than significant impacts from the generation of vibration.

General Analysis

The 2035 County General Plan EIR formulated GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 to mitigate for an increase in or unacceptable exposure to vibration levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[473] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan.

GPMM-NOI-3 stipulates that "[n]ew development that occurs within 200 feet of a railroad track…shall be evaluated for potential vibration impacts."[474] However, the proposed project is not sited within 200 feet of a railroad track, and so this mitigation does not apply.

GPMM-NOI-4 stipulates that "[i]ndividual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses…additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g.

[473] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[474] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

drilled piles to eliminate use of vibration-intensive pile driver).”[475] The proposed project would not make use of vibration-intensive equipment. Therefore, the proposed project transcends this mitigation measure.

GPMM-NOI-5 stipulates that “heavy industrial projects are required to provide evidence that vibration due to the operation of machinery would not adversely affect nearby vibration sensitive uses.”[476] The proposed project is not a heavy industrial project, and so this mitigation does not apply.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with vibration, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Nevertheless, the project may be characterized for the manner of its expected compliance.

Additional Project-specific Analysis

The effect of vibration on buildings near a construction site varies depending on the magnitude of vibration, geology, and receptor building construction. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to minor cosmetic damage at the highest levels.

Table 5-27: Guideline Vibration Annoyance Potential Criteria[477]

	Vibration Levels (PPV in inches/second)	
Human Response	**Transient**	**Continuous/Frequent**
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.1
Severe	2.0	0.4

No appreciable sources of vibration are typically associated with the operation of a single-family residence. However, construction activities can generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses.

The earthmoving, grading and other vibratory equipment that typically have the highest ground-borne vibration impacts, including pile drivers, jack hammers, vibratory rollers and all other forms of vibratory equipment attributed in Chapter 7 of the California Department of Transportation’s Transportation and Construction Vibration Guidance Manual would not be

[475] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[476] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[477] Source: California Department of Transportation: Transportation and Construction Vibration Guidance Manual, page 38. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.

required to implement the project. A "concrete vibrator" would be used to consolidate some cast-in-place concrete. However, this is a small electric power tool of approximately 1kW that spins an eccentric mass to generate vibration within 6-18+" of plastic concrete. Due to its localized mechanism of operation and low power levels similar to a common hand-held hammer drill, this would not be expected to result in any perceptible ground-borne vibrations at the property boundary.

While any vibration from roadway construction vehicles is exempt from the County Noise Control Ordinance, the amount of vibration characteristic of a vehicle's entrance or exit at a crawl would be expected to be imperceptible or barely perceptible and limited to transients that limit the potential for annoyance.

While a much larger "drill auger rig" used in the construction of highway infrastructure would be expected to generate 0.076in./sec at a distance of 50 feet according to the Roadway Construction Noise Model,[478] vibration from the smaller, non-percussive limited access drill rig required to construct the project's auger-cast piles is principally attributable to its engine, which is a 4-cylinder engine generating vibration levels characteristic of exempt roadway construction vehicles, such as pickup trucks. According to the California Department of Transportation, "[u]sing cast-in-place or auger cast piles…limits vibration generation to the small amount generated by drilling, which is negligible.")[479] The low usage factor and limited duration of use of this equipment would also be expected to limit the potential for annoyance.

Ground vibrations from construction activities would not be expected to reach the much higher levels that can damage structures, for which a figure of 0.3 in./sec (PPV, at 25 feet) sustained is recommended by the California Department of Transportation as a synthesis of industry criteria of tolerance of the older residential structures that characterize the adjacent sensitive receptors.[480] By comparison, during the Northridge earthquake of 1994, adjacent sensitive receptors sustained peak particle velocities in excess of 10 cm/s,[481] or 3.9 in./sec, corresponding to a root-mean-square velocity of 2.79 in./sec, with elevated velocities sustained for a period of 10-20 seconds.

- **Threshold 5.12-3**: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels

[478] Source: Federal Highway Administration: Roadway Construction Noise Model (version 1.1). Available at: https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/

[479] Source: California Department of Transportation: Transportation and Construction Vibration Guidance Manual, page 42. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf

[480] Source: California Department of Transportation: Transportation and Construction Vibration Guidance Manual, page 39. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.

[481] Source: Trifunac M.D. and Todorovska M.I. "Northridge, California, earthquake of 1994: density of red-tagged buildings versus peak horizontal velocity and intensity of shaking." Soil Dynamics and Earthquake Engineering 16 (1997): 209-22, Figure 1. Available at: https://sokocalo.engr.ucdavis.edu/~jeremic/za_SUZI_predavanje_Apr2020/radovi/CM1358.pdf.

The project would be expected to result in no adverse impacts under this threshold from exposure of future residents of the project to aviation noise.

Project-specific Analysis

The proposed project is not located within an airport land use plan.[482] The nearest Airport Influence Areas (San Gabriel Valley and Burbank) are more than 10 miles to the southeast and west, respectively. The proposed project parcel is not located within two miles of a private airstrip or other aviation facility that generates noise.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

Short-term construction noise level increases would occur from the use of construction equipment associated with building activities. However, the earthmoving and grading equipment that typically have the highest noise impacts are not required to implement the project, and other equipment is characteristic of the typical class of categorically exempt single-family homes. Exposure to these increased noise levels would be short-lived and would cease after construction is completed. Enforceable compliance of the project with the County Noise Control Ordinance would be expected to ensure that both construction and operational noise levels remain less than significant. Furthermore, the project's noise impacts, when combined with the existing impacts of the roadway and adjacent residences, would be expected to approach the thresholds in the County Noise Control Ordinance only at the nearest adjacent sensitive receptor. However, "the [substantial noise] impact on [one adjacent structure] alone would be insufficient to support [a finding of significance]" because "[u]nder CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons. [Citation.]" (*Clews Land and Livestock, LLC v. City of San Diego* (2017) 19 Cal.App.5th 161, 196.) *See also Taxpayers for Accountable School Bond Spending v. San Diego Unified School Dist.* (2013) 215 Cal.App.4th 1013, 1042 ("the small number of residences affected (about seven residences)" by a substantial periodic impact did not support even a fair argument of a significant effect on the environment of a substantial number of persons). Only four residential structures are located within 200 feet of the project footprint or staging area, and noise levels at 200 feet would be expected to drop off by between 12 and 15dBA compared to those figures referenced at 50 feet, across a mix of hard and soft terrain. Noise impacts would not be expected to violate the County Noise Control Ordinance at any sensitive receptor. Therefore, noise impacts emanating from the project during its construction phase and period of occupancy would not be expected to affect a substantial number of sensitive receptors.

No additional constraints in the form of tailored mitigation measures would be warranted. Nevertheless, additional mitigation has been formulated to fulfill generally applicable 2035

[482] Source: County Department of Regional Planning: 2035 County General Plan, Figure 6.2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

General Plan EIR measures, for the purpose of permitting the project to be approved as a continuation of the 2035 County General Plan project.

Mitigation Measures

MM-NOI-1: If reasonable noise complaints are received and not apparently rectified to the satisfaction of the County health officer within 24 hours, the County health officer shall at their discretion collect and/or validate exterior noise measurements taken using a device that conforms to the definition in County Code Section 12.08.340, configured pursuant to County Code Section 12.08.420. If these noise level measurements indicate a persistent violation of the County Noise Control Ordinance due to noise attributable to the project, one or more of the following modifications shall be required to reduce project noise impacts until compliance with the County Noise Control Ordinance is maintained:

- The offending equipment shall be substituted.
- The operational settings of the offending equipment shall be modified.
- The location of use and/or orientation of the offending equipment shall be modified.
- The offending equipment shall be used for a reduced fraction of each work hour.
- At the direction of the County, additional noise-reducing treatments shall be required, which may include, but are not limited to, installation of acoustical barrier partitions or installation of acoustical absorption enclosures around the offending equipment.

Level of Significance After Application of Mitigation Measures

MM-NOI-1 would further reduce impacts already expected to be less than significant by formalizing mechanisms to attenuate noise impacts in compliance with RCM-NOI-1. This measure would not be expected to introduce any secondary effects.

Cumulative Impacts

The incremental effects of the project to noise would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "[c]umulative projects in the Los Angeles County region would have the potential to result in a cumulative noise impact if they would, in combination with regional growth in the immediate area, create excessive community noise levels. The traffic noise levels predicted for buildout conditions…are based on cumulative traffic conditions that take into account cumulative development in the region. Therefore, these impact discussions inherently incorporate the cumulative scenario by default. Further, cumulative projects under the buildout of the Proposed Project within Los Angeles County would be required to comply with the applicable land use compatibility classification or they

would not be approved without a general plan amendment. Therefore, the Proposed Project would not contribute to a significant cumulative noise impact above and beyond [the non-cumulative noise analysis].”[483] However, the proposed project fulfills all generally applicable mitigation conceived as warranted by the 2035 County General Plan EIR and transcends the finding of unavoidable significance from increases in community noise levels above what is considered acceptable, due to traffic, construction and operational characteristics.

Past projects have contributed to existing noise, the levels of which nevertheless remain healthy and are considered to be undegraded in a residential neighborhood.

Other closely related present and future projects are also governed by the County Noise Control Ordinance and would not be expected to create substantial sources of noise without abatement through an enforcement complaint, nor would more than a few be located in the influential vicinity of the project parcel where noise sources might be additive. The existing ambient noise conditions on the project parcel are unsaturated, with a greater than 10dBA CNEL offset from a 70dBA CNEL threshold for a cumulatively considerable effect from perceptible increases in noise greater than 3dBA CNEL. This offset would represent more than a doubling in psycho-acoustical volume over a period of 24 hours, or a more than tenfold increase in sound energy. The incremental effects of the project during construction or the period of occupancy would not be expected to approach this level of impact.

[483] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.13 Population and Housing

5.13.1 Introduction

This section of the EIR evaluates the project's potential impacts relating to population and housing. A single-family home constructed on a vacant lot is not generally expected to have a significant effect on population growth or the supply of housing.

5.13.2 Regulatory Framework

Federal, state, and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Federal Planning Regulations

Title 23 Code of Federal Regulations ("CFR") 450.322(e) requires in the development of the regional transportation plan that the Metropolitan Planning Organization ("MPO") validate data utilized in preparing other existing modal plans for providing input to the regional transportation plan. In updating the plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO is required to prepare and approve the Regional Transportation Plan.

State Regulation

1969 California Housing Element Law

The California Housing Element Law (California Government Code §65300) requires the Southern California Association of Governments ("SCAG") and other regional councils of government in California to determine the existing and projected regional housing needs for persons at all income levels. According to California Government Code §65300, each governing body of a local government in California is required to adopt a comprehensive, long-term general plan for the physical development of the city, city and county, or county. The California Housing Element Law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community as part of the housing element, one of the seven mandated elements of the local general plan. The California Housing Element Law is implemented by the California Department of Housing and Community Development ("HCD"), which is responsible for reviewing local governments' housing elements for compliance with state law and providing written comments to the local governments. Using the information provided by local governments in its Housing Element, the HCD determines the regional housing need for each county and allocates funding to meet this need to the council of governments for distribution to its jurisdictions. The HCD also oversees distribution of funding related to the regional housing need by the council of governments to the local governments to ensure that funds are appropriately allocated. The requirements for the Housing Element are delineated in California Government Code Section 65580–65589.9.

Regional Housing Needs Assessment

California Government Code §65583(a)(1) and §65584 require that each Council of Governments consult with the California Division of Housing Policy Development and shall determine each region's existing and projected housing need through preparation of a Regional Housing Needs Assessment ("RHNA") that allocates a share of the regional housing need to each city, county, or city and county based on an analysis of population and employment trends and documentation of projections and a quantification of the locality's existing and projected housing needs for all income levels, including extremely low income households, as defined in subdivision (b) of Section 50105 and Section 50106 of the Health and Safety Code. The RHNA is a key tool for SCAG and its member governments to plan for this growth. The RHNA quantifies the regional need for housing that is allocated to each jurisdiction for a certain planning period (e.g., in the next RHNA cycle, the period is from 2014 to 2021).

This region's RHNA is produced periodically by SCAG, as mandated by state law, to coincide with the region's schedule for preparing Housing Elements. It consists of two measurements of housing need: (1) existing need and (2) future need for very-low income, low-income, moderate, and above-moderate income categories.

The existing need assessment is based on data from the most recent U.S. Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30 percent of their income for housing, as well as severe overcrowding.

The future need for housing is determined primarily by the forecasted growth in households in a community, based on historical growth patterns, job creation, household formation rates, and other factors to estimate how many households would be added to each community over the projection period. The housing need for new households is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition, and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors—household growth, vacancy need, and replacement need—form the "construction need" assigned to each community.

Finally, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution.

Sustainable Communities and Climate Protection Act of 2008

Senate Bill 375 (SB 375; Chapter 728, Statutes of 2008) focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas ("GHG") emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill 32 (AB 32). SB 375 requires California Metropolitan Planning Organizations to develop a

Sustainable Communities Strategy ("SCS") as part of the RTP, with the purposes of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. The SCS must identify the general location of land uses, residential densities, and building intensities within the region; identify areas within the region sufficient to house all the population of the region; identify areas within the region sufficient to house an eight-year projection of the regional housing need; identify a transportation network to service the regional transportation needs; gather and consider the best practically available scientific information regarding resources areas and farmland in the region; consider the state housing goals; set forth a forecasted development pattern for the region; and allow the regional transportation plan to comply with the federal Clean Air Act ("CAA") of 1970 (42 USC § 7401 *et seq.*). The development pattern in the SCS, when integrated with the transportation network and other transportation measures and policies, must reduce the GHG from automobiles and light duty trucks to achieve the GHG emission reduction targets approved by the California Air Resources Board ("CARB"). If the SCS does not achieve the GHG emission targets set by CARB, an Alternative Planning Strategy must be developed to demonstrate how the targets could be achieved.

SB 375 also imposes a number of new requirements on the regional housing needs process. Prior to SB 375, the regional transportation plan and regional housing needs processes were not required to be coordinated. SB 375 now synchronizes the schedules of the RHNA and regional transportation plan processes. The RHNA, which is developed after the regional transportation plan, must also allocate housing units within the region consistent with the development pattern included in the SCS. Previously, the RHNA determination was based on population projections produced by the Department of Finance. SB 375 requires the determination to be based upon population projections by the Department of Finance and regional population forecasts used in preparing the regional transportation plan. If the total regional population forecasted and used in the regional transportation plan is within a range of three percent of the regional population forecast completed by the Department of Finance for the same planning period, then the population forecast developed by the regional agency and used in the Regional Transportation Plan shall be the basis for the determination. If the difference is greater than three percent, then the two agencies shall meet to discuss variances in methodology and seek agreement on a population projection for the region to use as the basis for the RHNA determination. If no agreement is reached, then the basis for the RHNA determination shall be the regional population projection created by the Department of Finance.

Existing law requires local governments to adopt a housing element as part of their general plan. Unlike the rest of the general plan, where updates sometimes occur at intervals of 20 years or longer, under previous law the housing element was required to be updated as frequently as needed and no less than every five years. Under SB 375, this period has been lengthened to eight years and timed so that the housing element period begins no less than 18 months after adoption of the regional transportation plan to encourage closer coordination between the housing and transportation planning. SB 375 also changes the implementation schedule required in each housing element. Previous law required the housing element to contain a program which set forth a five-year schedule of to implement the goals and objectives of the housing element. The new law instead requires this schedule of actions to occur during the eight-year housing element planning period, and requires each action have a timetable for implementation.

California Relocation Assistance Act

The California Relocation Assistance Act (Government Code Section 7260 *et seq.*) establishes uniform policies to provide for the fair and equitable treatment of people displaced from their homes or businesses as a direct result of state and/or local government projects or programs. The California Relocation Assistance Act requires that comparable replacement housing be made available to displaced persons within a reasonable period of time prior to the displacement. Displaced persons or businesses are assured payment for their acquired property at fair market value. Relocation assistance in the form of advisory assistance and financial benefits would be provided at the local level. This includes aid in finding a new home location, payments to help cover moving costs, and additional payments for certain other costs.

Homeowners and Private Property Protection Act

In 2008, California voters approved Proposition 99, the Homeowners and Private Property Protection Act, which amended Section 19 of Article 1 of the California Constitution so that local governments are prohibited from using eminent domain authority to acquire an owner-occupied residence for the purposes of conveying it to a private recipient, with limited exceptions. Proposition 99 applies only to owner-occupied residences. Cities may still use eminent domain authority to convey multifamily and non-residential property to other private parties.

Local Regulation

SCAG Regional Growth Management Policies

In 2004, SCAG adopted a voluntary regional growth strategy known as the Compass Blueprint. SCAG's Compass Blueprint is an advisory or voluntary plan that promotes mixed-use development, better access to jobs, conservation of open space, public/private partnerships, and user-fee infrastructure financing, improving the capacity and efficiency of movement of goods, reducing vehicle miles traveled ("VMT"), improving air quality, improving housing availability and affordability, renovating urban cores, and creating over 500,000 high–paying jobs.

In 2012, the Regional Council of SCAG adopted the 2012–2035 RTP/SCS to increase mobility for the region's residents and visitors. In addition, the 2012–2035 RTP/SCS commits to reducing emissions from transportation sources to comply with SB 375, improving public health, and meeting the National Ambient Air Quality Standards. The SCS envisions combining transportation and land use elements in order to achieve emissions reduction targets set by the California Air Resources Board ("CARB").

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to soils and geology, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.13.3 Existing Conditions

The project parcel is a vacant, residentially zoned parcel in a residential neighborhood of single-family homes. As such, all local and regional population and housing estimates reasonably anticipated a single-family home on the project parcel. The unincorporated census-designated place of Altadena is not distinguished in the SCAG 5th Cycle Regional Housing Needs Assessment ("RHNA") Final Allocation Plan for the years 2014-2021[484] from all unincorporated areas. The projected need between the years of 2014 and 2021 of residential units in the unincorporated County is 30,574, including 12,581 above moderate income households. (*Ibid*.).

5.13.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.13-1**: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)

- **Threshold 5.13-2**: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.13-3**: Induce substantial growth or concentration of population

- **Threshold 5.13-4**: Displace a large number of people

[484] Source: South Coast Association of Governments: 5th Cycle Regional Housing Needs Assessment Final Allocation Plan. Available at: https://scag.ca.gov/sites/default/files/old/file-attachments/5thcyclepfinalrhnaplan.pdf.

5.13.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. Generally, a single-family home is not expected to have a significant impact on population growth or the supply of housing, as these factors were considered in the zoning of the project parcel for these purposes and sizing of all required facilities. The basis for this compliance is briefly attributed.

Impact Discussion

- **Threshold 5.13-1**: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- **Threshold 5.13-3**: Induce substantial growth or concentration of population

The project would be expected to result in no adverse impacts under these thresholds from inducing substantial growth or concentration of population.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory in all planning areas but the Antelope Valley, stating that "[t]he Proposed Project accommodates up to 659,409 housing units, and although buildout is not expected to occur by 2035, the opportunities for housing development provided in the Proposed Project are consistent with SCAG growth projections for 405,500 units by 2035. The housing and population growth allowed under the Proposed Project is consistent with SCAG projections and do not constitute a significant adverse environmental impact."[485]

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with population growth and density, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Development of a single residence would not induce substantial unplanned population growth in the area. The general plan and zoning code anticipate the construction of a single-family residence on the project parcel, and all necessary utilities exist in the immediate vicinity. The growth represented by addition of the proposed project would be consistent with projected needs in the RHNA.

[485] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.13-6. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

- **Threshold 5.13-2**: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere
- **Threshold 5.13-4**: Displace a large number of people

The project would be expected to result in no adverse impacts under these thresholds from displacing substantial numbers of people or housing.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting in all planning areas, stating that "[w]ithout mitigation, [this impact] would be less than significant."[486]

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with population displacement, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The development of a project on a vacant residential site would neither displace existing housing or people.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The proposed project is consistent with the adopted land use designation and applicable zoning. Development of the site with one single-family residence in accordance with the adopted long-range plans for the project parcel would not result in significant growth or the potential for unanticipated growth due to this consistency. As infill development, construction of the project would not necessitate the implementation of significant new infrastructure such as major roadway improvements and/or the extension of infrastructure with the potential to induce unanticipated growth and development. All of the infrastructure, including sewer, water, and electrical utilities and vehicular access, exist in the immediate vicinity of the project parcel and have adequate capacity to serve the proposed project.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

[486] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.13-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to population and housing would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "the Proposed Project would be adequate to accommodate SCAG's planned growth through 2035; therefore, it is unlikely that the Proposed Project would induce population growth in surrounding jurisdictions. Since cumulative projects would be required to comply with applicable land use plans governing regional growth, a significant cumulative impact would not occur."[487] The proposed project is consistent with its land use designation and therefore with applicable land use plans governing regional growth.

Past projects have resulted in buildout of much of the County in accordance with applicable specific and general plans, with which the proposed project also remains consistent.

Other closely related present and future projects would be expected to be consistent with land use designation assumed in applicable land use plans governing regional growth and would not be expected to introduce substantial unplanned changes in the population or housing supply with inuring indirect effects.

[487] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.13-8. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.14 Public Services

5.14.1 Introduction

This section of the EIR evaluates the project's potential impacts relating to public services. Public services include fire protection, police, school, library and emergency response services. Generally, these services were sized in anticipation of a single-family home on this residentially zoned lot.

5.14.2 Regulatory Framework

State and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to public services.

State Regulation

California Health and Safety Code (Section 13000 *et seq.*)

State fire regulations are set forth in Section 13000 *et seq.* of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California.

California Code of Regulations ("CCR") Title 24, Part 2 and Part 9

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains fire-safety-related building standards referenced in other parts of Title 24. This Code is preassembled with the 2000 Uniform Fire Code of the Western Fire Chiefs Association. This Code was revised in January 2008 with a change in the base model/consensus code from the Uniform Fire Code series to the International Fire Code.

California Public Resources Code ("PRC") Sections 4201-4204

This section of the PRC was amended in 1982 to require the California Department of Forestry to classify all State Responsibility Areas ("SRAs") into fire hazard severity zones. The purpose of this code is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be used to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

State Responsibility Area Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry and Fire Protection)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRAs. Title 14 mandates that the future design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures.

Local Regulation

Developer Fees

In response to increasing demands for new facilities, equipment, and staffing created by new development, the County has implemented a Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment in the high-growth areas of Los Angeles County. The developer fees are paid to the Consolidated Fire Protection District of Los Angeles County ("Fire District"). This Fire District developer fee is adjusted annually and is charged on all new development, including residential buildings, new detached residential accessory structures, new commercial buildings, and new additions over 2,000 square feet prior to building permit issuance.

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to public services, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.14.3 Existing Conditions

Fire protection facilities and service to the subject property are provided by the Los Angeles County Fire Department. Fire Station/Engine Company No. 12 is located less than one mile south of the project parcel. Police services are provided by the Los Angeles County Sheriff. The Altadena Sheriff station is located less than two miles to the southwest of the project parcel.

The area is served by public and private primary and secondary schools in the Pasadena Unified School District. The public primary and secondary schools for the project are Franklin Elementary School, Eliot Middle School, and John Muir High School.

The area is served by a mix of neighborhood, community and regional parks. (*See* Table 5-28: Existing Parks Within a Two-Mile Radius of the Project). The project is located in the Altadena Library District.

5.14.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.14-1**: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  i. Fire protection
  ii. Police protection
  iii. Schools
  iv. Parks
  v. Other Public Facilities

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

No significance criteria exist for this area of analysis.

5.14.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. Generally, construction of a single-family home on a residentially zoned lot is not expected to have a significant effect on public services, as these services were sized in anticipation of this zoned usage. The basis for this compliance is briefly attributed.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-PS-1: Pursuant to Section 65995 of the California Government Code, the Applicant must pay a school developer fee in order to offset the incremental cost impact of expanding school resources to accommodate the increased student enrollment associated with one new residence.

Impact Discussion

- **Threshold 5.14-1**: Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection

The project would be expected to result in no adverse impacts from the construction of new or altered fire protection facilities.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting after incorporation of GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3, stating that "existing regulatory programs and [GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3] would reduce potential impacts associated with fire protection to a level that is less than significant."[488] The proposed project must comply with all applicable regulatory requirements and standard conditions. GPMM-PS-2 and GPMM-PS-3 are not applicable, and the project would comply with the applicable "fair share" mitigation measure GPMM-PS-1 by paying the applicable Fire Department Developer Fee as required by ordinance.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with fire protection services, and by transcending its mitigation, the the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Fire Station No. 12 is located less than one mile south of the project parcel, and the addition of one single-family home on a residentially zoned lot that anticipated this use would not alter the service requirements for this Fire Station.

ii. Police protection

The project would be expected to result in no adverse impacts from the construction of new or altered police protection facilities.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting after incorporation of GPMM-PS-4, stating that "[GPMM-PS-4]

[488] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.14-11. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

would reduce potential impacts associated with law enforcement to a level that is less than significant."[489] GPMM-PS-4 does not apply to the project.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with police protection services, and by transcending its mitigation, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Police services are provided by the Los Angeles County Sheriff. The Altadena Sheriff station is located less than two miles to the southwest of the project parcel, and the addition of one single-family home on a residentially zoned lot that anticipated this use would not significantly alter the service requirements for this Sheriff station.

iii. Schools

The project would be expected to result in no adverse impacts from the construction of new school facilities.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[490] The proposed project must comply with all applicable regulatory requirements and standard conditions.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with school services, and by transcending its mitigation, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The project would not generate a significant number of new students in the school district. New or expanded school facilities would not be required to provide classroom and support space for these low numbers of school age children. However, the Applicant must pay an applicable school fee pursuant to Section 65995 of the California Government Code, in order to offset the incremental cost impact of expanding school resources to accommodate the increased student enrollment associated with one new residence.

[489] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.14-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[490] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.14-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

iv. Parks

The project would be expected to result in no adverse impacts from the construction of new parks facilities.

Project-specific Analysis

As attributed in Section 5.15, the project would generate a negligible population gain within an area that is already well-served by a mix of types of parkland.

v. Other Public Facilities

The project would be expected to result in no adverse impacts from the construction of other public facilities.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[491] The proposed project must comply with all applicable regulations.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with other public facilities, and by transcending its mitigation, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The project is served by the Altadena Library. The nearest library is less than one mile to the south of the project parcel, and the addition of one single-family home on a residentially zoned lot that anticipated this use would not significantly alter the service requirements for the library system. No other public facilities affected by the project have been identified.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The proposed project includes all necessary fire protection devices, including fire sprinklers. Adequate fire flow availability exists at two hydrants within 100 feet of the project parcel, served by different systems. Adequate water supplies and infrastructure already exist on the project parcel, and there is no requirement for other new facilities or emergency services. Development

[491] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.14-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

of the project parcel with one single-family home would not require an expansion to local law enforcement resources and therefore would not result in any environmental impacts involving construction of new law enforcement facilities. The project would not generate a significant number of new students in the school district. New or expanded school facilities would not be required to provide classroom and support space for these low numbers of school age children. However, the Applicant must pay an applicable school fee pursuant to Section 65995 of the California Government Code, in order to offset the incremental cost impact of expanding school resources to accommodate the increased student enrollment associated with one new residence.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to public services would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "impacts [to required fire protection services] would be mitigated through the County's Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment and compliance with the County Fire Code."[492] "Operational funding for the Sheriff's Department and the police departments serving cities in Los Angeles County is derived from various types of tax revenue (e.g., property taxes, sales taxes, user taxes, vehicle license fees, deed transfer fees, etc.), which are deposited in the General Fund. Provided that staff and facilities are expanded to serve future development in the Project Area and cities, no significant cumulative impacts to law enforcement are anticipated."[493] "[I]ncrease in the demand for school facilities and services due to cumulative development would be adequately mitigated to a less than significant level by the payment of SB 50 fees."[494] "Requiring payment of the library facilities fee in effect (currently $718.00 per unit of residential development) would mitigate cumulative impacts on the County Library to a less-than-significant level and are therefore not cumulative

[492] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.14-11. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[493] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.14-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[494] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.14-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

considerable."[495] The proposed project must pay all applicable fees and taxes and would therefore be expected to carry its fair share of any cumulative impact to public services.

Past projects have resulted in buildout of much of the County in accordance with applicable specific and general plans, with corresponding provisioning of public services that also anticipated buildout in accordance with zoning and land use designation, which the project would use without need for any substantial modification related to the project.

Other closely related present and future projects would be consistent with their zoning, for which public services have also been adequately sized in anticipation.

[495] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.14-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.15 Recreation

5.15.1 Introduction

This section of the EIR evaluates the project's potential impacts to public services. Recreation includes parkland, recreational facilities, and publicly utilized open spaces. Generally, these facilities were sized in anticipation of a single-family home on this residentially zoned lot.

5.15.2 Regulatory Framework

State and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below. There are no applicable federal regulations related to recreation.

State Regulation

The Quimby Act

Since the passage of the 1975 Quimby Act (California Government Code Section 66477), cities and counties have been authorized to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. A 1982 amendment (AB 1600) requires agencies to clearly show a reasonable relationship between the public's need for the recreation facility or parkland, and the type of development project upon which the fee is imposed. Cities and counties with a high ratio of park space to inhabitants can set a standard of up to five acres per 1,000 people for new development. Cities and counties with a lower ratio can only require the provision of up to three acres of park space per 1,000 people. The calculation of a city or county's park space to population ratio is based on a comparison of the population count of the last federal census to the amount of city/county-owned parkland.

The Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. This state law empowers local agencies to establish Community Facilities Districts ("CFDs") as a means of obtaining community funding.

Landscaping and Lighting Act of 1972, California Streets and Highway Code Section 22500–22509

The California Landscaping and Lighting Act of 1972 authorizes local legislative bodies to establish benefit related assessment districts, or Landscaping and Lighting Districts ("LLADs") and to levy assessments for the construction, installation, and maintenance of certain public landscaping and lighting improvements. LLADs may be established to maintain local public parks.

Local Regulation

Los Angeles County Code Title 21

In addition to containing regulations on the operation of park facilities, the County Code contains provisions that regulate the provision of parklands for new subdivisions, in accordance with the Quimby Act. County Code Section 21.24.340 (Residential Subdivisions, Local Park Space Obligation, Formula) contains the methodology used to determine the amount of parkland required to be dedicated by the subdivider as a part of the subdivision map approval process. In accordance with Section 21.28.140, the developer may also choose to pay a fee in-lieu of the provision of parkland. Additionally, the developer may choose to provide less than the required amount of parkland but develop it with amenities equal to the value of what the in-lieu fee would be. In order to determine the local park space obligation for a subdivision, a formula is used, which considers the number of dwelling units in the subdivision, the average household size by Park Planning Area ("PPA") (which differs for single family, multifamily, and mobile home developments as well as by PPA), and the adopted ratio of three acres of parkland per 1,000 residents, per the Quimby Act. However, it should be noted that as a condition of zone change approval, General Plan amendment, specific plan approval, or development agreement, the County may require a subdivider to dedicate land according to the General Plan goal of four acres of local parkland per 1,000 residents, and six acres of regional parkland per 1,000 residents.

Once the local park space obligation is determined, County Code Section 21.24.350 (Residential Subdivisions, Provision or Local Park Sites) contains regulations pertaining to the siting of park facilities as well as provisions that give the option to subdividers of 50 units or less to choose to provide the obligatory amount of parkland, any excess of which would be credited to the subdivision, or otherwise allow any remaining obligation to be satisfied by the payment of park fees in accordance with the provisions of Section 21.28.140.

Additionally, since only the portions of the land dedicated for parkland that are suitable for park use can be counted against the obligation of the subdivider, attributes of the park space including the slope of the site are used to determine the amount of land which can be counted against the subdivider's obligation. For example, for the portions of the site in excess of 20 percent slope, only 10 percent of the acreage will be counted against the subdivider's obligation whereas all of the land that is less than three percent slope can be counted towards the obligation.

Section 21.28.140 (Park Fees Required When, Computation and Use) contains provisions regarding the payment of in-lieu fees for any portion of the dedication obligation not satisfied by the subdivider. These fees would be enforced as a condition of approval on the final approval of the subdivision. The in-lieu fee is determined by multiplying the amount of park space not satisfied by the representative land value for the appropriate PPA. This section also makes it the responsibility of the Los Angeles County Department of Parks and Recreation to develop a schedule specifying how, when, and where it will use the land or fees, or both, from each subdivision to develop park or recreational facilities within the applicable PPA.

Safe Neighborhood Parks Proposition of 1992, 1996, Proposition A

Proposition A created the Los Angeles County Regional Park and Open Space District. The District's boundaries are coterminous with the boundaries of Los Angeles County. The proposition authorized an annual assessment on nearly all of the 2.25 million parcels of real property in Los Angeles County. Proposition A funded $540 million for the acquisition, restoration or rehabilitation of real property for parks and park safety, senior recreation facilities, gang prevention, beaches, recreation, community or cultural facilities, trails, wildlife habitats, or natural lands, and maintenance and servicing of those projects. In 1996, voters approved another Proposition A to fund an additional $319 million for parks and recreation projects and additional funds for maintenance and to service those projects. Proposition A funds may be used to fund the development, acquisition, improvement, restoration and maintenance of parks; recreational, cultural and community facilities; and open space lands.

County of Los Angeles Trails Manual

In May 2011, the Los Angeles County Board of Supervisors adopted the County of Los Angeles Trails manual, which provides guidelines and standards for trail planning, design, development, and maintenance of Los Angeles County trails.

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The County General Plan governs the project, as does the Altadena Community Plan.

Consistency of the project with this these policies, including any related to recreation, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis.

5.15.3 Existing Conditions

The existing parkland in the vicinity is summarized in Table 5-28: Existing Parks Within a Two-Mile Radius of the Project.[496] There are no other identified recreational facilities within a two-mile radius.

Table 5-28: Existing Parks Within a Two-Mile Radius of the Project

Name	Size (acres)	Types	Ownership/ Management	Address	Distance
Loma Alta Park	17.33	Community	County of Los Angeles	3330 North Lincoln Ave. Altadena, CA 91001	0.21mi. east

[496] Source: County Department of Parks and Recreation: Parks Locator. Available at: https://parks.lacounty.gov/#.

Hahamongna Watershed Park	300	Regional	City of Pasadena	101 Foothill Blvd La Cañada Flintridge, CA 91011	0.26mi. southwest
Charles White Park	5.47	Neighborhood	County of Los Angeles	77 Mountain View Street Altadena, CA 91001	1.19mi. southeast
Farnsworth Park	14.76	Neighborhood	County of Los Angeles	568 E Mount Curve Ave Altadena, CA 91001	1.62mi. east
Total acres:			**337.56 acres within a 2-mile radius of project parcel**		

The project parcel and all of northwest Altadena has been designated as in "low" need of additional parkland.[497]

The California Department of Fish and Wildlife ("CDFW") also maintains the California Protected Areas Database ("CPAD"), containing data on lands owned in fee by governments, non-profits and some private entities, that are protected for open space purposes. The areas in the vicinity of the project parcel are portrayed in Figure 5-28: California Protected Open Space Areas in Vicinity of Project.

[497] Source: County Department of Parks and Recreation: Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A, page 4. Available at: https://lacountyparkneeds.org/FinalReportAppendixA/StudyArea_047.pdf.

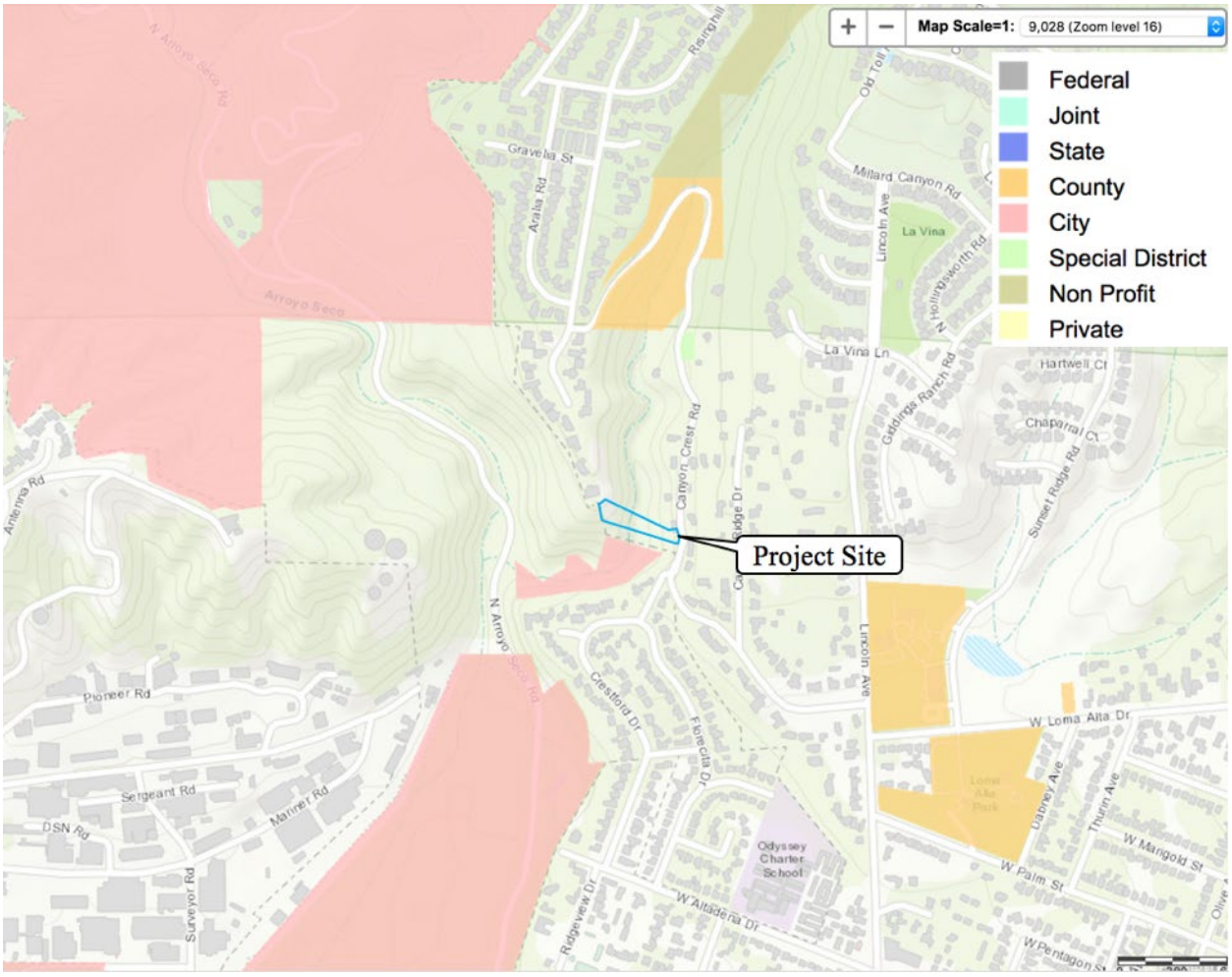


Figure 5-28: California Protected Open Space Areas in Vicinity of Project[498]

5.15.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.15-1**: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated

- **Threshold 5.15-2**: Include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment

[498] Source: California Department of Fish and Wildlife: Biogeographic Information and Observation System California Protected Areas Database Holdings. Available at: https://apps.wildlife.ca.gov/bios6/.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

No significance criteria exist for this area of analysis.

5.15.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. Generally, construction of a single-family home on a residentially zoned lot would not be expected to have a significant effect on recreational facilities, as these services were sized in anticipation of complete buildout according to zoning designation. The basis for this compliance is briefly attributed.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

There are no standard conditions or regulatory compliance measures specifically relied upon in this area of analysis.

Impact Discussion

- **Threshold 5.15-1**: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated

The project would be expected to result in no adverse impacts from substantial physical deterioration of parks facilities from increased usage, and less than significant impacts to any parks.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[499]

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with the deterioration of parks facilities, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

[499] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

The addition of a single-family residence on a property zoned for single-family residences would be consistent with the general and community plans and zoning and would not be expected to cause substantial deterioration or accelerate deterioration of nearby parks or require the provision of additional parkland. The project would generate a negligible population gain within an area that is well-served by a mix of types of parkland and would not be physically adjacent to or within visual proximity of any existing parks.

- **Threshold 5.15-2**: Include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment

The project would be expected to result in no adverse impacts from the construction or alteration of parks facilities.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[500]

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with parks facilities construction, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The proposed project would not require the construction of any public recreational facilities because it does not involve a subdivision or any associated tentative map or parcel map and is therefore not subject to the Quimby Act.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

The proposed project is well-served by a mix of types of parkland and is not physically adjacent to or within visual site of any existing parks or recreational facilities.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

[500] Source: County Department of Regional Planning: 2035 County General Plan EIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to recreation would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "existing regulations, Proposed General Plan Update policies, and Implementation Programs assure that the funding for parkland acquisition would be proportional to increases in population pursuant to the Quimby Act and impacts would be less than significant….[E]xisting federal, state, and local regulations, would mitigate potential adverse impacts to the environment that may result from the expansion of parks, recreational facilities, and trails."[501] The proposed project transcends regulation of parks, recreational facilities and trails and would be expected to be accounted in proportional increases to population pursuant to the Quimby Act.

Past projects have resulted in buildout of much of the County in accordance with applicable specific and general plans, with corresponding provisioning of recreational services proportionally to population. The project vicinity is adequately served by a mix of parkland and open spaces that would not be expected to become substantially more trafficked by the addition of the insubstantial increase in population associated with the project.

Other closely related present and future projects are or are reasonably foreseeable to be consistent with zoning regulatioion, for which recreation facilities have been adequately sized in anticipation.

[501] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.16 Transportation

5.16.1 Introduction

This section of the EIR evaluates the project's potential impacts to transportation and traffic. This includes assessment of the existing transit facilities and roadways in the vicinity of the project, the existing level of service of these facilities, the marginal impact of the project on these facilities during construction and operation, and compliance with regulations governing encroachment of public roadways.

5.16.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Federal Highway Administration Manual on Uniform Traffic Control Devices

The Manual on Uniform Traffic Control Devices ("MUTCD")[502] is published by the Federal Highway Administration and sets minimum standards and provides guidance to ensure uniformity of traffic control devices ("TCDs") across the nation. The use of uniform TCDs (messages, locations, sizes, shapes, and colors) helps reduce crashes and congestion, and improves the efficiency of the surface transportation system.

Transportation Research Board Circular 212

As referenced in Government Code Section 65089, Circular 212 was created by the Transportation Research Board, a part of the National Academy of Sciences, to provide guidance for Critical Movement Analysis and the measurement of Level of Service ("LOS") at signalized and unsignalized intersections, in transit lanes, and for pedestrians.

Transportation Research Board Highway Capacity Manual

As referenced in Government Code Section 65089, the Highway Capacity Manual specifies level of service methods for freeways, multilane highways, two-lane highways, arterials, freeway weaving sections, ramp junctions, signalized intersections, and unsignalized intersections.

State Regulation

California Manual on Uniform Traffic Control Devices

This California Manual on Uniform Traffic Control Devices ("California MUTCD") is published by the California Department of Transportation ("Caltrans") and is issued to adopt uniform

[502] Source: United States Department of Transportation, Federal Highway Administration: Manual on Uniform Traffic Control Devices (MUTCD) Overview. Available at: https://mutcd.fhwa.dot.gov/kno-overview.htm.

standards and specifications for all official traffic control devices in California, in accordance with Section 21400 of the California Vehicle Code ("CVC").[503] The California MUTCD incorporates Federal Highway Administration's Manual on Uniform Traffic Control Devices (2009 Edition) and all policies on traffic control devices issued by Caltrans that were issued at the time of its release. Caltrans publishes Standard Specifications, Standard Special Provisions, Standard Plans, and other manuals, which contain specifications and requirements for traffic control devices, including their use and placement.

Senate Bill 743

Senate Bill ("SB") 743 was signed into law in September 2013. SB 743 will ultimately eliminate auto delay and level of service as transportation impact metrics in CEQA analyses. The Governor's Office of Planning Research ("OPR") has been in a rule-making process, which when complete, will implement the impact analysis changes associated with SB 743. In April of 2018, OPR released a revised proposal for changing the CEQA Guidelines that will change the way transportation impacts are analyzed.[504] Impact metrics related to vehicle miles travelled ("VMT") are expected to replace the Level of Service criteria. Individual lead agencies will ultimately be responsible for identifying VMT-related impact criteria, though the OPR has suggested that a per capita VMT that is 15% below existing development may be appropriate as a significance threshold, for projects larger than a screening threshold of 110 trips per day.

California Government Code Section 65089

California Government Code Section 65089 required that a congestion management program shall be developed, adopted, and updated biennially for every county that includes an urbanized area, and shall include every city and the county. It is required that the program contain traffic level of service standards established for a system of highways and roadways including at a minimum all state highways and principal arterials. "Level of service (LOS) shall be measured by [Transportation Research Board] Circular 212, by the most recent version of the Highway Capacity Manual, or by a uniform methodology adopted by the agency that is consistent with the [Transportation Research Board] Highway Capacity Manual." (Government Code Section 65089(b)(1)(A)).

Local Regulation

Congestion Management Program

[503] Source: California Department of Transportation: Manual on Uniform Traffic Control Devices. Available at: https://dot.ca.gov/-/media/dot-media/programs/safety-programs/documents/ca-mutcd/rev-5/camutcd2014-rev5-a11y.pdf.
[504] Source: California Office of Planning and Research: Technical Advisory on Evaluating Transportation Impacts in CEQA. Available at: http://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf.

The Congestion Management Program ("CMP")[505] for Los Angeles County was administered by the Los Angeles County Metropolitan Transportation Authority ("Metro") through 2019. The CMP monitored the relationship between land use and transportation at numerous intersections, freeway segments, and rail corridors. The CMP identified a system of highways and roadways, with minimum levels of service performance measurements designated at Level of Service ("LOS") E (unless exceeded in base year conditions) for highway segments and key roadway intersections on this system.

The CMP exempts "[p]rojects determined not to have a significant effect on the environment" as "not subject to the CMP Land Use Analysis Program," for which "preparation of a TIA [("Traffic Impact Analysis")] is unnecessary."[506] The purpose of a TIA is to "identify site-specific impacts and mitigation for the regional highway, freeway and transit systems within the vicinity of major projects, as defined by the TIA Guidelines contained in Appendix D."[507] "A TIA is not required if the Lead Agency for the EIR finds that traffic is not a significant issue and does not require local or regional traffic impact analysis in the EIR."[508]

In 2019, the County adopted a resolution to opt out of its CMP,[509] "as authorized by the California Government Code Section 65088.3, electing for the Los Angeles County to be exempt from the Congestion Management Program as described in the California Government Code Section 65088 et seq."

As justification, the resolution notes that "[o]ver the last several years, the CMP has become increasingly outdated in relation to the direction of regional, State, and Federal transportation planning requirements. Additional reasons to opt-out of the CMP include:
Opting out of the CMP relieves the County from:

- Having to use a single measure LOS to determine roadway deficiencies.
- Losing State gas tax funds or being ineligible to receive State and Federal Transportation Improvement Program funds, as a result of not being in compliance with CMP requirements or performance standards.
- Administrative and financial burden associated with the preparation of documents to demonstrate conformance with the CMP."

SCAG's 2012/2016 RTP/SCS

SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy ("SCS") in their regional transportation plan. For the SCAG region, the 2012 Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS") was adopted in April

[505] Source: County Metropolitan Transportation Authority: 2010 Congestion Management Plan. Available at: http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf.
[506] Source: County Metropolitan Transportation Authority: 2010 Congestion Management Plan, page 45. Available at: http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf.
[507] Source: County Metropolitan Transportation Authority: 2010 Congestion Management Plan, page 46. Available at: http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf.
[508] Source: County Metropolitan Transportation Authority: 2010 Congestion Management Plan, page D-2. Available at: http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf.
[509] Source: County Board of Supervisors. Available at: http://file.lacounty.gov/SDSInter/bos/supdocs/137953.pdf.

2012[510] and updated in April of 2016,[511] with subsequent amendments in 2017 and future updates expected to this living document. The SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers.

Metro LRTP

The County, the 88 cities in Los Angeles County, and other transportation agencies engage in transportation planning activities by participating in the development and implementation of the Long Range Transportation Plan ("LRTP")[512] and RTP. The LRTP serves as a blueprint for how the Metropolitan Transportation Authority will spend anticipated revenues in the coming decades.

Greenbook and Graybook

For over 50 years, the "Standard Specifications for Public Works Construction," named for its cover as the "Greenbook," has specified standards for Public Works specifications for cities, counties and agencies in Southern California.[513] First published in 1967, the Greenbook promotes uniformity, and eliminates conflicts and confusion, among the plans and specifications used by local public agencies. It is the work of an active volunteer committee of professional agency members who are thoroughly versed in the changing technology and advanced thinking of the construction industry.

The "Additions and Amendments to the Standard Specifications for Public Works Construction," named for its cover as the "Graybook," is published by the County Department of Public Works and contains County-specific revisions and amendments to the Greenbook. The Graybook requires a construction traffic control plan for any non-transient encroachment in the public road right-of-way, which may be appropriately brief for "[s]imple daytime lane closures" with traffic control devices that are "installed in accordance with the Manual on Uniform Traffic Control Devices."[514] The specific requirements for temporary traffic control measures are contained in an

[510] Source: South Coast Association of Governments: Regional Transportation Plan 2012-2035. Available at: https://libraryarchives.metro.net/dpgtl/scag/2012-2035-regional-transportation-plan.pdf.
[511] Source: South Coast Association of Governments: Regional Transportation Plan 2016-2040. Available at: https://scag.ca.gov/sites/default/files/old/file-attachments/f2016rtpscs.pdf.
[512] Source: Metropolitan Transportation Authority: 2009 Long Range Transportation Plan. Available at: http://media.metro.net/projects_studies/images/final-2009-LRTP.pdf.
[513] Source: Greenbook Committee of Public Works Standards, Inc. Available at: http://www.greenbookspecs.org/.
[514] Source: County Department of Public Works: Graybook Additions and Amendments to the Standard Specifications for Public Works Construction 2006 Edition, page 42. Available at: https://dpw.lacounty.gov/cons/specs/graybook2006.pdf.

informational document from the Department of Public Works entitled "Requirements for Temporary Traffic Controls for Lane Closures, Street Closures and Detours."[515]

General Plan and Community Plan

General plans, specific plans, and community plans contain policies in their respective planning areas as a means of implementing stated goals. The 2035 County General Plan[516] governs the project, as does the Altadena Community Plan.[517]

Consistency of the project with this these policies, including any related to the transportation system, is attributed in Table 5-11: County General Plan Policy Consistency Analysis and Table 5-12: Altadena Community Plan Policy Consistency Analysis. However, the Mobility Element of the 2035 County General Plan, which governs the design, construction, operation and maintenance of the transportation system, is not relevant to the construction of one single-family residence. The Mobility Element also encompasses the 2012 County Bicycle Master Plan, which guides the implementation of proposed bikeways and promotes bicycle-friendly policies and programs.[518]

Altadena Community Standards

County Code Sections 22.306.020 and 22.306.070(A)(3)(b)(ii) establishes criteria for a zone of visibility on both sides of a residential driveway, called a "driveway zone."[519] In the driveway zone, opaque fences, walls, and landscaping are limited to a height of 42 inches in order to ensure adequate visibility between vehicles egressing from a residential driveway and vehicles on the roadway.

5.16.3 Existing Conditions

Roadway Circulation System

The project is fronted by Canyon Crest Road, a two-lane collector road serving a number of side streets and residences farther to the north, together comprising between 200 and 250 single-family homes, and no other development. The road right of way of Canyon Crest Road is 30 feet wide, with pavement width of approximately 25 feet along the frontage of the property. There are no sidewalks or other pedestrian facilities along Canyon Crest Road. Shoulder space spanning the public right of way and accommodating of vehicle parking exists on portions of

[515] Source: County Department of Public Works: Requirements for Temporary Traffic Controls for Lane Closures, Street Closures and Detours. Available at: https://dpw.lacounty.gov/SPATS/public/spatsfaq/forms/Requirements%20for%20TTC%20-%208-17-16.pdf.
[516] Source: County Department of Regional Planning: 2035 County General Plan. Available at: https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.
[517] Source: County Department of Regional Planning: Altadena Community Plan.
[518] Source: County Department of Public Works: Bicycle Master Plan Final Plan – March 2012. Available at: https://dpw.lacounty.gov/pdd/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf.
[519] See detail of "Driveway Zone" definition at: https://mcclibrary.blob.core.usgovcloudapi.net/codecontent/16274/367411/22.306.020_A.png.

Canyon Crest Road, including on the project parcel and properties to the south but is largely absent to the north until the hairpin turn in Canyon Crest Road to the north. The posted speed limit of Canyon Crest Road is 25mph, with intervals around curves posted at 15mph or 20mph within a half mile of the project site, though speeds in excess of 25mph characterize the existing condition. Therefore, Canyon Crest Road in the vicinity of the project operates at a qualitative level of service "A" according to County criteria, such that mean flow rates are in excess of 85% of the posted travel speed. No sustained queuing or congestion on the road adjacent to the project parcel or at its intersection with Lincoln Avenue occur at any time of day, even in the presence of single-lane closures. Intermittent pedestrian and bicycle travel also regularly occur in the lanes of travel in both directions, necessitating encroachment of passing vehicles into the opposing lane of traffic.

Canyon Crest Road is the sole collector road for residences to the north of the project with addresses along Canyon Crest Road and in the Meadows neighborhood to the north. With 10 trips per day and one at the peak hours expected of single-family residences according to the 10th edition of the Institute of Transportation Engineers ("ITE") Trip Generation Manual,[520] Canyon Crest Road would be expected to be characterized by between 2,000 and 2,500 trips per day, including 200 to 250 trips during the a.m. and p.m. peak hours.

Canyon Crest Road outlets to Lincoln Avenue, which is an arterial road collecting much of western Altadena, at a three-leg intersection mediated by one stop sign for Canyon Crest Road. In the vicinity of this intersection, the speed limit posted on Lincoln Avenue is 35mph south of Loma Alta Drive (approximately 100 feet south of the interaction) and north of Loma Alta Park (approximately 500 feet north of the intersection), and 25mph along the length of Loma Alta Park. Lincoln Avenue to the north of this intersection is one of two outlet roads for the single-family residential neighborhood in the La Viña Specific Plan, which provides for a maximum of 272 single-family homes.[521] Lincoln Avenue also services approximately 20 additional residences on Lincoln Avenue north of the intersection of Canyon Crest Road, and no other development or parking facilities for Loma Alta Park. With 10 trips per day and one at the peak hours expected of single-family residences according to the 10th edition of the Institute of Transportation Engineers ("ITE") Trip Generation Manual,[522] Lincoln Avenue at its intersection with Canyon Crest Road would be expected to be characterized by approximately 3,000 trips per day, including 300 trips during the a.m. and p.m. peak hours.

The nearest downstream intersection meriting a traffic signal is the intersection of Lincoln Avenue and Altadena Drive, approximately 0.3 miles south of the intersection between Canyon Crest Road and Lincoln Avenue. That intersection operates at a Level of Service of "A" according to qualitative signalized arterial intersection criteria, such that no vehicle typically waits more than one red indication.

[520] Source: Institute of Transportation Engineers. Available at: https://www.ite.org/technical-resources/topics/trip-and-parking-generation.
[521] Source: County Department of Regional Planning: La Viña Specific Plan Summary. Available at: https://planning.lacounty.gov/long-range-planning/la-vina-specific-plan/#:~:text=The%20La%20Vina%20Specific%20Plan,in%20Los%20Angeles%20County%2C%20California.
[522] Source: Institute of Transportation Engineers. Available at: https://www.ite.org/technical-resources/topics/trip-and-parking-generation.

Visibility from the project driveway along Canyon Crest Road meets or exceeds the distances at existing residential driveways along Canyon Crest Road. (*See* Figure 5-29: Existing Driveway Visibility in Vicinity of Project). Sufficient visibility exists for vehicles to observe traffic in either direction as they enter or exit the project parcel. (*See* Figure 5-30: Visibility of Roadway from Driveway on Project Site).

Figure 5-29: Existing Driveway Visibility in Vicinity of Project[523]

[523] Source: Applicant

Figure 5-30: Visibility of Roadway from Driveway on Project Site[524]

According to the County Department of Public Works Sewer Maintenance Division, single-lane closures occur on Canyon Crest Road at the southeast corner of the property for several hours every approximately 60 days in order to service the sewer siphon that spans Millard Canyon, without reported incident. In accordance with the MUTCD, proper signage and flagging ensures that this lane closure is safely managed with alternating flow, and observations revealed that this single lane closure does not result in any sustained queuing. (*See* Figure 5-31: Regular Single Lane Closure Adjacent to Project Site).

[524] Source: Applicant. View from project parcel of roadway looking north (left) and south (right).

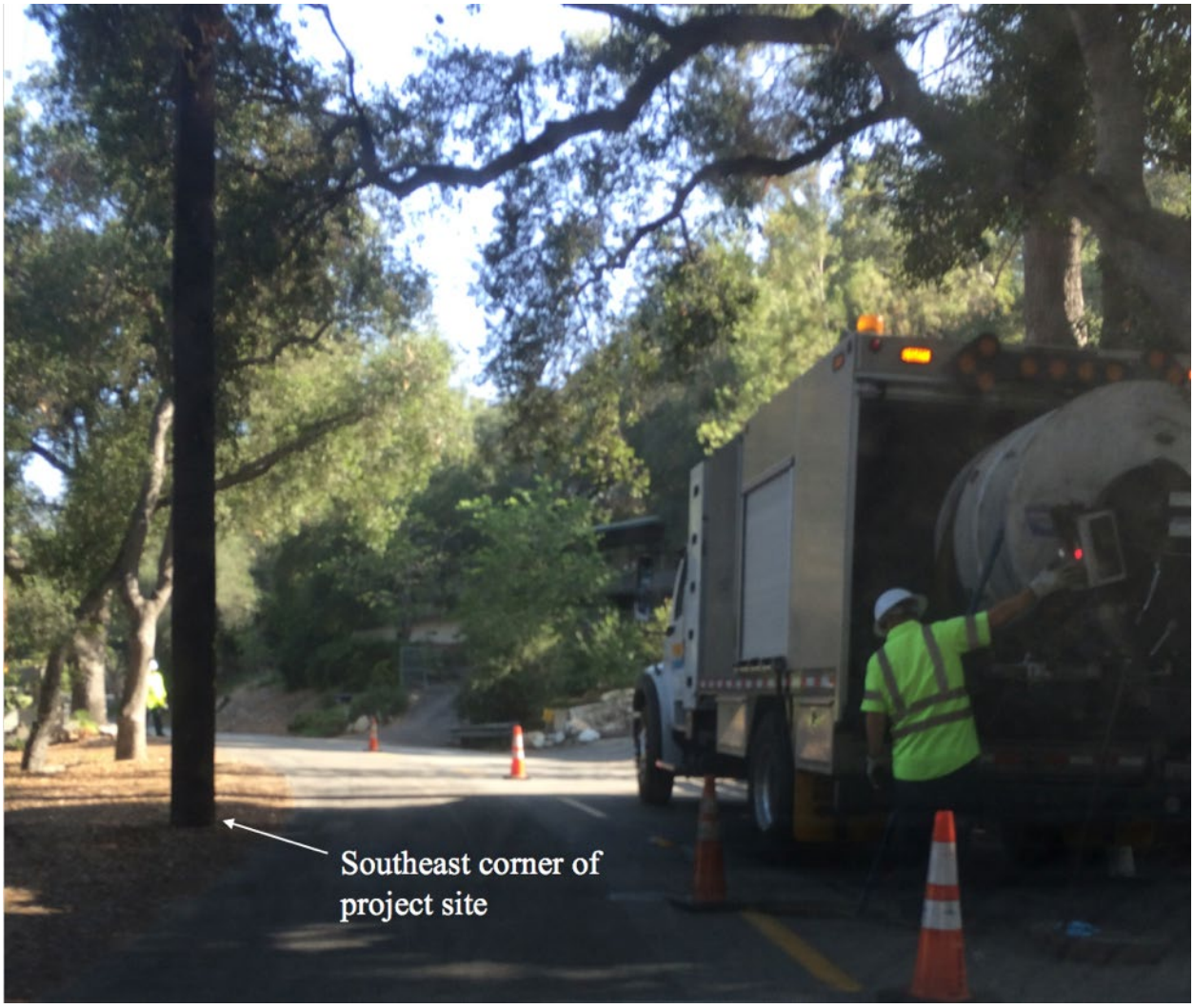


Figure 5-31: Regular Single Lane Closure Adjacent to Project Site[525]

Observations of Canyon Crest Road revealed additional single-lane closures, as well as parking, entrance, and exit of large construction vehicles used in maintenance of or additions to existing single-family residences along Canyon Crest Road in the vicinity of the project parcel.

[525] Source: Applicant

Figure 5-32: Observed Single-Lane Closures and Construction Vehicles Along Canyon Crest Road[526]

[526] Source: Applicant
A: Along frontage of 3617 Canyon Crest Road, ~250 feet north of project parcel

In or about 2005, a “long-side” water lateral was installed on the project parcel by a previous owner, without reported incident. The water lateral spanned both lanes of traffic, constructed in sections that permitted either the northbound or southbound lane of traffic to pass. The water lateral extends across approximately 20 feet of the road right of way. Other signs of single-lane closure for utility work characterize Canyon Crest Road in the vicinity of the project parcel, in the form of pavement repair from trenching along hundreds of feet in the road segment between Canyon Ridge Drive to the southeast of the project parcel and the hairpin turn in Canyon Crest Road to the north. These signs of trenching occur in both the north-bound and south-bound lanes and down the centerline of Canyon Crest Road.

B: In driveway of 3737 Canyon Crest Road, ~900 feet north of project parcel
C: North of 3737 Canyon Crest Road, ~1000 feet north of project parcel
D: Along frontage of 3637 Canyon Crest Road, ~350 feet north of project parcel
E: Along southeast corner of project parcel, extending through the easterly change in direction of Canyon Crest Road to the south of the project site
F: Along frontage of 3617 Canyon Crest Road, ~250 feet north of project parcel

Figure 5-33: Signs of Utility Work Resulting in Single-Lane Closures in Vicinity of Project Site on Canyon Crest Road[527]

Canyon Crest Road was repaved in both lanes along a stretch of approximately 2,500 feet over a span of four days in March of 2020, without incident. In 2019, a portion of Canyon Crest Road was made single-lane for several weeks to accommodate staging of construction equipment for slope stability improvements above Canyon Crest Road.

As of September 2025, Southern California Edison proposes to underground much of the power utility infrastructure in northern Altadena following the Eaton Fire, including along Canyon

[527] Source: Applicant, pictures dating from 2018

Crest Road. Planned routes are reasonably foreaseeable to require trenching and single lane closure along the entirety of Canyon Crest Road during construction.[528]

Circulation System Extending Beyond Vicinity of Project

Canyon Crest Road exits onto Lincoln Avenue approximately 0.3 miles southeast of the project parcel, which in turn connects to Altadena Drive and Loma Alta Drive, all of which are main circulation routes through Altadena and identified as proposed Class III Bike Routes within the 2012 County of Los Angeles Bicycle Master Plan,[529] though bike lanes have not yet been painted on these routes. These are two-lane roads with sidewalks and sufficient shoulder width for on-street parking in each lane. The interchange at Lincoln Avenue and Altadena Drive is the nearest interchange controlled by a traffic light. Pedestrian crossings and signalized crosswalks characterize this and other major intersections in the vicinity of the project parcel.

Lincoln Avenue provides access to the Interstate-210 Freeway, interchanging with the Ventura Freeway (California State Route 134), California State Route 2, California State Route 110, and other freeways farther to the east and west.

Nearby public transit includes bus routes 267 and 264, which provide service from Altadena Drive and Lincoln Avenue to areas of Pasadena and Arcadia at service intervals as often as approximately 25 minutes during commute hours,[530] narrowly underperforming the criteria for a "major transit stop" pursuant to California Public Resources Code Section 21064.3. The nearest bus stop is located approximately 0.4 miles from the project site, at the corner of Altadena Drive and Lincoln Avenue. Metro Rail in Pasadena provides service to the greater Los Angeles area.

[528] Source: Southern California Edison, Proposed Altadena Rebuild Map. Available at: https://s3.amazonaws.com/cms.ipressroom.com/352/files/20258/Altadena_Rebuild-09182025.pdf.
[529] Source: County Department of Public Works: Bicycle Master Plan Final Plan – March 2012. Available at: https://dpw.lacounty.gov/pdd/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf.
[530] Source: County Metropolitan Transportation Authority: Altadena Route Map. Available at: https://media.metro.net/riding_metro/bus_overview/images/264-267.pdf.

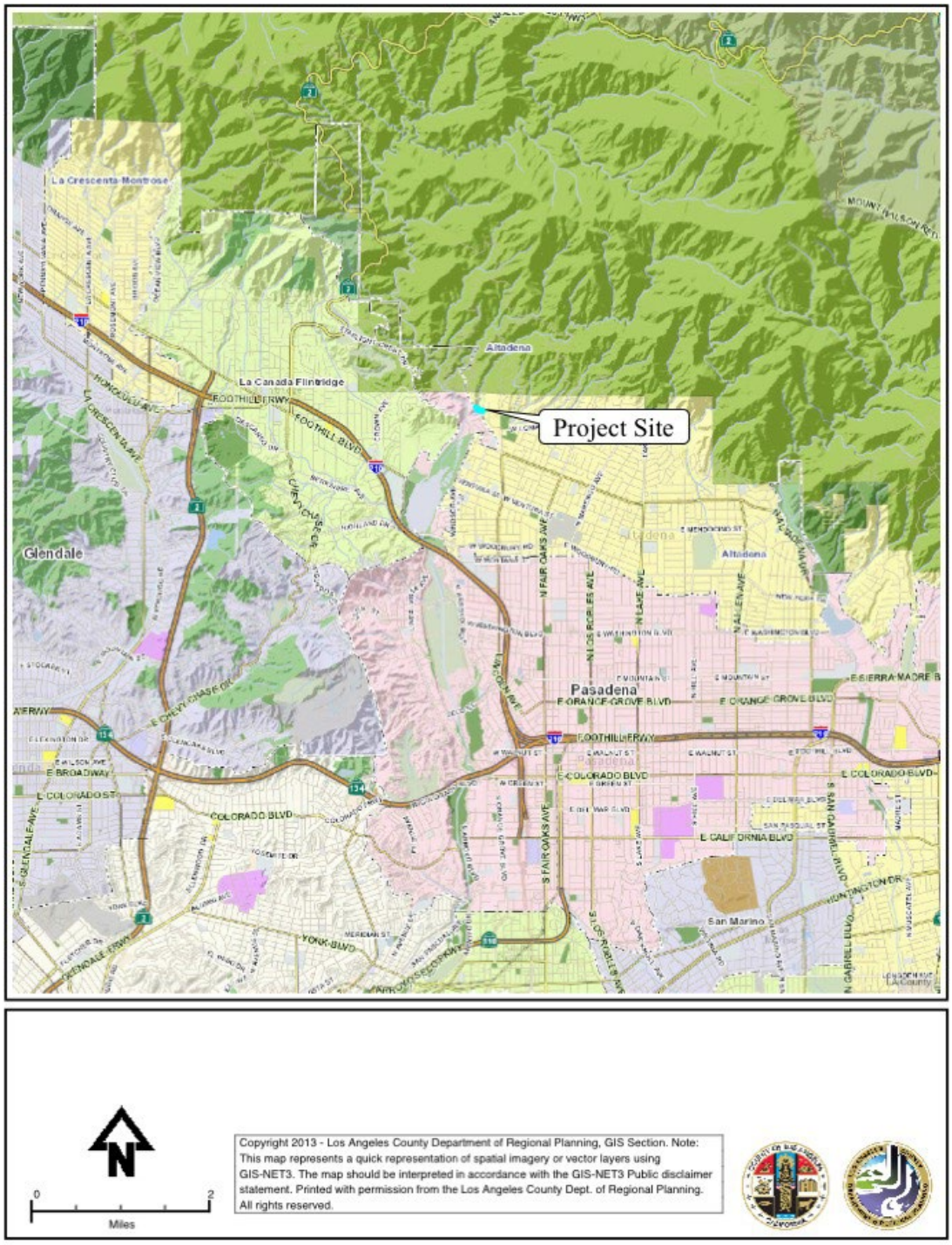


Figure 5-34: Roadways in Vicinity of Project[531]

[531] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

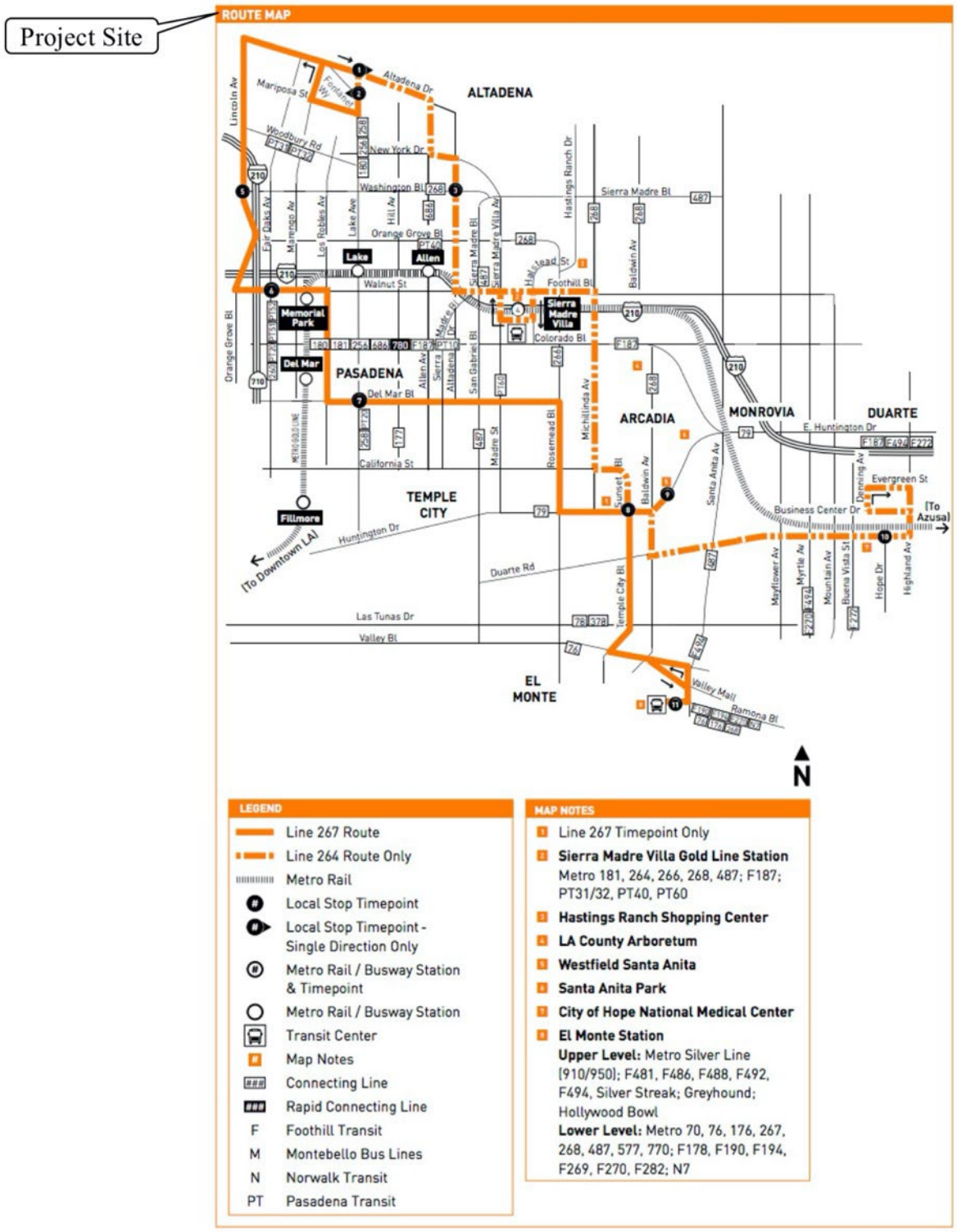


Figure 5-35: Mass Transit in Vicinity of Project[532]

532

5.16.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.16-1**: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilties
  - For purposes of analysis in this EIR, adopted programs or plans addressing the circulation system include the County's Traffic Impact Analysis Guidelines.[533] See analysis under threshold 5.16-2.
  - For purposes of analysis in this EIR, adopted plans or programs addressing public transit, bicycle or pedestrian facilities are in the County General Plan Mobility Element and include the 2012 County Bicycle Master Plan.[534] As of the date of the Notice of Preparation, the County Pedestrian Plans for Unincorporated Communities[535] is not adopted.

- **Threshold 5.16-2**: Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)
  - For purposes of analysis in this EIR, the threshold of significance for "land use projects" is the screening threshold recommended by the Office of Planning and Research in its Technical Advisory in Evaluating Transportation Impacts in CEQA[536] and by the County's Transportation Impact Analysis Guidelines,[537] the generation or attraction of more than 110 trips per day.
  - In addition, pursuant to State CEQA Guidelines Section 15064.3(b)(1), a showing that a project would reasonably be expected to "decrease vehicle miles traveled in the project area compared to existing conditions" suffices to demonstrate less than significance.

- **Threshold 5.16-3**: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

- **Threshold 5.16-4**: Result in inadequate emergency access

Note: as of the 2020 update, State CEQA Guidelines Section 15064.3 states that vehicle delay will no longer be considered a significant environmental impact for projects that are not roadway

[533] The 2010 County of Los Angeles Congestion Management Plan[533] is no longer in use in the County.
[534] Source: County Department of Public Works: Bicycle Master Plan Final Plan – March 2012. Available at: https://dpw.lacounty.gov/pdd/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf.
[535] Source: County Department of Public Health: Pedestrian Plan for Unincorporated Communities. Available at: http://publichealth.lacounty.gov/place/stepbystep/docs/Step_by_Step_LA_County_full_draft_Summer_2017.pdf.
[536] Source: California Office of Planning and Research: Technical Advisory in Evaluating Transportation Impacts in CEQA, page 10. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
[537] Source: Los Angeles County Department of Public Works. Available at: https://pw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf

expansion projects. The GPEIR predates this change and analyzes the significance of roadway Level of Service impacts.

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.16-5**: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system
  - For purposes of analysis in this EIR, a substantial increase in traffic in relation to the existing traffic load is as defined in the 2010 County of Los Angeles Congestion Management Plan.

5.16.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to transportation and traffic begins with a description of those facilities that comprise the transportation system in the vicinity of the project, as well as mediation of the pre-existing regulatory framework. The existing level of service and impact of the project on that level of service are analyzed along with localized effects during construction and the period of occupancy of the project.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

SC-TRANS-1: Pursuant to the County Graybook, prior to any non-transient encroachment of the public road right-of-way, the Applicant shall obtain an encroachment permit from the Department of Public Works,[538] which will permit materials, equipment or vehicles in the public road right-of-way only for the necessary purpose of constructing a utility connection in the public road right-of-way. As required to obtain a permit, the Applicant shall submit to and receive approval from the Department of Public Works of a construction traffic control plan identifying construction vehicle routes, entrance/exit and construction vehicle parking locations; duration and location of lane closures; and the use of traffic control devices. All encroachment throughout the construction of the project shall comply with the approved construction traffic control plan to the satisfaction of the Department of Public Works. Pursuant to the Graybook, the construction traffic control plan shall adhere to the California Manual on

[538] See Los Angeles County Road Permit Standard Provisions. Available at: https://dpw.lacounty.gov/general/forms/download/694.pdf.

Uniform Traffic Control Devices, which specifies traffic control devices, buffer distances, and required lane widths for safe single-lane closure on a two-lane roadway. Encroachment shall be permitted only Monday through Friday, 7a.m.-3.30p.m., excepting federal holidays. Outside of permitted construction hours or in the event of emergency, any excavation in progress in the public road right-of-way shall be covered with approved steel road plate complying with Department of Public Works Standard Plan 6008-1, pursuant to the Graybook.

RCM-TRANS-1: Pursuant to County Code Sections 15.64.180, 15.64.210 and 15.08.080 and California Vehicle Code Section 22500.1, stopping, parking or leaving a vehicle is prohibited on every way set apart for public travel except when necessary to avoid conflict with other traffic or in compliance with a traffic sign or signal or direction of a police officer.

RCM-TRANS-2: Any non-transient staging of materials or vehicles on the pavement in the right of way of Canyon Crest Road is prohibited pursuant to RCM-TRANS-1 except where expressly authorized by a valid encroachment permit for utility connections issued by the County Department of Public Works, pursuant to SC-TRANS-1.

PDF-TRANS-1:The Applicant proposes that any work requiring an encroachment permit be performed only from January 1 to April 31, outside of California's fire season, and that the encroachment permit not be used during the effective period of any National Weather Service storm watch or warning that includes Altadena or the Angeles National Forest adjacent to Altadena. The Applicant further proposes that the encroachment permit be used only between 9a.m. and 3:30p.m., Monday through Friday, excepting federal holidays.

Impact Discussion

- **Threshold 5.16-5**: Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system
- **Threshold 5.16-1**: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilties

The project would be expected to result in no adverse impacts under these thresholds from conflict with the regulatory framework through degraded performance or substantial increases in the use of transportation facilities or systems, and less than significant impacts on any transportation facility or system.

General Analysis

The 2035 County General Plan EIR found impacts to the circulation system to be significant and unavoidable because certain "impacted locations are still considered to be significantly impacted with mitigation," represented by significant increases in the level of service at some intersections

and on some already-congested freeways, and because "completing certain improvements located within cities lies with agencies other than the County," with "potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the County's control."[539] Notwithstanding this finding of significance under some circumstances, the 2035 County General Plan EIR formulated GPMM-T-1, GPMM-T-2, GPMM-T-3, GPMM-T-4 and GPMM-T-5 as feasible mitigation to reduce impacts to less than significant under other circumstances.

GPMM-T-1 stipulates that "[t]he County shall continue to monitor potential impacts on roadway segments and intersections on a project by project basis as buildout occurs by requiring traffic studies for all projects that could significantly impact traffic and circulation patterns. Future projects shall be evaluated and traffic improvements shall be identified to maintain minimum levels of service in accordance with the County's Traffic Impact Analysis Guidelines, where feasible mitigation is available."[540] In accordance with the County's TIA Report Guidelines, use of the 10th edition of the Institute of Transportation Engineers ("ITE") Trip Generation Manual[541] results in an expected trip generation rate for a single-family residence of approximately 10 trips/day during the period of occupancy, including one trip at the peak hour. During construction, the same source expects six to seven trips per day, including one trip at the peak hour. These amounts do not exceed the criteria for performance of traffic modeling at CMP intersection and highway monitoring locations in a TIA. The existing level of service accommodates more than 200 single-family residences farther along Canyon Crest Road, each with the same profile of expected trips as the project. By inspection, the project would result in an insubstantial increase in the number of trips on Canyon Crest Road, amounting to a fraction of a percent, which would therefore be less than significant at any existing LOS, such that no traffic flow study would be warranted under GPEIR analysis.

GPMM-T-2 stipulates that the County "shall implement over time objectives and policies contained within the General Plan Mobility Element."[542] As attributed in Table 5-11: County General Plan Policy Consistency Analysis, Mobility Element policies relate to the design, construction, operation and maintenance of the transportation system, which are not pertinent to a single-family home.

GPMM-T-3, GPMM-T-4 and GPMM-T-5 are conditional requirements of the County that are not triggered by the construction of a single-family home.

As the project would not change the Level of Service criteria on Canyon Crest Road or at any other nearby intersection from an un-degraded state of "A" and is entirely within the County's jurisdiction, it transcends the finding of unavoidable significance analyzed in the GPEIR.

[539] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.16-83. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[540] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[541] Source: Institute of Transportation Engineers. Available at: https://www.ite.org/technical-resources/topics/trip-and-parking-generation.
[542] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with the circulation system, and by transcending its mitigation, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

Most construction vehicles would be expected to be passenger trucks or cars transporting workers, tools, and other equipment or building materials. As attributed in Section 3.5, the number of construction workers would be expected to be 4-6 during peak work periods and 1-4 during off-peak work periods. This number can be accommodated with 1-2 vehicles, parking for which exists along the shoulder of Canyon Crest Road, in the staging area of the project parcel, and in the project garage for some phases of construction. The approximately 30 feet wide by 40 feet deep existing graded area at the northeast portion of the project parcel would accommodate the longest delivery vehicles required to implement the project without encroaching into the roadway, and the project footprint would provide additional staging space as the foundation is constructed. This amount of staging area far exceeds that of the many typical 50-foot wide, down-sloping residential hillside lots, as well as many urban lots, that have been built out in the Los Angeles metropolitan area, and the footprint of the home would provide additional staging during and after the second phase of construction, as framing commences. Though the project parcel would be expected to accommodate the project's phased staging needs, material delivery and storage may also be accommodated on the Applicant's private property nearby or on any other private land by arrangement of its owner, as useful, and if the Applicant elects to take receipt of building materials in bulk delivery rather than purchasing incrementally. Smaller quantities of materials could then be transported to the site as useful for the day's work. The amount of building material required in each phase of the construction of a single-family residence of 1,555 square feet is modest in relation to that required to build larger structures (*see* Table 3-1: Expected Construction Equipment and Trips), with correspondingly reduced spatial requirements.

The County Department of Public Works has approved a conceptual construction traffic control plan for the project. Because such plans must be reviewed in association with an encroachment permit, and because any encroachment permit application expires if work is not commenced within 60 days of issuance,[543] the final approval of the plan would await the Applicant's submission of the application, shortly before such work commences, well after discretionary project approvals. *See also Lexington Hills Association v. State* (1988) 200 Cal.App.3d 415, 433 (agency's issuance of roadway encroachment permits solely to implement standard traffic control-related conditions does not constitute discretionary "approval" of the project and required no discussion under CEQA).

While the County has approved a conceptual construction traffic control plan establishing the ability of the project parcel to accommodate expected parking and staging needs, should it prove

[543] Source: County Department of Public Works: Los Angeles County Road Permit Standard Provisions. Available at: https://dpw.lacounty.gov/general/forms/download/694.pdf. See also County Code Section 16.06.050.

convenient, the Applicant's own private residence less than a half mile distant or any other private land by arrangement of its owner may also be used as supplemental staging area, such that workers or materials could be ferried as needed. Such particulars are left to the discretion of the Applicant and his contractors in implementing the project in compliance with all applicable regulations prohibiting non-transient obstruction of the roadway. This EIR need not exhaustively describe such details, which would be expected to vary depending on the methods and practices of contractors yet to be chosen, but may reasonably anticipate that any activity not in substantial compliance with all applicable constraints would be enjoined, such that alternative approaches would be necessary to the continuation of the project. Pursuant to the enforcement provisions of RCM-TRANS-1, law enforcement is empowered to abate any non-transient obstruction of roadway traffic that was not approved by, or performed in substantial compliance with the conditions of, the encroachment permit, and would reasonably be expected to do so.

Notwithstanding the prohibition against staging and parking on Canyon Crest Road, transient disturbances to traffic would occur as vehicles enter or exit the project parcel. As attributed in Figure 5-29: Existing Driveway Visibility in Vicinity of Project, adequate visibility to accommodate this proposed use exists in both directions along Canyon Crest Road. The fewer than 40 large truck trips expected to be required to implement the project would be spaced over the expected 18 months of construction, with an expected peak intensity of no more than a few truck trips in a single day. This intensity would not be expected to deviate from that characteristic of renovations or additions that have occurred and would be expected to contiunue occurring in the existing single-family residences along Canyon Crest Road. (*See* Table 3-1: Expected Construction Equipment and Trips). The existing condition is also characterized by both single-lane closures and construction and maintenance vehicles associated with existing residential development informally staged in the roadway for extended intervals. (*See* Figure 5-32: Observed Single-Lane Closures and Construction Vehicles Along Canyon Crest Road).

The vehicle with the largest wheelbase and turning radius expected to be accommodated on-site is a volumetric concrete mixer truck with a wheelbase of approximately 16 feet and turn radius of approximately 35 feet, an end-to-end length of approximately 25 feet and a width of approximately 8 feet. A truck of these dimensions is capable of entrance to or exit from the project parcel with a turn that can be accommodated on the project parcel and the nearer roadway lane in a transient disturbance of tens of seconds. As necessary, a two-point turn could be initiated from, or result in exit to, the northbound lane of traffic on Canyon Crest Road, permitting more space and a wider range of parking orientations for larger vehicles on the project parcel. A flagman would be expected to assist with any slow turns of larger vehicles merging into traffic, pursuant to RCM-TRANS-1. Whether using the southbound lane to enter with a two-point turn or the northbound lane to exit with a two-point turn, the required reversal of direction for these limited number of large truck trips could be accommodated around a block in the Meadows neighborhood to the north, in compliance with all roadway regulations.

In compliance with these regulations, a cement mixer could alternatively be parked out of the right-of-way of either lane of Canyon Crest Road adjacent to the fenced intersection with Florecita Drive, approximately 150 feet to the south of the project site, with concrete line-pumped across the project site frontage. This would avoid any turn of a larger vehicle onto

Canyon Crest Road. These implementation decisions are left to the discretion of the Applicant and contractor, as they assess conditions.

A larger number of light passenger vehicle trips, such as pickup trucks ferrying workers and materials, would not be expected to exceed six to seven trips per day, pursuant to the ITE Trip Generation Manual. For such vehicles, entrance or exit with a two-point turn would be expected to be similar to the entrance and exit of residential vehicles in the driveways and paved parking areas of residences in the vicinity, the disturbances of which the existing conditions support in far greater numbers.

The project's only non-transient disturbance to traffic would be expected to be its sewer connection. This is the only sub-surface utility work in any public road right-of-way required to implement the proposed project. As a preliminary matter, utility connections are an expected impact of any new development, including projects that are categorically exempt from CEQA. Therefore, the County implements a standard process for the common and typical operation of connecting utility laterals that encroach in the public right of way, pursuant to SC-TRANS-1, which includes a ministerial encroachment permit with accompanying construction traffic control plan. Pursuant to SC-TRANS-1, both lanes of traffic would be restored during commute hours, or in the event of an emergency. The limited scope of work would be expected to be short-lived, lasting from three to ten weekdays during non-commute hours, depending on subsurface conditions encountered, with correspondingly limited impacts. This work would not be expected to materially deviate from the existing conditions of periodic utility and roadway maintenance that has occurred and would be expected to continue along Canyon Crest Road. (*See* Figure 5-33: Signs of Utility Work Resulting in Single-Lane Closures in Vicinity of Project Site on Canyon Crest Road).

Requirements associated with this ministerial encroachment permit are not within the scope of CEQA review. *See Lexington Hills Association v. State* (1988) 200 Cal.App.3d 415, 433 (agency's issuance of roadway encroachment permits solely to implement standard traffic control-related conditions does not constitute discretionary "approval" of the project and required no discussion under CEQA). State CEQA Guidelines Section 15305(b) also acknowledges that "minor encroachment permits," even where subject to discretionary approval, are exempt from CEQA because they *do not* have a significant effect on the environment. Nevertheless, the Department of Public Works, in reviewing plans for the project, has confirmed that in accordance with the provisions of the Manual for Uniform Traffic Control Devices ("MUTCD"),[544] a single lane of traffic at least 11 feet in width would be kept open on Canyon Crest Road at all times. While most activity in the roadway would be centered five feet or more from the edge of this lane, manual activity below steel roadway channel is typical where comfortable clearances for equipment with respect to traffic are not available.

While County Code Section 20.32.490 guides that "[w]here design considerations permit, main-line sewers shall have a straight alignment, and shall be located five feet from and on the northerly and easterly sides of the centerlines of streets," the existing sewer main extending

[544] Source: United States Department of Transportation, Federal Highway Administration: Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Edition. Available at: https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/mutcd2009r1r2edition.pdf.

southwards from manhole #17 on Sewer Index Map 1906 adjacent to the southeast corner of the project site is constructed along the centerline of Canyon Crest Road. It is believed that this implementation owed to the atypical circumstance that two water mains had been in operation on opposite sides of the roadway at the time of construction of this main, and its location was chosen to split the difference between the two, just maintaining 10 feet of offset from each. Title 22, California Code of Regulations Section 64572 stipulates that water mains "shall be at least 10 feet horizontally from and one foot vertically above, any parallel pipeline conveying…untreated sewage." The water main 10 feet east of the centerline remains in operation today, while the water main 10 feet west of the centerline does not. As such, literal compliance with all provisions of County Code and California Code of Regulations could not be maintained in any extension of the existing sewer main located adjacent to the southeast corner of the project parcel. Furthermore, any such extension would encroach upon the protected zone of oak trees without being necessary to service the proposed project sewer lateral.

As such, and pursuant to the discretion afforded the County's engineers in County Code Section 20.32.400, the project would create a manhole adjacent to the southeast corner of the project parcel, along the terminal stretch of existing sewer siphon, five feet west of the centerline of the roadway and manhole #17. The project would then connect its lateral to this manhole. The manhole would be constructed with a northerly stub permitting potential extension of the sewer main, as is typical. This implementation would fulfill the design intent of County Code Section 20.32.490 to provide a lateral buffer for utility construction and maintenance, such that disturbance may be minimized in the other lane of traffic, and serve as an optional node for any potential future extension. Inasmuch as County Code Section 20.32.530 provisions for an orderly delineation of payment responsibility relative to project parcel frontage *when a main is extended*, the Applicant has agreed that the project parcel shall be encumbered with a restrictive covenant to bear the cost of any future extension along the indicated portion of his parcel frontage, in the event this main were ever to be extended. Only a few residences exist upgrade of the project parcel before the grade again descends beyond the point at which this gravity sewer main could maintain required slope and minimum depth below grade. Should the main ever be extended across the parcel frontage, a manhole would be avoided in the protected zone of oak trees on the project parcel, which would otherwise be required at a terminus 40 feet downgrade of the upgrade lot line.

Pursuant to SC-TRANS-1, and as is also characteristic of the regularly scheduled closure of a single lane of traffic adjacent to the project parcel to service a sewer siphon that spans the site (*see* Figure 5-31: Regular Single Lane Closure Adjacent to Project Site), the work zone area to construct the sewer lateral connection would be delineated by proper signage and suitable lateral and longitudinal buffers. As is also characteristic of the regularly scheduled closure of a single lane of traffic adjacent to the project parcel (*see* worker immediately adjacent to lane of travel in Figure 5-31: Regular Single Lane Closure Adjacent to Project Site), and pursuant to the discretion afforded the contractor in the MUTCD, a lateral work zone buffer is optional and would not be expected to exceed several feet beyond the edge of excavation if specified, maintaining the full lane width of northbound traffic at all times during the permitted encroachment. No private driveways would be blocked by the temporary closure of the southbound lane of traffic adjacent to the southeast corner of the project parcel.

The project would not conflict with the 2012 County Bicycle Master Plan because this and other similar proposed plans address the improvement of roadway infrastructure, enforcement of safety regulations and outreach that is not applicable to the construction of a single-family residence on one residentially zoned lot. Neither would the project conflict with the policies in the County General Plan Mobility Element, which are similarly oriented towards the design, construction, operation and maintenance of the transportation system, and which are therefore irrelevant to the construction of one single-family residence that is not expected to result in any reasonably foreseeable change to these facilities (*see* Table 5-11: County General Plan Policy Consistency Analysis). The project would not appreciably increase the demand for public or alternative transportation or affect the performance of these systems because the addition of one single-family residence is negligible in the context of the thousands of existing residences within similar proximity to public and alternative transportation systems that are already served by these systems and because the project was anticipated in the long-range plans for these facilities, which are based on complete buildout according to land-use maps.

- **Threshold 5.16-2**: Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)

The project would be expected to result in no adverse impacts from an increase in average per capita VMT and less than significant impacts from any marginal increase in VMT.

Project-specific Analysis

The 6-7 daily trips that would be expected during construction and the 10 daily trips that would be expected during the period of occupancy do not exceed the screening threshold of 110 trips per day.

This screening threshold was derived by assuming that the level of traffic added by a project conforming to the categorical exemption for small structures, which pursuant to State CEQA Guidelines Section 15303(c) may be as large as 10,000 square feet, *is* less than significant.[545] The Secretary of the Natural Resources Agency has stated that such projects " '*do not* have a significant effect on the environment.' (§ 21084, subd. (a), italics added; [Citations.])." *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1101.

In addition, the project would provide housing in the Pasadena Regional Statistical Area, which has had and is projected to continue to have a high ratio of jobs to housing,[546] thereby contributing to reduced per capita VMT. Additionally, the Applicant and his wife propose to walk to and from work, a distance of less than a mile by foot, or less than two miles by vehicle, and so would be expected to further reduce VMT (which is dominated by distance of vehicular commute) compared to other residents commuting to Pasadena or other job centers.

[545] Source: California Office of Planning and Research: Technical Advisory on Evaluating Transportation Impacts in CEQA, page 12, fn. 19. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
[546] Source: Southern California Association of Governments: The New Economy and Jobs/Housing Balance in Southern California. Available at: https://scag.ca.gov/sites/default/files/old/file-attachments/neweconomyjobshousingbalance.pdf.

- **Threshold 5.16-3**: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

The project would be expected to result in no adverse impacts from hazardous design features or incompatible uses of the transportation system.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[547] In complying with all applicable aspects of the regulatory framework, if any, that were analyzed to mediate the interaction of single-family residences with hazardous traffic features, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The project is a single-family home on a residentially zoned lot on Canyon Crest Road in Altadena, which is a compatible use in its residential neighborhood. The proposed project has lines of sight along Canyon Crest Road for more than 450 feet to the north (the incoming, project-side lane of traffic) and 150 feet to the south from the project driveway and is therefore not expected to introduce any hazard from a lack of visibility for vehicles entering or exiting the project parcel. (*See* Figure 5-29: Existing Driveway Visibility in Vicinity of Project). The project driveway has been designed to accommodate a two-point turn, such that vehicles may both enter and exit in a forward direction for maximum visibility. The project driveway visibility meets or exceeds that of other residences along Canyon Crest Road that characterize the existing condition, and exceeds the requirements of the Altadena Community Standards, which attempt to avoid the discretionary creation of visibility hazards. (*See* Figure 5-29: Existing Driveway Visibility in Vicinity of Project and Figure 5-30: Visibility of Roadway from Driveway on Project Site). During construction, the project would accommodate road-side parking and a separate, existing graded staging area of approximately 30 feet wide and 40 feet deep, each with adequate visibility to the north when entering into southbound traffic. Pursuant to RCM-TRANS-1 and SC-TRANS-1, the project would not be permitted to create a hazardous condition by obstructing traffic in Canyon Crest Road or any other connecting roadway, or impeding the flow of traffic with a single-lane closure without proper signage, and law enforcement would reasonably be expected to timely abate such a nuisance in the unexpected event that it was ever to occur.

- **Threshold 5.16-4**: Result in inadequate emergency access

The project would be expected to result in no adverse impacts to future residents of the project or any other members of the public from subjecting them to inadequate emergency access, and less than significant impacts to emergency use of the circulation system.

[547] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[548]

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with hazardous traffic features, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

During the period of occupancy, the access of emergency public services (*see* Section 5.14) to and from the project would be adequately provided by Canyon Crest Road, as for adjacent residences.

The project would not permanently affect the physical configuration of Canyon Crest Road. The only non-transient disturbance to the flow of traffic required to implement the project is the connection of the project's sewer utility service. The County implements a standard process that governs utility connection that encroaches in the public right of way, pursuant to SC-TRANS-1, which includes a ministerial encroachment permit along with review of a construction traffic control plan. Pursuant to SC-TRANS-1, all work in the public right of way shall occur during non-peak hours Monday through Friday, excepting federal holidays. Any excavation in the roadway shall be covered with steel road plate and secured, except during the hours when work is permitted. The materials to cover any excavation shall be kept at hand during working hours, for quick replacement in the event emergency response would be facilitated by the use of both lanes of Canyon Crest Road. The Department of Public Works has confirmed that in accordance with the provisions of the Manual for Uniform Traffic Control Devices ("MUTCD"),[549] a single lane of traffic at least 11 feet in width can be kept open at all times in order to implement this improvement, accommodating emergency vehicles at elevated speeds. Similar single-lane closures for utility and roadway work along Canyon Crest Road have characterized the existing condition and would be expected to continue as subsurface utilities and roadways are maintained, repaired and replaced at the end of their service life. (*See* Figure 5-33: Signs of Utility Work Resulting in Single-Lane Closures in Vicinity of Project Site on Canyon Crest Road).

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

[548] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[549] Source: United States Department of Transportation, Federal Highway Administration: Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Edition. Available at: https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/mutcd2009r1r2edition.pdf.

Construction-related traffic impacts are associated with vehicles carrying workers to and from the site and no more than a few dozen large truck trips carrying construction materials, which may result in minor traffic perturbations as vehicles enter and exit from the project parcel. Impacts of this type would also be expected to be characteristic of discretionary (e.g. additions) or non-discretionary (e.g. fire, water, or other damage repair) renovations in the future in the surrounding residential development, several of which have been noted in the related projects list. The construction activities most impactful to traffic are typically those associated with grading equipment and the import or export of earth (cf. approximately 250 10-yard dump truck trips for the 2,500 cubic yards of cut that would trigger a residential use permit in Altadena). However, the project would not require any import or export of any fill or spoil from the project parcel. The connection to the public sewer main would require the temporary closure of a single lane of traffic on Canyon Crest Road for brief intervals. However, the vicinity currently supports similar single-lane closures, and the project must comply with the standard conditions of the required encroachment permit, which includes a construction traffic control plan that outlines procedures for signage, hours of work, and other requirements. Less than 10 additional trips per day are associated with the construction or operation of one new single-family home, a quantity that would not result in any significant long-term traffic impacts for this road with an un-compromised existing Level of Service that accommodates more than 200 other homes. The project's driveway area has already been used for parking and entrance/exit on Canyon Crest Road for many decades, and the project incorporates a driveway area accommodating of two-point turns that permits residents to exit with visibility in the forward direction, with adequate visibility for hundreds of feet in either direction.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

General Analysis

The 2035 County General Plan analyzed that "the [2035 County General Plan] could result in a cumulatively significant traffic impact that may remain significant and unavoidable."[550] However, the proposed project does not entail substantial new traffic and therefore transcends the finding of unavoidable significance.

[550] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

The incremental effects of the project to transportation would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

Past projects have contributed to usage of Canyon Crest Road that remains at the most serviceable, undegraded LOS, and downflow arterial intersections in the vicinity also operate at undegraded LOS. During its construction or period of occupancy, the proposed project would also be expected to add an insubstantial fraction of a percent to the existing traffic flow levels on any roadway. Localized disturbances, such as utility connections, would also be expected to be discretionary in schedule, quickly revertible as needed, and either transitory or short-lived, such that a cumulative impact with any other discretionary or non-discretionary disturbance in the vicinity may be avoided to maintain the performance of the roadway. Because the project is located in a region with a high ratio of jobs to housing, it and other similar projects like it within one mile would be expected to contribute to a reduction in per capita VMT with correspondingly less than significant effects on the circulation system.

5.17 Utilities and Service Systems

5.17.1 Introduction

This section of the EIR evaluates the project's potential impacts to utilities and service systems. Utilities and service systems include water and electricity supply, sewer systems and wastewater treatment, and solid waste disposal. Generally, these services were sized in anticipation of a single-family home on this residentially zoned lot, and all required utilities are available in the immediate vicinity of the project parcel.

5.17.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

Federal Clean Water Act

Wastewater treatment before effluent is discharged to Waters of the United States is required by the federal Clean Water Act ("CWA"), United States Code, Title 33, Sections 1251 *et seq.* The federal Clean Water Act is described in further detail in Section 5.9.2.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act ("RCRA") gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

State Regulation

State Water Resources Control Board

In California, State Water Resources Control Board ("SWRCB") is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The SWRCB's current challenge is exacerbated by California's rapid population growth, and the continuing struggle over precious water flows. It faces tough new demands which include fixing ailing sewer systems; building new wastewater treatment plants; and tackling the cleanup of underground water sources impacted by the very technology and industry that has catapulted California into global prominence. Additionally, the SWRCB would continue to focus on its most vexing problem of nonpoint source pollution, or polluted runoff, which is difficult to categorize, isolate and resolve.

The 1969 Porter-Cologne Water Quality Control Act, codified in the California Water Code, authorizes the SWRCB to implement programs to control polluted discharges into State waters. Pursuant to this law, the local Regional Water Quality Control Board ("RWQCB") is required to

establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge. On April 2, 2019, the SWRCB adopted its own definition of a "wetlands" and therefore a "waters of the State" for purposes of implementing state law, complementing the federal definition of "waters" used for purposes of implementing federal law. The definition provides that all of the following are true of a wetlands:
"(1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation."[551]

SB X7-6, Groundwater

Passed into law in November, 2009, SB X7-6, Groundwater (Section 12924 of the Water Code) required statewide collection and publication of groundwater elevations for the first time in California's history. SB X7-6 directs local agencies, with the assistance of DWR, to monitor and report the elevation of their groundwater basins to help manage the resource better during both average water years and drought conditions. As of December 2, 2013, DWR received monitoring notifications for more than 395 basins and sub-basins. DWR has designated 124 monitoring entities who are now monitoring and reporting groundwater elevations for 152 basins and sub-basins.

California Water Action Plan

The California Water Action Plan - released by Governor Brown in January 2014 - is a roadmap for the first five years, 2014 to 2019, of the state's journey toward sustainable water management. The California Water Action Plan has been developed to meet three broad objectives: more reliable water supplies, the restoration of important species and habitat, and a more resilient, sustainably managed water resources system (water supply, water quality, flood protection, and environment) that can better withstand inevitable and unforeseen pressures in the coming decades.

The California Water Plan, last adopted in 2013 with a draft update in 2018, provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future. The plan, updated every five years, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The California Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the plan help identify effective

[551] Source: California Water Resources Control Board: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, page 1. Available at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/wrapp/df_procedures_clean.pdf

actions and policies for meeting California's resource management objectives in the near term and for several decades to come.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, the act requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000. The act also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties are required to maintain the 50 percent diversion specified by AB 939 by the year 2000.

AB 939 further requires each city or county to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element ("SRRE") to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of the act, including the above-noted diversion goals, and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristic of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the County Integrated Waste Management Board to update it on their progress toward the AB 939 goals.

California Solid Waste Reuse and Recycling Act

The California Solid Waste Reuse and Recycling Act of 1991 (AB 2176) was enacted to assist local jurisdictions with accomplishing the goals of AB 939. In accordance with AB 2176, any development project that has applied for a building permit must include adequate, accessible areas for the collection and loading of recyclable materials. In addition, the areas to be utilized must be adequate in capacity, number, and distribution to serve the proposed project. Moreover, the collection areas are to be located as close to existing exterior refuse collection areas as possible.

California Senate Bill 610 and 221

California SB 610 and SB 221 became effective January 1, 2002, amending Sections 10910–10915 of the State Water Code, and requiring that counties and cities consider the availability of adequate water supplies for certain new large development projects. These statutes require that cities and counties obtain from the local water supplier written verification of sufficient water supply to serve proposed large development projects in their jurisdiction. Pursuant to SB 610, industrial, manufacturing, or processing plant or industrial park projects are required to complete a Water Supply Assessments if one
of three thresholds is exceeded:

- More than 40 acres of land
- More than 650,000 square feet of floor area
- Employing more than 1,000 persons

Local Regulation

Los Angeles County Sanitation Districts

Capital improvements to Los Angeles County Sanitation Districts ("LACSD") water reclamation plants are funded from connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to the LACSD sewerage system or by existing users that significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program ensures that all users pay their fair share for any necessary expansion of the system. Estimated wastewater generation factors used in determining connection fees in the LACSD's 22-member Districts are set forth in the Connection Fee Ordinance for each respective District.

Urban Water Management Plans

Under California Water Code Division 6, Part 2.6, Section 10610-10656, the Urban Water Management Planning Act requires urban water suppliers that supply more than 3,000 acre-feet of water annually, or serve more than 3,000 connections, to submit an Urban Water Management Plan ("UWMP"). The UWMP is a public document prepared by water suppliers to support their long-term resource planning over a 20-year period and ensure adequate water supplies are available to meet existing and future water demands. The UWMP must be submitted to the DWR every five years, and must demonstrate progress toward reduction in 20 percent per capita urban water consumption by the year
2020, as required in the Water Conservation Bill of 2009, Senate Bill X7-7. The preparation of the plan includes guidebook, workshops, and programming for comprehensive strategies to conserve water. The water purveyor for the project, Lincoln Avenue Water Company, updated its UWMP in 2015.[552]

Water Quality Control Plan for the Los Angeles Region

Water Quality Control Plans or Basin Plans give direction on the beneficial uses of the state waters, describe the water quality that must be maintained to support such uses, and provide programs, projects, and other actions necessary to achieve the standards established in the Basin Plans. The Water Quality Control Plan for Los Angeles is described in further detail in Section 5.9.2.

5.17.3 Existing Conditions

As attributed in Section 3.3.8, all utility mains required to serve the project would be available on or adjacent to the project parcel and have been sized in anticipation of a single-family residence on this residentially zoned parcel.

[552] Source: Lincoln Avenue Water Company: 2015 Urban Water Management Plan. Available at: http://lawc.org/wp-content/uploads/2016/07/2015-Urban-Water-Management-Plan.pdf.

Wastewater Treatment

Within the County of Los Angeles, wastewater treatment is administered by the Los Angeles County Sanitation Districts ("LACSD"), a public agency created under state law to manage wastewater and solid waste on a regional scale, comprised of 24 independent special districts. The project is located in special district #17.[553]

The Sanitation Districts operate 10 water reclamation plants ("WRPs") and one ocean discharge facility (Joint Water Pollution Control Plant), which treat approximately 510 million gallons per day ("mgd"), 165 mgd of which are available for reuse. The capacities at these facilities range from 0.2 mgd (La Cañada WRP) to 400 mgd (Joint Water Pollution Control Plant). The project is served by the San Jose Creek WRP.[554] The plant has a design capacity for primary, secondary and tertiary treatment for 150 million gallons of wastewater per day and currently treats approximately 100 million gallons per day.[555] The plant serves a population of approximately 150,000 people. All of the reclaimed water is reused at the plant, at the Upper San Gabriel Valley Municipal Water District, and as groundwater recharge into the Rio Hondo and San Gabriel Coastal Spreading Grounds. Solid by-products of the treatment process are discharged to the Joint Water Pollution Control Plant in the City of Carson.

Wastewater from the project parcel is routed through the LACSD public sewer system to a trunk line under Lincoln Avenue. According to the Department of Public Works, all down-grade segments of this sewer system are operating sufficiently.

Solid Waste Disposal

Within the County of Los Angeles, solid waste management, including collection and disposal services and landfill operation, is administered by various public agencies and private companies. Refuse from single-family residential uses in the area is collected by a private contractor, Athens Services, which provides separate containers for trash, recycling and yard waste refuse. The area of Altadena lies within the public Scholl Canyon Landfill wasteshed.[556] The Scholl Canyon Landfill permits 3,400 tons per day of throughput, accommodates construction/demolition, industrial, inert, manure, mixed municipal and tire waste. The expected closure date for the landfill is 2024. However, the County has provisioned for long-term disposal capacity to replace local landfills as they reach capacity and close with transport to other regional landfills using the "Waste-by-Rail" system.[557]

[553] Source: County Sanitation Districts. Available at: https://www.app.lacsd.org/facilities/?tab=2&number=5.
[554] Source: County Sanitation Districts. Available at: https://www.app.lacsd.org/facilities/?tab=2&number=5.
[555] Source: County Sanitation Districts. Available at: https://www.waterandwastewater.com/san-jose-creek-water-reclamation-plant/.
[556] Source: County Sanitation Districts. Available at: https://www.lacsd.org/home/showpublisheddocument/962/637647356847530000.
[557] Source: County Department of Regional Planning: 2035 County General Plan, page 226. Available at: https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.

5.17.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.17-1**: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects

- **Threshold 5.17-2**: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years

- **Threshold 5.17-3**: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

- **Threshold 5.17-4**: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals

- **Threshold 5.17-5**: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste

Los Angeles County CEQA Environmental Reporting Procedures and Guidelines, Appendix D

Significant adverse impacts result from a project, as identified in the County's CEQA Guidelines Appendix D, if the project would:

- **Threshold 5.17-6**: Breach federal, state, and local statutes and regulations relating to solid waste or litter control

- **Threshold 5.17-7**: Extend a sewer trunk line with capacity to serve new development
  - For purposes of analysis in this EIR, a sewer trunk line is as identified by the County Department of Public Works in their sewer network map.[558]

5.17.5 Impact Analysis

Methodology

[558] Source: County Department of Public Works: LA County Sanitary Sewer Network – Consolidated Sewer Maintenance District Map Interface. Available at: http://dpw.lacounty.gov/smd/sewernetwork/; https://pw.lacounty.gov/smd/smd/maps/1906m.pdf.

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to utilities and service systems first identifies all existing utilities and service systems required to implement the project, as well as mediation of the pre-existing regulatory framework. The analysis then attributes the marginal impact of the project during construction and operation. Generally, utilities and service systems have been sized in anticipation of a single-family home on this residentially zoned lot. The basis for this compliance is attributed.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

SC-USS-1: The project shall comply with the County Construction and Demolition Recycling and Reuse Program requirements to minimize the amount of construction refuse generated and corresponding impacts to landfill resources.

Impact Discussion

- **Threshold 5.17-1**: Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects
- **Threshold 5.17-3**: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

The project would be expected to result in no adverse impacts from the construction or relocation of water, wastewater, stormwater, or appurtenant facilities.

General Analysis

The 2035 County General Plan EIR forecast that in all planning areas, "[t]here is adequate water treatment capacity in the region for the net increase in water [treatment] demands from [complete buildout], and impacts would be less than significant."[559]

The 2035 County General Plan EIR analyzed that "[p]resently and for the foreseeable future, the national and regional supply of electrical energy is not in jeopardy. The acceleration of the approval and licensing process of additional state power plants will ensure an adequate supply of electricity for state consumers. Past shortages of electricity were solved by the additional power plants being brought "online" in California. The matter of electrical generation capacity is not one of physical shortages due to power plant limitations; rather, it is a function of market forces and the wholesale cost of electricity."[560]

[559] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[560] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-64. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Additional Project-specific Analysis

The project would not require the construction or relocation of any new water, wastewater or electricity facilities and would not be served by new stormwater drainage, natural gas or telecommunications infrastructure.

The project is served by an existing water meter on the project site, supplied by the water purveyor for the area, Lincoln Avenue Water Company.

The vicinity of the project is not served by any existing stormwater drains. Stormwater in the vicinity is conducted principally by sheet runoff and collected in open drainage swales. An 18" diameter culvert collects this runoff from an area above the project parcel for passage under Canyon Crest Road, to an open drainage channel that spans the southeast corner of the project parcel. Existing flow through this culvert and drainage swale would be unaltered by the project. The stormwater collected in the project's downspouts would be routed through rain gardens that filter deposited pollution collected on the project's roof, back into the open drainage swale. The impervious area of the proposed project is a small fraction of the more than one-acre drainage area serviced by this swale, and this added flow would not be expected to provide a significant source of additional runoff or create polluted runoff.

The project would not be expected to produce industrial wastewater or require the construction or relocation of any additional wastewater facilities. Only domestic wastewater would be expected, which would be treated by the existing San Jose Creek WTP. Pursuant to the County's National Pollutant Discharge Elimination System ("NPDES") permit for the San Jose Creek WTP (NPDES Permit No. CAG994003), wastewater from the project would be treated to a tertiary level according to all applicable state and federal standards. The WTP has a capacity of 150 million gallons per day. It currently treats approximately 100 million gallons average per day. The proposed project is a single-family residence. As the average person in the County of Los Angeles generates less than 100 gallons of wastewater per day, and the users of the project would reasonably be expected to use this amount of water, the WTP has the capacity to treat all of the wastewater generated by the project, without requiring the construction or relocation of new facilities.

- **Threshold 5.17-2**: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years

The project would be expected to result in no adverse impacts from new or expanded water supply requirements, and less than significant impacts to any existing water supply.

General Analysis

The 2035 County General Plan EIR forecast that in the West San Gabriel Valley Planning Area, "[t]here is adequate forecasted residual water supply at buildout to serve [complete buildout],

and impacts on water supplies would be less than significant,"[561] weighing residual supply capacity of 176mgd against projected added demand of 4.69mgd in nine planning areas that include the West San Gabriel Valley Planning Area.

Project-specific Analysis

In *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, the California Supreme Court established four principles that govern an EIR's analysis of water supply impacts. First, "[d]ecision makers must, under the law, be presented with sufficient facts to 'evaluate the pros and cons of supplying the amount of water that the [project] will need.' [Citation.]" *Id*. at p. 431.

Second, an EIR "evaluating a planned land use project must assume that all phases of the project will eventually be built and will need water, and must analyze, to the extent reasonably possible, the impacts of providing water to the entire proposed project. [Citation.]" *Id*. at p. 431.

"Third, the future water supplies identified and analyzed must bear a likelihood of actually proving available; speculative sources and unrealistic allocations ('paper water') are insufficient bases for decision-making under CEQA. [Citation.] An EIR for a land use project must address the impacts of likely future water sources, and the EIR's discussion must include a reasoned analysis of the circumstances affecting the likelihood of the water's availability." *Id*. at p. 432.

Fourth, "where, despite a full discussion, it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some discussion of possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of those contingencies. [Citation.]" *Id*. at p. 432.

The project would not incorporate any regularly irrigated landscaping such as a lawn and would be required to make use of efficient fixtures. The project would therefore be expected to consume less than the recent statewide residential average of approximately 75 GPCD during operation. During construction, a figure even lower still would be expected, as no significant consumption of water has been identified among the construction activities required to implement the project. This amount is sufficiently insubstantial that there are not expected to be any noteworthy pros or cons in providing this amount. The project would not entail any future phases beyond the construction and operation of the single residence analyzed herein, and no expanded entitlements are required. A 1-inch water service connected to a 6-inch water main already exists on the project parcel. According to the UWMP for Lincoln Avenue Water Company ("LAWC"),[562] "LAWC can expect to meet future demands through 2040 for all climatologic classifications" using a combination of local aquifer and imported water from the Metropolitan Water District, as well as capital improvements, incentives and requirements on end users to reduce demand in times of drought. Indefinite projections are not supplied by any water purveyor. Future demands are projected to include population growth consistent with

[561] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[562] Source: Lincoln Avenue Water Company: Urban Water Management Plan. Available at: http://lawc.org/wp-content/uploads/2016/07/2015-Urban-Water-Management-Plan.pdf.

development of the small number of remaining vacant lots in the service area, assuming use of 125 gallons per capita per day ("gpcd"). Because the project would be expected to use less than 125 gpcd, the project's water requirement needs have been anticipated and can be met by LAWC.

Because the project is served by an existing water meter, the project would be expected to feasibly implement any program of supplemental irrigation before or during construction, pursuant to SC-BIO-1. The amounts of water used during construction would be expected to be both insubstantial and smaller in quantity than used during the operation of the project and therefore fall within the demand projections for LAWC.

- **Threshold 5.17-4**: Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals
- **Threshold 5.17-5**: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste
- **Threshold 5.17-6**: Breach published national, state or local standards relating to solid waste or litter control

The project would be expected to result in no adverse impacts under these thresholds from inadequate capacity or procedures for solid waste disposal, and less than significant impacts from the generation of solid waste.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[563]

In complying with all applicable aspects of the regulatory framework that were analyzed to mediate the interaction of single-family residences with solid waste disposal, the proposed project is consistent with and was sufficiently analyzed by the 2035 County General Plan EIR.

Additional Project-specific Analysis

The non-recycled solid waste generated by the project would be disposed of in the Scholl Canyon Landfill. This landfill has a current anticipated lifetime of six more years. The County of Los Angeles is looking at several possible options for meeting Altadena's waste needs after this closure, including the use of other existing landfills in the County, or new facilities. The County's Integrated Waste Management Plan ("IWMP") has identified landfills to meet capacity for the next fifteen years.[564] The "Waste-by-Rail" system would be expected to provide long-

[563] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-60. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[564] Source: County Department of Public Works, Countywide Integrated Waste Management Plan 2018 Annual Report. Available at: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=6530&hp=yes&type=PDF.

term disposal capacity to replace local landfills as they reach capacity and close.[565] All solid waste generated by the project would be expected to be disposed in accordance with these plans and with all applicable statutes and regulations, and construction waste would be expected to be recycled in accordance with SC-USS-1.

- **Threshold 5.17-7**: Extend a sewer trunk line with capacity to serve new development

The project would be expected to result in no adverse impacts from extension of a sewer trunk line.

Project-specific Analysis

The proposed project does not require extension of a sewer trunk line. The nearest sewer trunk line is at the corner of Palm Street and Lincoln Avenue, more than 0.3 miles to the southeast of the project parcel.[566]

Moreover, the project would not be expected to significantly impact the replacement schedule for sewer mains or trunk lines. The sewer mains serving the project parcel were sized in anticipation of complete buildout in accordance with zoning. The sewer mains serving the project parcel downstream to the LACSD District 17 trunk line connection at Lincoln and Royce Avenues in Altadena are of vitrified clay pipe ranging in diameter between 8" and 12". They were built under C.I. (County Improvement) 1462M commencing in 1953 and C.I. 1978M commencing in 1958. Sewer systems throughout the County are aging and require upgrades. The County does not plan for sewer infrastructure needs through long-range capital improvement planning, and instead addresses sewer infrastructure through ongoing closed-circuit video inspections in their Condition Assessment Program[567] funded by Accumulative Capital Outlay Program Funds.[568] This program provisions for the inspection of every foot of sewer main on a 10-year cycle.[569] While the vitrified clay pipe sewer main serving the wastewater needs of the project parcel would be expected to have a long lifetime of 100 or more years, the need for eventual replacement of utility mains was anticipated and will be provided by the County.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

[565] Source: County Department of Regional Planning: 2035 County General Plan, page 226. Available at: https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.
[566] Source: County Department of Public Works: LA County Sanitary Sewer Network – Consolidated Sewer Maintenance District Map Interface. Available at: http://dpw.lacounty.gov/smd/sewernetwork/; https://pw.lacounty.gov/smd/smd/maps/1906m.pdf.
[567] Source: County Department of Public Works: Los Angeles County Consolidated Sewer Maintenance District Condition Assessment Program. Available at: http://dpw.lacounty.gov/smd/SMD/CondAssessProgram.pdf.
[568] Source: County Department of Regional Planning: 2035 County General Plan, page 221. Available at: https://planning.lacounty.gov/wp-content/uploads/2023/03/gp_final-general-plan.pdf.
[569] Source: County Department of Public Works: Condition Assessment Program Details. Available at: https://dpw.lacounty.gov/SMD/cap/Page_01.cfm.

Water demand and wastewater generation would not increase significantly as a result of the development of one home on the site. The proposed project is consistent with the zoning and land use designations, which form the basis for the existing infrastructure capacity. The project would result in additional impervious surface areas but would not possess any impervious surface areas outside the footprint of the home. The proposed project is designed to comply with Low Impact Development standards that route stormwater runoff through rain gardens into the existing drainage swale that presently collects sheet runoff in the footprint of the home, thus leaving the drainage pattern on the project parcel substantially unaltered. Although project implementation could result in the generation of some refuse during the construction phase, the quantities would be expected to be insubstantial and must be recycled pursuant to the County's Construction and Demolition Recycling and Reuse Plan requirements. In addition, the project would not result in a significant increase in solid waste production from one single-family residence. Existing landfills would be expected to have adequate capacity to service the site and use in accordance with County plans provisioned by land use designation.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to utilities and service systems would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan analyzed that "wastewater from cumulative projects could be treated at existing wastewater treatment plants, and no significant cumulative impact to wastewater treatment capacity would occur."[570] "cumulative net change in water demands in [2035 County General Plan] buildout conditions, and water demands due to post-2035 [2035 County General Plan] buildout, would not result in significant impacts to water supplies when compared with countywide residual water supply, shown in Table 5.17-19."[571] "[C]umulative solid waste generation in 2035 is estimated at about 6.3 million pounds per day, or 3,100 tons per day, which is well within the residual capacity of landfills serving Los Angeles County. No

[570] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-16. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[571] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-47. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

significant cumulative impact would occur."[572] "Estimated cumulative electricity demands in 2035 Proposed Project buildout conditions would be about 15.1 billion kWh per year, that is, 15,100 GWH per year, within SCE's demand forecast for its service area. Thus, cumulative impacts on electricity supplies would be less than significant."[573] The proposed project would be consistent with these resource usage projections.

Past projects have contributed to a functional existing utility and service systems network for the existing residential neighborhood.

[572] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-59. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[573] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.17-65. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5.18 Wildfire

5.18.1 Introduction

This section of the EIR evaluates the project's potential impacts to wildfire. This includes assessment of the pre-existing threat vectors, incidents, fuel sources, and fire-fighting infrastructure in the vicinity of the project; risk vectors associated with the project, and effect of regulatory requirements including fuel modification and fire-resistant and -suppressive building methods and capabilities.

5.18.2 Regulatory Framework

Federal, state and local laws, plans, guidelines or other framework that are potentially applicable to the project are summarized below.

Federal Regulation

National Cohesive Wildland Fire Management Strategy

The National Cohesive Wildland Fire Management Strategy[574] is a cooperative effort of the United States Department of the Interior, United States Department of Agriculture, and their land management agencies and partners to establish a national vision and unified strategy for wildland fire management. It defines four broad challengs: 1.) Managing vegetation and fuels; 2.) Protecting homes, communities and other values at risk; 3.) Managing human-caused ignitions; and 4.) Effectively and efficiently responding to wildfire.

Elements of this centralized approach adopted in the Angeles National Forest are the management of fuels and periodic prescribed burns to ensure compatibility with densities across historic fire return intervals; strategic deployment of fuel treatments and fire breaks; and continuing characterization, analysis and refinement of land management practices and techniques as wildfires are encountered.

State Regulation

California Strategic Fire Plan

The 2018 California Strategic Fire Plan[575] is the statewide plan for reducing the risk of wildfire. The plan's basic principles are to: involve the community in the fire management planning process; assess public and private resources that could be damaged by wildfires; develop pre-fire management solutions and implement cooperative programs to reduce the community's potential

[574] Source: United States Forests and Rangelands: The National Strategy: The Final Phase in the Development of the National Cohesive Wildland Fire Management Strategy. Available at: https://www.forestsandrangelands.gov/strategy/thestrategy.shtml#alignment.
[575] Source: California Department of Forestry and Fire Protection: 2018 Strategic Fire Plan for California. Available at: https://osfm.fire.ca.gov/media/5590/2018-strategic-fire-plan-approved-08_22_18.pdf.

wildfire losses. One of the more important objectives of the California Fire Plan pertains to pre-fire management solutions. Included within the realm of pre-fire management solutions are fuel breaks, the establishment of wildfire protection zones, and prescribed fires to reduce the availability of fire fuels. In addition, the plan recommends that clearance laws, zoning, and related fire safety requirements be implemented by state and local authorities to address fire-resistant construction standards, hazard reduction near structures, and infrastructure. The California Fire Plan does not contain any specific requirements or regulations. It assesses current fire management practices and standards and recommends how best to improve the practices and standards in place.

California Building Code

The California Building Standards Code (CBC), in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC is based on the International Building Code but has been amended for California conditions. The CBC is updated every threeyears, and the current 2022 CBC went into effect January 1, 2023. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of fire sprinklers in all new residential, high-rise, and hazardous materials buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code (CFC), contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2022 CFC went into effect January 1, 2023. It is effective statewide but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. The California Fire Code regulates building standards in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

Very High Fire Hazard Severity Zone

Government Code 51175 to 51189 directs CAL FIRE to identify areas of very high fire hazard within local responsibility areas. Mapping of Very High Fire Hazard Severity Zones (VHFHSZ) is based on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior and expected burn probabilities in order to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data. In late 2005, effective in 2008, the California Building Commission adopted CBC Chapter 7A, requiring new buildings

in VHFHSZ to use ignition-resistant construction methods and materials. CBC Chapter 7A is applicable to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings in a Wildland-Urban Interface Fire Area as defined in CBC Section 702A. Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building in any fire hazard severity zone within State Responsibility Areas or any wildland-urban interface fire area to resist the intrusion of flames or burning embers projected by a vegetation fire, and therefore contributes to a systematic reduction in conflagration losses. VHFHSZs are delineated and used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and a 100-foot defensible space clearance.

Following the Eaton Fire in Altadena, VHFHSZ maps were updated to extend farther throughout much of northerm Altadena.

California Public Utilities Commission General Order 95: Rules for Overhead Electric Line Construction

General Order 95 governs the design, construction, operation, and maintenance of overhead electric lines in California. General Order 95 includes safety standards for overhead electric lines, including minimum distances for conductor spacing; minimum ground clearance for conductors; standards for calculating maximum sag; and requirements for electrical line inspection and vegetation clearance.

On January 19, 2018, the California Public Utilities Commission (CPUC) adopted the CPUC Fire-Threat Map. The map delineates the boundaries of a new High Fire-Threat District Map where stricter fire-safety regulations apply.

California Public Resources Code Section 4293

PRC Section 4293 requires any electrical utility to maintain clearance, to any vegetation or other non-utility conductor, from any utility conductor, of four feet when operating between 2,400 and 72,000 volts, six feet when operating between 72kV and 110kV, and ten feet when operating at more than 110kV.

California Public Resources Code Section 4427

PRC Section 4427 limits the use of any motor, engine, boiler, stationary equipment, welding equipment, cutting torch, tarpot, or grinding device from which a spark, fire, or flame may originate, when the equipment is located on or near land covered by forest, brush, or grass. Before such equipment may be used, all flammable material, including snags, must be cleared away from the area around such operation for 10 feet. A serviceable round-point shovel with an overall length of not less than 46 inches and a backpack pump water-type fire extinguisher, fully equipped and ready for use, must be maintained in the immediate area during the operation.

California Public Resources Code Section 4431

PRC Section 4431 requires users of gasoline-fueled internal combustion–powered equipment operating within 25 feet of flammable material on or near land covered by forest, brush, or grass to have a tool for firefighting purposes at the immediate location of use. This requirement is limited to periods when burn permits are necessary. Under Section 4431, the Director of Forestry and Fire Protection specifies the type and size of fire extinguisher necessary to provide at least a minimum assurance of controlling fire caused by use of portable power tools during various climatic and fuel conditions.

California Public Resources Code Section 4442

PRC Section 4442 prohibits the use of internal combustion engines running on hydrocarbon fuels on any land covered by forest, brush, or grass unless the engine is equipped with a spark arrestor and is constructed, equipped, and maintained in good working order when traveling on any such land.

Zone 0

In 2020, the California Legislature passed AB 3074[576] requiring property owners to establish and maintain an ember-resistant zone within 5 feet of structures in high fire hazard areas. This "Zone 0" requirement mandates the removal of all combustible materials—including dead vegetation, woodpiles, mulch, and outdoor furniture—from the immediate perimeter of buildings. The zone must contain only hardscaped surfaces such as concrete, gravel, or bare mineral soil, along with limited fire-resistant vegetation.

Although originally scheduled to take effect January 1, 2023, implementation has been delayed as the Board of Forestry and Fire Protection continues developing the detailed regulations. In February 2025, Governor Newsom issued Executive Order N-18-25 directing the Board to accelerate adoption of the Zone 0 regulations, which will apply to structures located in the state's highest fire severity zones. Once adopted, property owners will have three years to achieve compliance. This new defensible space zone supplements existing requirements for 30-foot and 100-foot defensible space zones, creating a comprehensive three-zone approach to structure protection from wildfire hazards.

Local Regulation

Los Angeles County Fire Department Strategic Plan 2017-2021

The Los Angeles County Fire Department (“Department”) Strategic Plan serves as a roadmap for identifying goals and priorities related to Department preparedness, and effectively deploying resources to achieve them. Specific actions serve three broad goals: improving 1.) the Department’s own emergency operations strategies; 2.) resiliency of Department infrastructure

[576] Source: California Legislative Information. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB3074.

during emergencies; and 3.) the long-term effectiveness of the Department's infrastructure and personnel.

5.18.3 Existing Conditions

Threat Classifications

The project parcel is located in a Very High Fire Hazard Severity Zone ("VHFHSZ"), along with all of the northern parts of Altadena and Pasadena.[577]

The project site is designated as a High Fire-Threat area by the CPUC.[578] As such, the following conditions apply to electrical lines in the vicinity:

- Rule 31.2, Inspection of Lines, requires frequent and thorough inspection of lines to ensure that they are in good condition. Lines that are temporarily out of service must be inspected and maintained in such a condition as not to create a hazard.
- Rule 35, Tree Trimming, defines minimum vegetation clearances around power lines. Rule 35 guidelines require 10-foot radial clearances for any conductor of a line operating at 110,000 volts or more, but less than 300,000 volts.

Fuel

The coast live oak and California sagebrush communities and most of the other plant species present on the site (see Section 5.4.3), including all that are not approved to exist in Fuel Modification Zone ("FMZ") A, would ignite and sustain flame and therefore contribute to fueling a wildfire. However, the FMZ of existing residences overlap with the entire portion of the project parcel excepting a small portion of the canyon bottom, including the entirety of the developmental footprint. (*See* Figure 3-6: Proposed Project Site Plan). Perennial native species that exist on the project site or would be introduced as part of the project's Fuel Modification Plan exist on a spectrum of combustibility and are known for being more fire-resistant. No species forbidden from intentional establishment by the County Forestry Division Fire Department are present in the biological site survey, and vegetation on the project parcel is less dense than on surrounding parcels spanning Millard Canyon. Native and non-native annual grasses present on the site are light fuels that, along with steep slopes, can contribute to rapid wildfire spread. However, local brush clearance requirements include the trimming of these grasses prior to fire season, to a height of at most 6" and preferably as near as possible to grade, in order to limit a "fire ladder" geometry.

Utility Infrastructure

[577] Source: County Department of Regional Planning: 2035 County General Plan, Figure 12.5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.
[578] Source: California Public Utilities Commission: FireMap. Available at: https://ia.cpuc.ca.gov/firemap/.

No high-voltage transmission lines exist in the immediate vicinity of the project site, but high-voltage transmission lines exist within one mile, including: 66kV Southern California Edison, tower-mounted lines running roughly E-W in the foothills above Altadena, approximately 5,000ft. to the north of the project site; a 66kV drop to a Jet Propulsion Laboratory facility in El Prieto canyon approximately 3,500ft. northwest of the project site; and a 66kV drop to the Jet Propulsion Laboratory approximately 3,500ft. southeast of the project site, which includes a distribution station.[579]

Standard 220V mains electricity lines serving the residential neighborhood exist on wooden power poles along the western edge of Canyon Crest Road, along the project frontage, at a height of approximately 20 feet above grade. 4.16kV primary distribution lines serving step-down transformers in the Meadows neighborhod to the northeast and a Lincoln Avenue Water Company facility above it[580] are mounted in a second course at the top of these poles, at a height of approximately 50 feet above grade. These distribution lines cross existing residential lots spanning Millard Canyon approximately 500 feet to the north of the project site. Trees in the vicinity of the 4.16kV lines are trimmed to maintain appropriate clearance, in accordance with National Electric Safety Council Rule 218, the California Power Line Fire Prevention Field Guide, and California Public Resources Code Section 4293, which prescribes a minimum of four feet of pruned clearance for a 4.16kV line.[581]

Tens of miles of additional 4.16kV and 16kV primary distribution lines extend throughout the developed areas within one mile to the east, south and west of the project site.

Wildfire Incidents

The Eaton Fire burned 14,021 acres in the San Gabriel Mountains and its foothills in 2025, including much of Altadena, destroying thousands of structures.[582] The fire approached within approximately 500 feet of the proposed project site and burned homes on Canyon Crest Road and surrounding neighborhoods. The Bobcat Fire burned 115,796 acres in the San Gabriel Mountains northeast of Altadena[583], in 2020. It was contained more than five miles northeast of the project parcel. The Station Fire, the largest wildfire in the history of the County, burned more than 160,000 acres in the San Gabriel Mountains north of Altadena in 2009. Believed to have been initiated by arson from a location adjacent to the CA-2 highway above the community of La Cañada Flintridge, it was contained north of the project parcel nearly one mile distant.

Other, smaller fires of less than one acre in size have occurred periodically in the urban-wildland interface in and around the community of Altadena. No wildfire is known to have burned throughout Millard Canyon since the 1935 La Vina Fire,[584] which destroyed some residences in

[579] Source: California Energy Commission: California Energy Infrastructure Map. Available at: https://arcg.is/1iG9Ge.
[580] Source: Southern California Edison. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=05a84ec9d19f43ac93b451939c330888.
[581] Source: California Department of Forestry and Fire Prevention: Power Line Fire Prevention Field Guide, 2008 Edition. Available at: https://osfm.fire.ca.gov/media/8482/fppguidepdf126.pdf.
[582] Source: Los Angeles County. Available at: https://recovery.lacounty.gov/eaton-fire/.
[583] Source: National Wildfire Coordinating Group. Available at: https://inciweb.nwcg.gov/incident/7152/.
[584] See: http://altadenahistoricalsociety.blogspot.com/2015/06/altadenas-1935-la-vina-fire.html.

the lower Millard Canyon neighborhood. Some residences on the eastern periphery of Millard Canyon burned during the Eaton Fire.

Causes for fires in and around the Altadena urban-wildland interface have not consistently been publicly attributed, but suspected causes have included irresponsible flame spread by humans, potentially associated with homeless activities; unauthorized discharge of fireworks; arcing or sparking electrical distribution lines or componentry; arson; and lightning strike. Recent fires include: the 14,021-acre 2025 Eaton Fire[585] east of the proposed project site; the 10-acre Lowe Fire in 2019 northwest of the proposed project site; a small un-named fire in Millard Canyon in 2018 southwest of the project site; a half acre suspected arson near Coyote Canyon northeast of the project site in 2017[586]; the 50-acre Mt. Wilson fire northeast of the project site[587]; and several fires in Eaton Canyon to the east of the project site, including a major fire in 1993 that burned dozens of homes, with initiation attributed to homeless activity.[588]

Wildfire Response Infrastructure

Federal

The United States Forest Service maintains seasonal and permanent wildland firefighters to combat forest fires that occur in the Angeles National Forest. The Southern California Geographic Coordination Center is the focal point for coordinating the mobilization of federal, state and local resources for wildland fire and other incidents throughout Southern California and maintains documentation[589] on federal procedures and capabilities, as well as information on federal, state and local wildfire plans, research, and intelligence.

State

The California Department of Forestry and Fire Protection ("Cal Fire") maintains air and ground infrastructure to respond to wildland fires. 21 units throughout the state maintain primary responsibility for wildland firefighting, where local jurisdictions do not provide coverage. In the County of Los Angeles, the Los Angeles County Fire Department maintains primary responsibility over private lands not located in federal jurisdiction. However, Cal Fire resources, including the nearby Riverside and San Bernardino units, can provide additional resources as part of a coordinated response during severe events.

Local

[585] Source: California Department of Forestry and Fire Prevention. Available at: https://www.fire.ca.gov/incidents/2025/1/7/eaton-fire.
[586] Source: Pasadena Star News. Available at: https://www.pasadenastarnews.com/2017/10/29/two-detained-in-connection-with-brush-fire-north-of-pasadena-altadena/.
[587] Source: Pasadena Independent. Available at: https://www.pasadenaindependent.com/community/looking-back-mt-wilson-fire/.
[588] Source: New York Times. Available at: https://www.nytimes.com/1993/10/29/us/california-fires-fighting-fire-future-making-stand-where-homes-can-be-saved.html.
[589] Source: National Interagency Fire Center: Sourthern California Geogrpahic Area Coordination Center. Available at: https://gacc.nifc.gov/oscc/index.php.

The Los Angeles County Fire Department ("LACFD") Air and Wildland Division ("Division") maintains air and ground infrastructure to respond to wildland fires. In its statistical summary for 2019,[590] the Division is documented as having responded to 369 incidents. As of 2019, the Division maintains 8 helicopters, 9 fire suppression camps, 28 fire suppression crews, and other heavy equipment for aerial water/foam drop and the creation of fire breaks. Fire Camp #2 is located in the Arroyo Seco less than a mile southeast of the proposed project.

5.18.4 Significance Criteria

State CEQA Guidelines Appendix G

Significant adverse impacts result from a project, as identified in Appendix G of the State CEQA Guidelines, if the project would:

- **Threshold 5.18-1**: Substantially impair an adopted emergency response plan or emergency evacuation plan
  - For purposes of analysis in this EIR, the adopted emergency response plan in the County is the Los Angeles County Operational Area Emergency Response Plan.[591]

- **Threshold 5.18-2**: Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrates from a wildfire or the uncontrolled spread of wildfire

- **Threshold 5.18-3**: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment

5.18.5 Impact Analysis

Methodology

As attributed in Section 2.2.7, each of the significance criteria identified is evaluated in turn, or together where closely related and/or overlapping analysis applies. The assessment of significance as it relates to wildfire considers the vectors for flame initiation and spread associated with the project and any associated infrastructure relative to existing risk vectors, as well as resilience of the project where a significant number of persons are serviced by the project. Generally, single-family homes are adequately governed by regulations limiting flame

[590] Source: County Fire Department: 2019 Statistical Summary. Available at: https://fire.lacounty.gov/wp-content/uploads/2020/06/2019-Statistical-Summary-May-2020.pdf.
[591] Source: Source: County Office of Emergency Management: Los Angeles County Operational Area Emergency Response Plan. Available at: https://ceo.lacounty.gov/wp-content/uploads/2023/11/County-of-Los-Angeles-OAEOP-2023-Final-for-Website.pdf.

initiation and spread and resiliency of the building envelope. The basis for this compliance is attributed.

Standard Conditions, Regulatory Compliance Measures and Project Design Features

RCM-H-1: Pursuant to County Code Title 32 Section 4908.1, the project shall implement landscaping to create and maintain a defensible space for effective fire safety through fuel modification consistent with the requirements of County Code Title 32, Sections 325.2.1, 325.2.2, 325.10, and 503.2, the County Fire Department's fuel modification guidelines, and California Code of Regulations, Title 14, Division 1.5, Chapter 7, subchapter 2.

Impact Discussion

- **Threshold 5.18-1**: Substantially impair an adopted emergency response plan or emergency evacuation plan

As attributed in analysis for Thresholds 5.8-6 and 5.8-9, the project would be expected to result in no adverse impacts under these thresholds from interference with an emergency response plan or emergency evacuation plan, and less than significant impacts in the event of any emergency in the area.

General Analysis

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[592] The project must comply with all applicable regulations. The project would be consistent with all 2035 County General Plan policies, including those related to emergency plans. (*See* Table 5-11: County General Plan Policy Consistency Analysis).

Additional Project-specific Analysis

The proposed project is not fronted by a roadway that has been designated by the County as a disaster route, though Canyon Crest Road is the sole means of vehicular entrance and exit for hundreds of residences. Pursuant to SC-TRANS-1, vehicular access on Canyon Crest Road would be maintained at all times during construction and operation, and the County is empowered to abate any non-compliant activity violating the standard traffic management process. This would be sufficient to ensure that the project's impacts to emergency access would not be significant. *See Berkeley Hillside Preservation v. City of Berkeley* (2015) 241 Cal.App.4th 943, 957, 961 (roadway access management is a common and typical concern of residential

[592] Source: County Department of Regional Planning: 2035 County General Plan EIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

construction, and adherence to a standard management process would reasonably prevent significant effects). Past construction and the existing conditions in the vicinity of the project parcel gracefully support single lane closures of similar durations, with signage and flagging as governed by the MUTCD. (*See* Figure 5-31: Regular Single Lane Closure Adjacent to Project Site and Figure 5-32: Observed Single-Lane Closures and Construction Vehicles Along Canyon Crest Road).

As attributed in Section 5.16, encroachment in the public right of way during utility connection would be expected to be brief in overall duration, limited to the least impactful hours of the day relative to existing burden on the circulation system, and to constitute the only non-transient disruption in the flow of traffic. PDF-TRANS-1 formalizes the Applicant's intent to limit this impact to times when fire and stormwater-related roadway risks are minimized. SC-TRANS-1 requires that the materials needed to restore two lanes of traffic be kept on hand and capable of being deployed quickly in the event of emergency and that two-lane access be restored whenever work is not in progress, as for the other periodic impediments of one lane that have characterized the roadway. As attributed in Section 5.16, the number of vehicles associated with the construction and operation of one single-family residence would be insubstantial in relation to those associated with existing conditions on Canyon Crest Road or any other roadway and would not therefore contribute to choking evacuation traffic flow with a substantial number of additional vehicles. In the event of a wildfire or any other disaster in the vicinity, construction activities would be expected to halt as emergency vehicles occupy the right of way.

- **Threshold 5.18-2**: Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrates from a wildfire or the uncontrolled spread of wildfire

The project would be expected to result in no adverse impacts from exposure of project occupants to significant risk of loss, injury or death involving wildland fires and a cumulatively inconsiderable increase in wildfire risk.

This threshold is constrained by the California Supreme Court's holding in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, prohibiting so-called "CEQA-in-reverse." It is the project's effect on the environment that is properly within the scope of analysis under CEQA, not the environment's effect on a project. Because the project does not entail a substantial number of new residential units, its future occupants are "particular persons" and not sufficient in number to constitute "persons in general." *See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492 ("Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons."). This analysis is therefore confined to the marginal extent to which the project exacerbates a sensitive existing condition. *Id*. At 377-378. This reduces to whether the project's impacts are cumulatively considerable, and if so, what effect that cumulative considerability could have on the environment.

<u>General Analysis</u>

The 2035 County General Plan EIR found these effects to be less than significant in the context of the existing regulatory setting, stating that, "[2035 County General Plan] policies and conditions of approval for future development projects within the [County], in addition to compliance with applicable regulations, would minimize [2035 County General Plan] impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant." The proposed project is consistent with all 2035 County General Plan policies, including those related to fire hazards. (*See* Table 5-11: County General Plan Policy Consistency Analysis). The project must comply with Section 7A of the California Building Code as well as all development standards for VHFHSZs in the County, including landscape management, fire sprinklers, fire-rated wall and roof assemblies and windows. Proximity to a slope vegetated with fire-wise plantings, as opposed to flashy fuels promoting a ladder effect, would not significantly exacerbate risk. The proposed design entails no vented attic or crawlspace requiring protection against wind-borne embers, which the California Building Code also addresses in its standards.

The contractor would be reasonably expected to adhere to all regulations limiting the potential for flame spread, including prohibiting smoking on-site and adhering to California Public Resources Code Sections 4427, 4431 and 4442. The metal building components used to construct the project, including pre-cut cladding panels and roofing, pre-formed anchors, and pre-cut and -formed lapped or spliced rebar, would be manufactured offsite and would not be expected to result in field cutting or the emission of sparks. Should spark-emitting construction operations become unexpectedly necessary, they are regulated by the Public Resources Code in order to minimize the potential for flamespread. The project would not be expected to involve the use, manufacture, or storage of uncommonly combustible materials, with the exception of the fuel and oil for internal combustion engines maintained in accordance with manufacturer instructions, use of which also characterize the existing condition in the vicinity to a far greater extent.

The fuel modification plan for the project has been designed to comply with preventative vegetation clearance regulations.[593] The dominant understory species on the project parcel, including California sagebrush, sage, California mugwort, laurel, sugar bush, yucca, elberberry and similar native species are approved to exist in the fuel modification zone B at distances between 30 and 50 feet from a structure, when established anew as part of a landscaping plan. Other species on the project parcel, including agave and prickly pear cactus, and some succulent species, are approved to exist at no offset to a structure. Vegetation on the site, including those oak trees that would remain in close proximity to the home and all proposed plantings, would be consistent with, and generally sparser than, the surrounding parcels spanning Millard Canyon and would not pose an elevated wildfire risk.

The project parcel is located within one mile of the primary responder fire station and therefore meets County standards for fire response distance in neighborhoods. The project is located within 100 feet of fire hydrants on two independent water systems (Lincoln Avenue Water Company and the City of Pasadena), and these hydrants have been tested to confirm that

[593] Source: County Fire Department: Plant Selection Guidelines. Available at: https://fire.lacounty.gov/wp-content/uploads/2020/05/Plant-Selection-Guidelines.pdf.

adequate fire flow availability exists. Canyon Crest Road provides adequate fire access for fire suppression efforts.

- **Threshold 5.18-3**: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment

The project would be expected to result in no adverse impacts from the installation or maintenance of associated infrastructure that may exacerbate fire risk and a cumulatively inconsiderable increase in wildfire risk.

This threshold is constrained by the California Supreme Court's holding in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, prohibiting so-called "CEQA-in-reverse." It is the project's effect on the environment that is properly within the scope of analysis under CEQA, not the environment's effect on a project. Because the project does not entail a substantial number of new residential units, its future occupants are "particular persons" and not sufficient in number to constitute "persons in general." *See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492 ("Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons."). This analysis is therefore confined to the marginal extent to which the project exacerbates a sensitive existing condition. *Id*. At 377-378. This reduces to whether the project's impacts are cumulatively considerable, and if so, what effect that cumulative considerability could have on the environment surrounding the project.

Project-specific Analysis

The project would not be expected to require any new fire-related infrastructure or firebreaks with indirect effects. Should a wildfire occur in the vicinity, like that of the Station Fire, Eaton Fire, or other smaller fires that have occurred in the area, timely evacuation of the project site would be expected to prevent the exposure of future residents to pollutant concentrations substantially elevated above those degrading the remainder of the air basin. If the area up-grade of the project was to burn, the up-grade slope is not steep, and existing pavement and the remnants of up-grade development would be expected to limit the mobilization of debris, mud or other dynamic disturbances in a manner that might compromise the safety of future residents. In addition, it is reasonably foreseeable that after such an event, evacuation orders would either remain in effect or precede substantial stormwater events, like those that affected the portions of Malibu located in the County following the Woolsey Fire in 2018.

Mechanisms of wildfire initiation associated with residential development include irresponsible flame spread and failure modes associated with electrical utility infrastructure. These include: (1) arcing due to high-impedance contact between utility line conductors (such as a tree branch) or between a utility line conductor and the surface of the ground (if the line is downed), drawing too little current to trip any power distribution fuse or circuit breaker (2) conductor slap and superheated metal particle ejecta, under rare circumstances outside of nominal design, and (3) sparking associated with catastrophic component failure e.g. blown transformers and short circuits. Pursuant to Paschen's Law, the minimum breakdown voltage of dry air at standard

temperature and pressure ("STP") to create an electric arc is 327V, which will be sustained at a distance up to 7.5micron, for electrodes that are uniform at that scale. Symmetrical sinusoidal AC, like standard mains and AC distribution lines, has a peak value equal to the nominal V(rms) $\times\sqrt{2}$, or 311V for 220VAC mains lines. As such, arcing is not associated with 220VAC residential mains connections or 110V single-pole residential circuits. Mains electrical fires are associated with loose, damaged or corroded wires that: 1.) generate sufficient resistive heat at the point of damage to ignite surrounding flammable material, or 2.) result in a sufficiently high-energy spark when circuit elements with higher capacitance are connected, due to localized super-heating of air at the point of damage. Paschen's Law describes that at STP, the breakdown voltage increases at approximately 3kV for each mm of arcing distance. So, a 4.16kV line would be expected to generate an arc across a gap of at most (4.16kV / 3kV/mm) $x\sqrt{2}$ = 1.96mm. Air with humidity reduces this distance, and plausible environmental deviations from STP would not substantially increase this distance.

While the overhead power lines along the project site's frontage possess vectors for wildfire initiation, the proposed project's mains connection would not be expected to add substantial risk of arcing or sparking, or any additional utility componentry. The proposed project would not reasonably be expected to have a faulty mains wiring installation, as all new construction must be inspected and tested against such faults, and all circuits must be provisioned with Arc Fault Circuit Interrupt functionality pursuant to the California Building Code. The proposed project would not be expected to inadvertently place any connection across the 4.16kV utility conductors situated approximately 50 feet above the existing grade, or inadvertently provide any connection between these conductors and ground, because no construction activities would occur in the vicinity of these conductors.

While it is possible that residents or guests of the proposed project could spread flame irresponsibly, this risk is reasonably uniform across the hundreds of residential projects in the vicinity. Historically, flame spread associated with typical residential activities by residents, such as operation of combustion equipment and grilling, have not been attributed as the cause of any modern fire in the area. This risk is neither substantial, nor cumulatively considerable in light of the hundreds of other surrounding residences that possess this potential vector of impact. To the extent untended human activity in the vicinity, including activity by the homeless, is posited or has been established as the cause of past canyon fires in the area, an occupied parcel would reasonably be expected to reduce the risk compared to a vacant parcel, as the owners would be expected to be on premises more often to police against incursions.

Level of Significance Before Application of Mitigation Measures

The impacts of the project after the application of standard conditions, regulatory compliance measures and project design features would be expected to be less than significant.

While most wildfires initiate with human behavior, and certain human activities (e.g. arson, smoking, irresponsible cookfire management) are associated with wildfire creation, the construction or occupancy of a single-family residence in accordance with all applicable

regulations does not pose an elevated risk compared to the other similar activities resulting in a human presence that characterize the existing condition in the proposed project vicinity.

No additional constraints in the form of tailored mitigation measures would be warranted.

Mitigation Measures

None.

Level of Significance After Application of Mitigation Measures

With no mitigation, the expected level of impacts remains unchanged.

Cumulative Impacts

The incremental effects of the project to wildfire would not be expected to introduce a cumulatively considerable effect or a significant cumulative impact.

General Analysis

The 2035 County General Plan EIR analyzed wildfire impacts under the Hazards impact area of analysis. See Section 5.8.5.

Past projects and attributes of the California climate and ecosystems have contributed to elevated fire risk in areas that have been designated Very High Fire Hazard Severity Zones. Therefore, the project had the potential to result in a cumulatively considerable effect if it resulted in the addition of a substantial fraction of the existing risk of wildfire generation in the vicinity. However, all of the proposed project's vectors for potential flame spread are constrained by a regulatory framework intended to contain risk from the construction and operation of single-family residences in Very High Fire Hazard Severity Zones, and the proposed project would reasonably be expected to add a proportional and therefore insubstantial fraction to the existing risk from similar activities occurring in association with hundreds of existing residences in the vicinity. These other existing projects possess the same risk vectors during expected use, maintenance and renovation.

6. OTHER CEQA CONSIDERATIONS

6.1 Impacts Found Not to Be Significant

Pursuant to CEQA Section 21003(f), "…it is the policy of the state that… [a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in State CEQA Guidelines Section 15126.2(a), which states that "[a]n EIR shall identify and focus on the significant environmental impacts of the Proposed Project" and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment."

State CEQA Guidelines Section 15063(a) allows the use of an Initial Study to document project effects that are less than significant, and State CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. However, this EIR has addressed every impact category and significance criterion, and therefore, pursuant to State CEQA Guidelines Section 15063(a), "an Initial Study is not required." This EIR has found all project-related impacts to be less than significant.

6.2 Significant Unavoidable Adverse Impacts

Pursuant to State CEQA Guidelines Section 15126(b), an EIR must "[d]escribe any significant impacts, including those which can be mitigated, but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described."

Because all potential project-related effects would be expected to be less than significant, pursuant to the analysis of Section 5, no significant unavoidable adverse impacts would be expected.

6.3 Irretrievable and Irreversible Commitment of Resources

Pursuant to State CEQA Guidelines Section 15126.2(c), "[i]rretrievable commitments of resources should be evaluated to assure that ["[p]rimary impacts and, particularly, secondary impacts [which] commit future generations to similar uses"] [are] justified." "Also, irreversible damage can result from environmental accidents associated with the project." However, pursuant to State CEQA Guidelines Section 15127, "[t]he information required by Section 15126(c) concerning irreversible changes, need be included only in EIRs prepared in connection with…[t]he adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;…[t]he adoption by a Local Agency Formation Commission of a resolution making determinations; or…[a] project which will be subject to the requirement for preparing an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321–4347." The proposed project does not meet any of these

criteria, and so analysis of irretrievable and irreversible commitment of resources is not required by CEQA.

Nevertheless, an appropriately brief analysis is provided. Approval and implementation of the project would allow for the construction of a single-family home on the 1.02-acre residential site and would require the commitment of a relatively small amount of additional energy resources (e.g., fossil fuels for any residual electricity consumption not accommodated in the project's photovoltaic system, as well as the material acquisitions of future residents) on a daily basis. In addition, the proposed project would encompass construction activities that result in the commitment of building supplies. However, the building supplies (e.g., wood, concrete, steel, etc.) would not be significantly greater in quantity than other projects of similar size, and these resources are available in sufficient quantities in this region and may be regrown or recycled. In addition, no development is proposed that would significantly affect biological, cultural/scientific, mineral, or other valuable resources, and pursuant to the analysis in Section 5.8, the project would not be expected to introduce the potential for "environmental accidents."

Therefore, no irretrievable and irreversible commitments of resources would be expected.

6.4 Growth-inducing Impacts

Pursuant to State CEQA Guidelines Section 15126.2(d), an EIR must "[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." To assess whether a project may have these impacts, several questions are considered:

- Would the project "remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)"?
- Would the project result in "[i]ncreases in the population [that] may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects"?
- Would the project "encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively"?
- In addition, CEQA case law would also suggest examination of the following questions:

    - Would the project result in economic expansion or growth that would change the tax revenue base or expand employment?
    - Would the project result in the establishment of a precedent-setting action such as an innovation, radical change in zoning or a General Plan amendment approval?
    - Would the project result in development or encroachment in an isolated area of open space, as opposed to an infill type of project in an area that is already largely developed?

"Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth." *Napa Citizens for Honest Gov't v Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 369. "An EIR must analyze the growth-inducing impact of a project, including

reasonably foreseeable consequences but not speculative effects. [Citations.]" *Federation of Hillside & Canyon Ass'ns v City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1265.

- **Would the project "remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)"?**

As indicated in the analysis of Sections 5.17 and 5.14, the proposed project is located in a residential neighborhood where all essential public services and utilities exist. Project features and constraints would result in localized improvements to address project-related demand for connections to existing infrastructure, but would not require new access roads, utilities, or infrastructure that might contribute to direct or indirect growth-inducing impacts.

In addition, the existing public facilities and services, including police and fire protection services, sewer, water, and storm drainage, and parks and recreational facilities, are adequate to serve the home. As such, no significant new demands would be expected that would result in the necessity to expand essential public services that might contribute to direct or indirect growth-inducing impacts.

- **Would the project result in "[i]ncreases in the population [that] may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects"?**

As indicated in the analysis of Section 5.13, one single-family home would not be expected to add significantly to population or tax existing community service facilities. The existence of a single-family home in this location was anticipated by the County General Plan and Altadena Community Plan. As such, no significant new demands would be expected that would result in construction of new facilities to provide services to the home that might contribute to indirect growth-inducing impacts.

- **Would the project "encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively"?**

No other activities have been identified that might contribute to indirect growth-inducing impacts, and no other reasonably foreseeable significant activities have been identified as being encouraged or facilitated by the project.

- **Would the project result in economic expansion or growth that would change the tax revenue base or expand employment?**

Implementation of the project would not result in any significant economic growth or expansion in either the community of Altadena, the County of Los Angeles or the larger southern California region. Although short-term, construction-related jobs would be created by the construction of the home, the scope of these jobs would be extremely limited and would cease with completion of the construction. In addition, project implementation would not result in the creation of any long-term employment opportunities. The assessed value of the project parcel would increase as

the site is improved with a home, but this would not be expected to substantially increase the tax revenue base in the County. The proposed project constitutes infill development of a site that is currently vacant but on which development has been anticipated, as indicated by the General Plan Land Use Element and zoning classification adopted for the site. Therefore, no significant direct or indirect growth-inducing economic effects would be expected.

- **Would the project result in the establishment of a precedent setting action such as an innovation, radical change in zoning or a General Plan amendment approval?**

The proposed project parcel is zoned R1-10000 for one single-family home. The Applicant does not propose an amendment to the Land Use Element of the County General Plan or any change in zoning for the project parcel. The County's General Plan was updated in 2015. Therefore, the project's consistency with land use policy and intensity of development is reasonably current.

- **Would the project result in development or encroachment in an isolated area of open space, as opposed to an infill type of project in an area that is already largely developed?**

Growth-inducing projects possess such characteristics as being located in isolated, undeveloped or under-developed areas, necessitating significant extensions of major infrastructure (e.g. roadways, utilities) or those that could encourage the "premature" or unplanned growth in an area not planned for development. However, the project parcel is surrounded by existing development and designated residential by the County General Plan and the Altadena Community Plan. The proposed project site is located within the Los Angeles-Long Beach-Anaheim urbanized area.[594] As such, the project would not remove an obstacle to population growth since the project is located in an area that possesses all essential infrastructure, and utilities were designed with capacity to accommodate the single-family home on this residentially zoned lot. Project implementation would not result in significant increases in demands on infrastructure. Therefore, no significant growth-inducing impacts would be expected.

[594] Source: United States Bureau of the Census: 2010 Census – Urbanized Area Reference Map: Los Angeles-Long Beach-Anaheim. Available at: https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua51445_los_angeles--long_beach--anaheim_ca/DC10UA51445_003.pdf.

7. PROJECT ALTERNATIVES

7.1 Introduction

Pursuant to State CEQA Guidelines Section 15126.6(a), an EIR must consider "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives….There is no ironclad rule governing the nature or scope of the alternatives to be discussed, other than the rule of reason." "CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Each case must be evaluated on its facts, which in turn must be reviewed in light of the statutory purpose." *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566. "An EIR need not consider every conceivable alternative to the project[.]" *In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1163.

In the absence of any "ironclad rule," compliance with the law's directive to consider *alternatives* for a project in which degrees of freedom exist in the design may be satisfied in the analysis of one or more alternative designs, in addition to the "no project" alternative required by CEQA. Pursuant to State CEQA Guidelines Section 15126.6(b), "the discussion of alternatives shall focus on alternatives to the project *or* its location which are capable of avoiding or substantially lessening any significant effects of the project[.]" (emphasis added). Pursuant to CEQA Sections 21001(g), 21002.l(a), and 21061, CEQA does not expressly require consideration of an alternative location for a project. *See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 485 ("Because the proposed project is consistent with…existing plans, policies and zoning, we conclude a review of alternative sites was not necessary.").

This EIR has elected to provide one Alternative Design alternative and to briefly consider the viability of an alternative location, in addition to the "no project" alternative. The lead agency has the discretion to determine how many alternatives will constitute a reasonable range. *Citizens of Goleta Valley v Board of Supervisors* (1990) 52 Cal.3d 553, 566. In one past residential project, comprised of 46 homes, the alternatives analysis was sufficient with one alternative site plan at the same density, one other reduced density plan, and one other increased density plan. *Sequoyah Hills Homeowners Ass'n v City of Oakland* (1993) 23 Cal.App.4th 704. Analogizing to the proposed project, for which a unit density of one is the only degree of design freedom, a single alternative site plan would be a sufficient sampling. Further alternatives that fall within a continuum need not be analyzed separately if they can be understood by considering other samples within the continuum. *Cherry Valley Pass Acres & Neighbors v City of Beaumont* (2010) 190 Cal.App.4th 316, 355.

Both the project and the Alternative Design alternative already occupy a reasonably minimal residential profile of three bedrooms, two bathrooms, living area, and a two-car garage in approximately 1,500 square feet, such that a "reduced size" alternative could only be very modestly reduced, resulting in an indistinct perturbation. Both the project and the Alternative Design alternative are hemmed in by setbacks, oak trees and policies that encourage minimization of development within the SEA, such that reasonable alternative locations on the

parcel would result in an indistinct perturbation. The Alternative Design alternative establishes that reducing the amount of grading and lowering height within the footprint of development trades off with increased disturbance area and correspondingly greater impacts to existing trees. The project as proposed sustains its impacts in the first ten feet of the structure's volume above street level, with respect to public sight lines across the parcel frontage and to the larger scaffold of the single oak tree to see substantive pruning, such that variations in height within the proposed project footprint would result in an indistinct perturbation. In considering the existing condition, the single-story profile of some nearby residences was also briefly considered as an alternative design sufficiently perturbed to resolve substantial differences. However, existing single-family residences in the vicinity generally employed substantial destructive grading of flat building pads. Reconciling height and setback requirements on this parcel would have required much of the volume of the structure to be placed below grade and was rejected summarily as unsuitable and impactful. As attributed elsewhere in this document, terraced designs stepping above the grade are encouraged on hillside parcels to minimize the extent of grading.

The Alternative Design alternative more closely adheres to the attributes of some existing residences nearby, including the use of gable roof segments, a rectilinear footprint within each segment, detached garage, and two levels. This alternative possesses attributes with the potential for reducing one or more different types of project impact, such as a reduction in building envelope volume, a reduction in grading, a reduction in height and/or a change in the location of the footprint of development. This alternative is sufficient to resolve the type and scale of impacts for any conceivable residential design on the project parcel, relative to the project as proposed. *See Saltonstall v City of Sacramento* (2015) 234 Cal.App.4th 549, 577 (similar alternatives that don't resolve substantial additional environmental information needn't be considered).

Pursuant to State CEQA Guidelines Section 15126.6(e)(2), an "environmentally superior" alternative must be identified, and in the event that alternative is the "no project" alternative, an environmentally superior alternative from among the others shall be identified. Pursuant to State CEQA Guidelines Section 15126.6(d), the analysis of alternatives should be less detailed than that of the project itself and must include only "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."

Pursuant to State CEQA Guidelines Section 15126.6(b), "alternatives that are capable of avoiding or substantially lessening any significant effects of the project" must be examined "even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly." Pursuant to State CEQA Guidelines Section 15126.6(f), "the EIR need examine in detail only the [alternatives] that the Lead Agency determines could feasibly attain most of the basic objectives of the project." Pursuant to State CEQA Guidelines Section 15126.6(c), the following criteria may be used to eliminate alternatives from consideration: "(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental effects." Re-stating, an alternative is not to be preferred if it fails to meet most of the basic project objectives, if it is infeasible, or if it does not avoid significant environmental effects in the project as proposed. Therefore, the lack of any significant effect in the project as proposed is sufficient, without more, to conclude that the alternatives would not be preferable to the project as proposed, and no feasibility analysis is required. *See In re Bay-Delta*

etc. (2008) 43 Cal.4th 1143, 1167 ("Under CEQA, the range of alternatives that an EIR must study in detail is defined in relation to the adverse environmental impacts *of the proposed project*." (emphasis in original); *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957 ["Where an EIR has identified significant environmental effects *that have not been mitigated or avoided*, the agency may not approve the project unless it first finds that '[s]pecific economic, legal, social, technological, or other considerations ... make infeasible the mitigation measures or alternatives identified in the environmental impact report.'" (emphasis added)]).

Pursuant to State CEQA Guidelines Section 15364, the term feasible is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Pursuant to State CEQA Guidelines Section 15126.6(f), other factors to consider within the "rule of reason" are "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…and whether a proponent can reasonably acquire, control, or otherwise have access to an alternative site."

"The issue of feasibility arises at two different junctures: (1) in the assessment of alternatives [except the No Project] in the EIR, and (2) during the agency's later consideration of whether to approve the project... But differing factors comes into play at each stage... For the first phase - inclusion in the EIR - the standard is whether the alternative is potentially feasible... By contrast, at the second phase - the final decision on project approval - the decision-making body evaluates whether the alternatives are actually feasible. (See Guidelines, § 15091, subd. (a)(3).) At that juncture, the decision-makers may reject as infeasible alternatives that were identified in the EIR as potentially feasible." (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 981, 989-999).

CEQA does not "mandate that the EIR itself also contain an analysis of the feasibility of the various project alternatives or mitigation measures that it identifies." (*San Franciscans Upholding the Downtown Plan v. City & County of San Francisco* (2002) 102 Cal.App.4th 656, 689-690; *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490 [the "public was not part of the debate of the economic feasibility of the project, but as we read CEQA, it does not require the public to be a part of that debate..."]; *The Flanders Foundation v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 617-619 [feasibility determination need only be rendered in an agency finding, if not already present in the EIR]).

Alternatives include:

- No Project/No Development
- Alternative Site
- Alternative Design (Two Level)

For each alternative, the analysis presented in this section briefly:

- Describes the alternative;
- Discusses the impacts of the alternative and evaluates the significance of those impacts in each impact area of analysis; and,

- Evaluates the alternative relative to the project, specifically addressing project objectives and the elimination or reduction of significant impacts.

7.2 Alternatives Rejected from Further Consideration

7.2.1 No Development

Pursuant to State CEQA Guidelines Section 15126.6(e)(1), the "'no project' [alternative] shall…be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(B), for "a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed….If disapproval of the project under consideration would result in predictable action by others, such as the proposal of some other project, this "no project" consequence should be discussed." In addition, State CEQA Guidelines Section 15126.6(e)(3)(C) instructs to "analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, *based on current plans* and consistent with available infrastructure and community services." (emphasis added).

The "No Development" alternative would leave the site in its existing vacant condition at present, an essentially unaltered scenario adequately described by the Environmental Setting description in Section 4 and the Existing Conditions sub-sections in each impact area of analysis in Section 5.

CEQA requires projecting what would reasonably be expected to occur from the point of implementation of such a decision onwards. Preliminarily, the site is currently zoned for residential use, and the proposed project's satisfaction of all of its associated requirements indicate that such use is feasible. Therefore, this analysis considers the regulatory framework constraining the Lead Agency in actions that could implement this alternative, and whether a court would reasonably be expected to overturn such an action for violation of governing local, state, or federal regulation.

A change to the project parcel zoning or land use designation would introduce a new avenue of discretion to deny or prohibit a residential project, by potentially rendering the project incompatible or inconsistent with policies and regulations governing the new zoning and use. However, any attempt to change the project's zoning or land use designation to no longer permit a conforming single-family residence on the parcel, so as to enable this form of a "no project" alternative, would not be "based on current plans," which designate the parcel for residential use. As such, CEQA does not require such consideration. Furthermore, recent amendments under the Housing Crisis Act preclude changes to "general plan land use designation, specific plan land use designation, or zoning of a [residential] parcel or parcels" that result in a less intensive residential use in comparison to those in place on January 1, 2018 (S.B. 330; Government Code, Section 66300(b)(l)(A)), such that the notional potential alteration of the project's zoning and land use according to some speculative future potential policy, regulation or other action aimed at repurposing vacant residential parcels away from residential use would not be reasonable to

consider, as a reviewing court would be expected to overturn for violation of the Government Code.

Government Code Section 65589.5(j) provides that housing development projects that are consistent with development standards may not be denied without a finding that the project "would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a specific, adverse impact means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete." As the proposed project complies with all development standards, and this EIR documents no statement of overriding consideration for a significant effect, this finding could not reasonably be made or sustained. While one court recently determined that Government Code Section 65589.5(j) need not apply to a project comprised of one single-family residence (*Resnitskiy v. County of Marin* (2022) 79 Cal.App.5th 1016), that court also noted that a project with "at least two units" would be governed by Government Code Section 65589.5(j). The California Department of Housing and Urban Development concurs that a project comprised of one single-family residence and one ADU would be governed by Government Code Section 65589.5(j).[595] The proposed project has incorporated an ADU that conforms to the ministerial exemption in Government Code section 65852(e)(1)(a)[596] from any local development standards. Therefore, Government Code Section 65589.5(j) applies to the proposed project, and this EIR need not consider a form of the "no project" alternative implemented by way of potential denial of entitlement approvals for any subjective reason, including any reason that may also apply to any design alternative on the proposed project parcel. *See also Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 714-716 (Lead Agency properly concluded that an action for a 45-lot residential project – the consideration of a reduced density alternative in an EIR – was legally infeasible pursuant to Government Code Section 65589.5(j)).

Independent of California law, a governing body's prohibition of a conforming use consistent with the designation and zoning it has established may be evaluated as an unconstitutional taking, where eminent domain is not properly employed. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992) [where not otherwise justified by nuisance, state regulation prohibiting a single-family residence on a parcel for which that project was consistent with land use designation and zoning amounted to a regulatory taking prohibited by the Fifth and Fourteenth Amendments, which could not proceed without comporting with requirements of eminent domain, including just compensation]; "Where a regulatory taking has been found to

[595] Source: California Department of Housing and Urban Development: Housing Accountability Act Technical Assistance Advisory. ["Since an application for both a single-family residence and an ADU includes more than one residential unit, the HAA applies (Gov. Code, § 65589.5, subd. (h)(2).)"] Available at: https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos/docs/hcd-memo-on-haa-final-sept2020.pdf.

[596] The ADU exists wholly within a project envelope that is consistent with local design guidelines applying to proposed single-family residences; has exterior access; has sufficient access on foot around the perimeter of the structure within 150 feet of the public roadway, pursuant to standard County Fire Department conditions in VHFHSZ's to maintain fire safety; and is not a JADU.

occur, the courts will overturn the agency's action…[Citation.]" [597] The entity that perpetrates an unauthorized taking is liable for compensatory damages for the interval of temporary taking. *First English Evangelical Lutheran Church v. Los Angeles County* (1987) 482 U.S. 304. Additionally, 42 U.S.C. Sections 1983 and 1988 provide for the recovery of reasonable attorneys' fees from the violator in an action to vindicate civil rights, including those civil rights guaranteed under the Fifth and Fourteenth Amendments in the case of an unauthorized taking.

While federal, state, local or private entities so authorized by statute are empowered to exercise eminent domain, none have elected to do so or would reasonably be expected to satisfy criteria for doing so over one residential parcel in an existing residential neighborhood. To satisfy criteria for exercising eminent domain over private property, an empowered entity may not effect a transfer of private use or ownership and is required to put the property to proper "public use". *See generally* California Code of Civil Procedure Section 1230.030; *Redevelopment Agency v. Hayes* (1954) 122 Cal.App.2d 777, 793. Such uses would generally include schools, roads, libraries, police stations, fire stations, utilities, parks or similar public facilities, for which the project parcel, set in an existing residential neighborhood, would be unsuitable.

Neither has any allocated source of funding within the County or within any other empowered entitity been identified to remunerate for isolated residential parcels in existing residential neighborhoods in an eminent domain action or voluntary market rate transaction. Federal and state lands acquisition and/or easement programs target much larger tracts with identified conservation value, such as the presence of critical habitat for endangered species or a wildlife linkage. Among these, the Habitat Conservation Plan (HCP) Land Acquisition Grants Program and Recovery Land Acquisition Grant Awards Programs[598] make grants to purchase tracts of hundreds or thousands of acres, often in wilderness or lands bordering existing reserves. For example, in FY2021, a grant of $11 million was made for 384 acres of the coastal Banning Ranch property adjacent to the County of Orange Central and Coastal Natural Community Conservation Plan/Habitat Conservation Plan Reserve.[599] In California, the Wildlife Conservation Board ("WCB") funds similar projects. Example projects for FY2022 include a $1.02 million grant to "restore 2,157 acres of wetlands and 189 acres of upland nesting habitat for the benefit of migratory birds at the Honey Lake Wildlife Area" and a "grant of up to $15.5 million…to acquire approximately 385 acres of land for the protection of upland and lowland habitat consisting of wetlands, vernal pools, marsh lands, arroyos and coastal sage scrub that support both state and federally endangered species…"[600] The WCB has made grants for conservation easements pursuant to the Oak Woodlands Conservation Act for tracts comprised of tens to thousands of acres of oak woodlands and oak savannah, often targeting lands potentially

[597] Source: California Office of Planning and Research: The Planner's Training Series: The Conditional Use Permit, page 6. Available at: https://www.opr.ca.gov/docs/theconditionalusepermit_071997.pdf.
[598] Source: California Department of Fish and Wildlife. Available at: https://wildlife.ca.gov/Conservation/Planning/NCCP/Grants#:~:text=Habitat%20Conservation%20Plan%20Land%20Acquisition%20Program,in%20support%20of%20approved%20HCPs..
[599] Source: United States Fish and Wildlife Service. Available at: https://www.fws.gov/sites/default/files/documents/CESCF-Non-Traditional-Awards-FY20-FY21.pdf.
[600] Source: California Department of Fish and Wildlife. Available at: https://wildlife.ca.gov/News/wildlife-conservation-board-funds-environmental-improvement-and-acquisition-projects2.

affected by ranching or agricultural activity. An example easement for 2,941 acres of blue oak woodlands on a ranch in Mariposa County was compensated at $1.495 million.[601]

The Applicant has also represented that he would not be a voluntary party to any form of transaction at market rate, in part because he "believes it is important, and wholly consistent with his rights, to ensure that his neighbors' attempt to abuse CEQA and the conditional use process be publicly seen to fail, that others may be dissuaded from similar attempts."

In summation, to assume denial of the right to improve this parcel in accordance with zoning and land use designation would defy the "rule of reason," as this decision would be expected to be overturned by a reviewing court. As such, this form of the "no project" alternative has been removed from further consideration or analysis.

Alternatively, pursuant to State CEQA Guidelines Section 15126.6(e)(3)(B), the "no development" alternative may be construed as "result[ing] in predictable actions by others, such as the proposal of some other project." If the entitlements for this particular form of the project were to be denied, and if a reviewing court declined to overturn for violation or error of law or fact, the "rule of reason" would require the reasonably foreseeable development of some alternative single-family residential project, for which the Alternative Design alternative described in Section 7.3 is deemed to be reasonably representative and is therefore an appropriate surrogate for this formulation of a "no project" alternative.

This analysis of the "no project" alternative is appropriately brief. "A legal duty to implement a proposed project may not excuse an agency from the requirement that the no-project alternative be discussed… The analysis can be limited, however, to a brief discussion of the no-project alternative and a statement that the alternative is not feasible because the agency is legally obligated to take action on the project in some form." (Kostka & Zischke, Practice Under the California Environmental Quality Act (2d ed Cal CEB) § 15.19, p. 15-28). *See also Tiburon Open Space Committee v. County of Marin* 78 Cal.App.5th 700, 737 ("If a lead agency could only exercise independent judgment by disregarding a binding [legal obligation], so equally could it be said that the agency could only exercise a true independent judgment if it was free to disregard provisions of CEQA that prove inconvenient"; Lead Agency properly declined to consider an alternative that conflicted with its legal obligations).

7.2.2 Alternative Site

Pursuant to State CEQA Guidelines Section 15126.6(f)(1), relevant factors for consideration of alternative sites include "site suitability, economic viability…and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." Pursuant to State CEQA Guidelines Section 15126.6(f)(2)(A), "[o]nly locations that would avoid or substantially lessen any of the significant effects of the project need be considered." In a project without significant effects, there are no locations that would

[601] Source: Trust for Public Land. Available at: https://www.tpl.org/media-room/easement-protects-oak-woodlands-near-yosemite-ca.

avoid or substantially lessen a significant effect. Therefore, no alternative locations need be considered. Furthermore, authorities have established that according to *Citizens of Goleta Valley v Board of Supervisors* (1990) 52 Cal.3d 553, 573 ("Goleta II"), "once land use policies earmarking a site for a particular type of use have been adopted, an agency need not, and ordinarily should not, reconsider that policy when a development project is proposed. Under the reasoning of Goleta II, an examination of alternative sites should not be necessary when a proposed development project is consistent with the applicable land use plan. The EIR should focus on options for developing the site consistent with adopted plan policies. Its discussion of alternatives should not search for an environmentally superior site for the project, but instead should search for an environmentally superior version of the project on the site. This reasoning was adopted by the court in Mira Mar Mobile Community v City of Oceanside (2004) 119 CA4th 477, which held that an EIR for a residential development consistent with planning policies of an adopted redevelopment plan did not need to examine alternative sites for the project. Relying on Goleta II, the court held that a development proposal that implements existing planning policies should not prompt reconsideration of those policies. Because the project was consistent with the city's existing plans, policies, and zoning, a review of alternative sites was not necessary." (Kostka & Zischke, Practice Under the California Environmental Quality Act (2d ed Cal CEB) § 15.25, p. 15-33). Because the proposed project is consistent with zoning and land use policy, no alternative locations need be considered.

Among the most important of project objectives to the Applicant is proximity to his place of work, as well as views of the natural canyon environment. While there are a small number of other residentially zoned, vacant lots in the vicinity that could meet these and other project objectives, the Applicant has stated that he does not own these other parcels and would need to purchase one to meet the project objectives as proposed. These similar parcels are also possessed of similar attributes that would reasonably be expected to contribute to similar effects.

None of these parcels were publicly listed for sale as of the date of the Notice of Preparation, but the cost of purchase of a parcel of comparable utility and value may be reasonably inferred from the fair market value of the proposed parcel. In June 2017, the vacant parcel was professionally appraised at $540,000, with an estimated cost of construction of the proposed project of $500,000. The resulting value of the completed proposed project was appraised with a best estimate of $1,100,000. Since the date of appraisal, the Case Shiller index of home prices in the Los Angeles area has increased from approximately 264 to nearly 400[602], and the proposed project has also increased slightly in square footage, such that a best estimate of $1,700,000 may be reasonably assumed as of the date of the Notice of Preparation. In light of this increase, the replacement cost of the project parcel to attain comparable desirability would then reasonably be in excess of the $540,000 fair market value of the parcel as of 2017.

The Applicant's financial ability to pursue a project at a financial loss is irrelevant to the assessment of the economic feasibility of a project alternative. *Maintain Our Desert Environment v. Town of Apple Valley* (2004) 124 Cal.App.4th 430, 448-449. Therefore, it is necessary, but not sufficient, to a finding of economic feasibility that value created be greater than cost, by a reasonable margin.

[602] Source: Federal Reserve Economic Data. Available at: https://fred.stlouisfed.org/series/LXXRSA.

However, even where such profitability may be maintained, a disproportionate difference not expected to be borne by a "prudent person" properly renders an alternative economically infeasible. *San Franciscans Upholding the Downtown Plan* (2002) 102 Cal.App.4th 656, 693-694. Without more, it would be economically infeasible to maintain the proposed project site in its vacant state indefinitely. Even were the Applicant to permanently encumber the proposed project site with a conservation easement, eliminating property taxes, the resulting state and federal income tax deduction could not exceed the owner's marginal tax rate for personal income, a deficit of more than half the appraised fair market value of the parcel. The resulting deficit, in conjunction with the purchase of a new site at a similar market rate, would be more than half the appraised fair market value of the parcel, or at least half of $540,000, or more than half the expected marginal cost to implement the proect.

It is reasonable to infer that a prudent property owner would not pursue a course of action that would result in hundreds of thousands of dollars of lost economic value, and the alternative would therefore not be economically feasible. *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1181 (alternative may be rejected with "evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project").

Therefore, this alternative has been removed from further consideration.

7.3 Analysis of Alternatives

The Applicant's proposed design is already a small fraction of the 9,000 square-foot size permitted by the tightened developmental standards in the Altadena Community Standards District for the project parcel. In addition, the Applicant has already undertaken reductions in the modest scale of the proposed project compared to earlier iterations of the design, reducing the height along the eastern and northern ridgelines and eliminating a driveway transition apron. The proposed project is already scaled at the minimum size able to meet certain development requirements, while still fulfilling the objectives of the project to provide a usable amount of space for the Applicant and his family. The proposed project would not be expected to result in any significant effects. Because of this, no alternative would result in a significant effect being reduced to less than significance, and no legally permissible reason would exist to adopt an alternative to the project as proposed.

Nevertheless, an alternative is proposed and analyzed in a level of detail befitting these circumstances. In this analysis, it is conservatively assumed that a tree could be treated as a removal if substantial excavation would occur within five trunk diameters or if canopy removal would exceed approximately 1/3. Attribution of development parameters, such as the areas of development and volume of grading, are both approximate and sufficiently resolved to assess relative impacts.

7.3.1 Two-Level Alternative Design

Alternative Description

As for the project as proposed, the two-level alternative would be developed on the project parcel. The alternative would have the potential for reducing impacts by reducing project height and maximum height above street grade plane, and essentially eliminating excavation not associated with pile construction, with no bulk grading for any structural envelope. The alternative would closely approximate the form of some existing two-story hillside residences on Canyon Crest Road within 300 feet of the project parcel, as perceived from public vantages on Canyon Crest Road.

The project would retain the minimum project objectives to provide a two-bedroom, two-bathroom home with an office, two-car garage and storage space. Generally, development in the vicinity is single-story where flat building pads have been graded, or two or more stories where constructed on a hillside slope, predominantly with detached two-car garages. Of those constructed on a slope, the residences at 3617 Canyon Crest Road (two homes to the north of the project parcel) and 3558 Canyon Crest Road (immediately southeast of the project parcel) provide a consistent template. Both are two stories in a footprint between approximately 1,250 and 1,500 square feet, with detached two-car garages that range between approximately 480 and 540 square feet, and three and 12 feet from the front property boundary. Consistent with the existing two-story development within 300 feet, this alternative incorporates a detached two-car garage of 450 square feet in the front yard approximately ten feet from the front property boundary. The alternative incorporates a conventional gable roof in the upper rectilinear segment, like the residence at 3617 Canyon Crest Road, and an L-shaped lower level notched into the hillside. A portion of the lower level exists below the upper level, and the remainder incorporates a flat roof that serves as deck space for the upper level. The alternative would place the kitchen and living areas, a bathroom, deck, and storage space on the higher of two levels, and place two bedrooms, a bathroom and office space on the lower level.

Objectives Assessment

The alternative could be feasible but would be less effective in meeting project objectives than the project as proposed, including the following, at least:

- Site and design the home to minimize impacts to existing oak trees on the site and use these trees to screen the home to the extent possible from public vantages.
    - While the alternative is aligned and situated so as to slot between the protected zones of oak trees, the alternative would remove three additional oak trees. This would result in correspondingly greater visual impacts from some public vantages.
- Utilize design strategies including building orientation, footprint minimization, profiling of the existing grade, building articulation, exterior materials and colors, and landscaping to blend the structure into the natural environment to the extent feasible, in accordance with the County's Hillside Management Area Sensitive Design Guidelines.
    - While the alternative would reduce the height of the structure above the street grade plane, it would not comply as well with Sensitive Design Guidelines to profile the existing grade, make use of building articulation, present a minor axis to the roadway and blend the project into the existing surroundings.
- Utilize the existing graded and compacted area at street level for construction staging, as well as the driveway for the home.

  - The alternative would consume much of the staging area that would have been available to the project as proposed. The ability to accommodate necessary construction vehicles and equipment without encroaching into the road right-of-way would be more difficult during some construction phases, including the pouring of the garage foundation, which may require a phased pour.
- Utilize well-oriented roof-mounted solar to render the home net-zero energy.
  - The non-shed roof profile of the alternative would not be optimized for solar generation, in order to reduce the height of the alternative and utilize the shallow roof angles characteristic of adjacent residences. A substantially smaller portion of the gable roof would have any south-facing orientation, and the garage roof would be largely occluded by oak tree canopy.

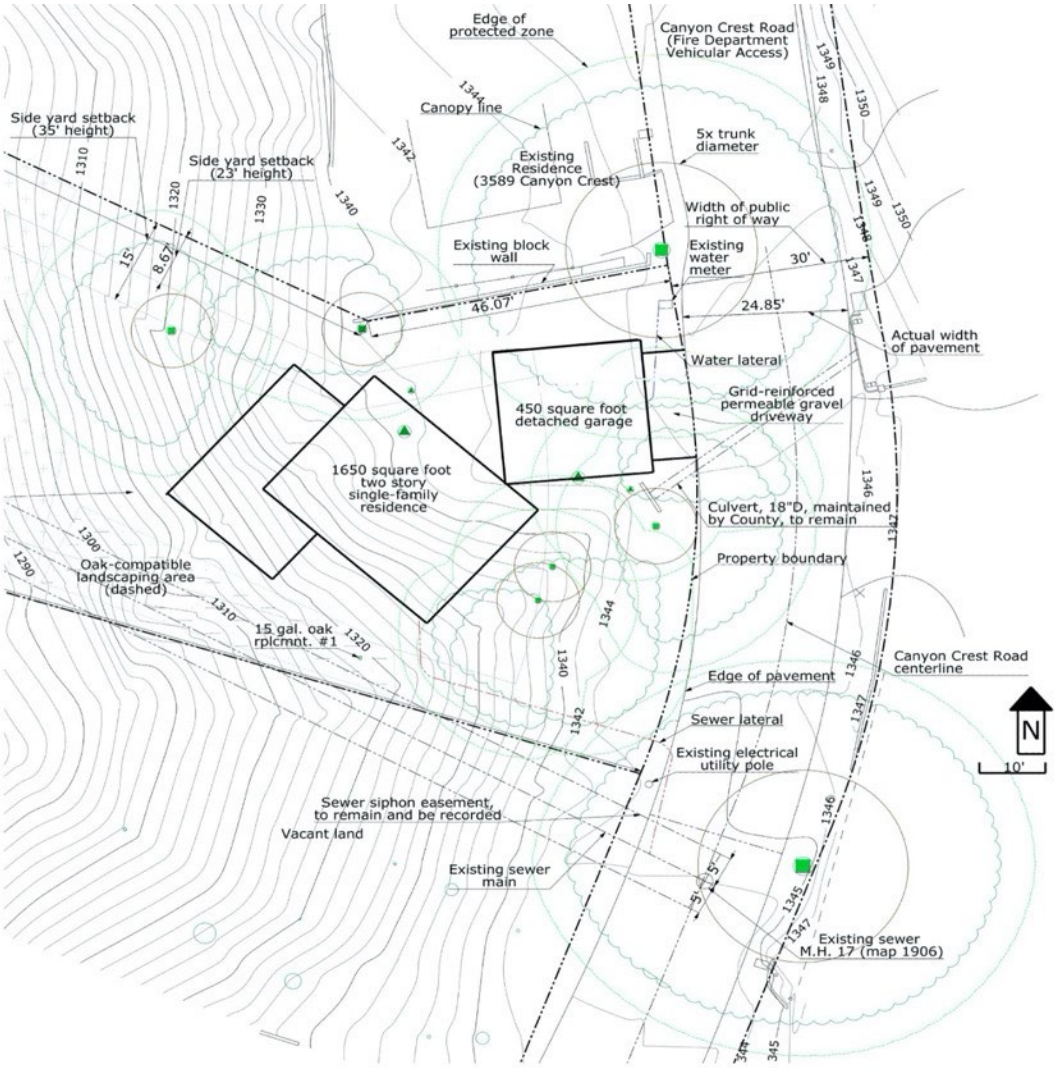


Figure 7-1: Two-Level Alternative Site Plan[603]

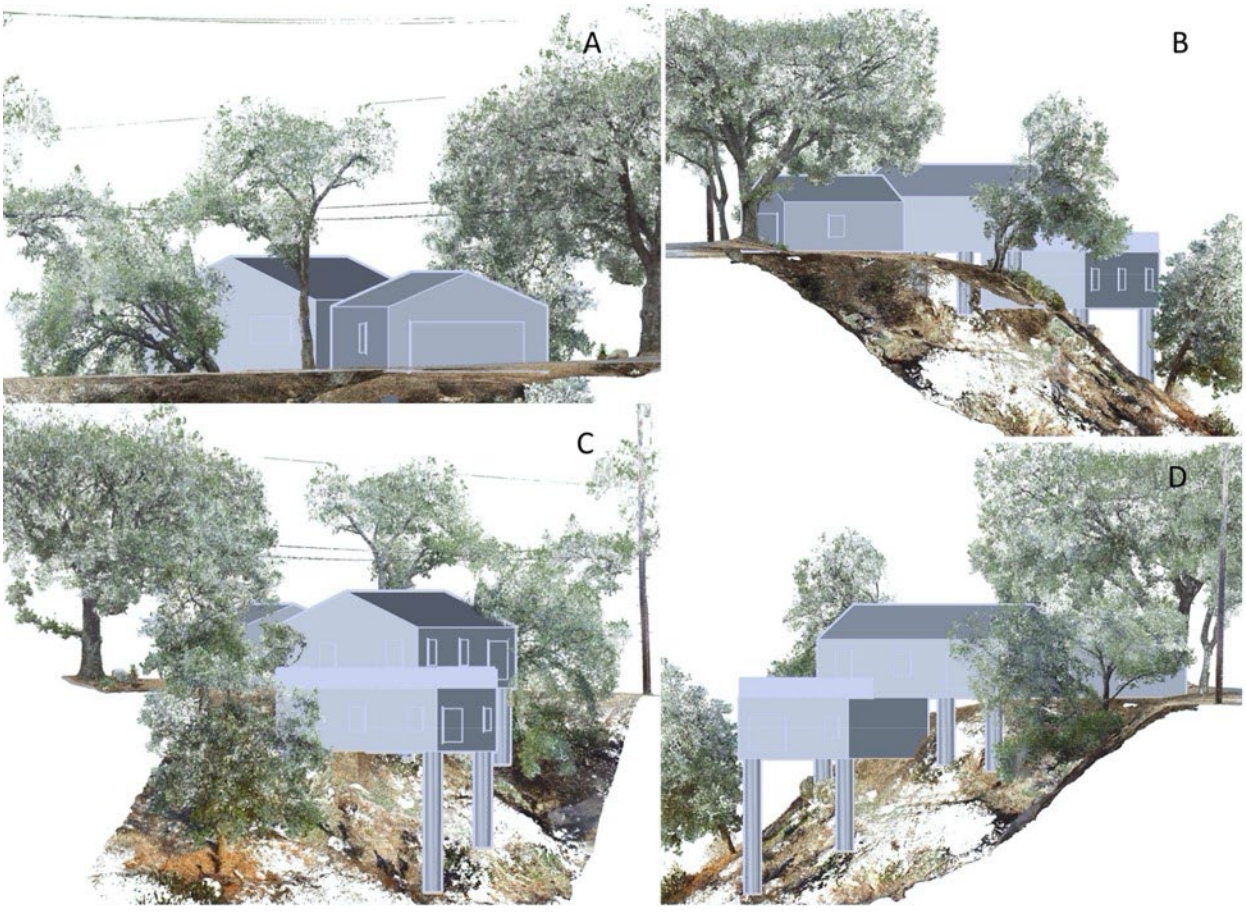


Figure 7-2: Two-Level Alternative Elevations[604]

Construction Scenario

The construction scenario for the alternative would be similar to the project as proposed in that it would incorporate a deep-pile foundation with a mix of reinforced concrete, conventional framing and other building components characteristic of single-family residences. However, the alternative would reduce the staging area available during some phases of construction because the project footprint encroaches into area accessible under the project as proposed.

Comparative Impacts

[603] Source: Applicant
[604] Source: Applicant
A: East
B: North
C: West
D: South

Aesthetics

The two-level alternative would be expected to result in a mixed balance of impacts. The alternative would adhere to all zoning regulations. The alternative would have a lower height and maximum height above street grade plane, but because the garage would be placed nearer the roadway, the alternative would still subtend a comparable vertical angular FOV, as well as a somewhat larger horizontal angular FOV, integrated across visible vantages at eye level on Canyon Crest Road. The alternative would not satisfy as many of the Hillside Management Area Sensitive Design Guidelines. The alternative would remove a greater number of oak trees, which help to define the aesthetic character of the neighborhood and blend residential structures in with their surroundings. On balance, there would be no objective basis to find the alternative aesthetically superior.

Agriculture and Forestry Resources

The two-level alternative would be expected to result in similar potential impacts to agriculture or forestry resources. As for the project as proposed, the alternative would not impact any agricultural resources. The alternative would require the removal of additional oak trees, which would however also be replaced pursuant to the standard Oak Tree Permit process.

Air Quality

The two-level alternative would be expected to result in similar construction impacts to air quality and a similar operational impact. As for the proposed project, the alternative would not be expected to exceed any of the short-term construction or long-term operational thresholds of significance for air quality.

Biological Resources

The two-level alternative would be expected to have a greater short-term impact on biological resources and a similar long-term impact. The alternative would require the removal of three additional mature oak trees compared to the project as proposed, with a correspondingly greater short-term impact on biological resources (which would not, however, remove more than 100” of collective trunk diameter or any heritage tree). Pursuant to the Oak Tree Ordinance, the removed trees would be replaced in a 2:1 ratio, and long-term impacts would therefore be expected to be substantially similar.

Cultural and Tribal Cultural Resources

The two-level alternative would be expected to have a similar potential to impact cultural resources. While the amount of cut excavation would be reduced, the alternative would increase the extent of ground disturbance compared to the project as proposed.

Geology/Soils

The two-level alternative would be expected to result in similar potential impacts from soils disturbance. While limited to shallower depth and lower quantity of grading, the alternative would have a larger ground disturbance area. The alternative would still require a similar deep-pile foundation in both the main structure and detached garage, increasing the number of piles and spoil from the augering of piles, which would be expected to be removed from the project parcel to avoid provisioning for fill grading with the spoil.

Greenhouse Gas Emissions and Energy

The two-level alternative would be expected to result in similar potential impacts from greenhouse gas emissions. The extent of the building envelope and its efficiency levels would be expected to be similar. However, the alternative would not be expected to generate as much electricity from its photovoltaic system, due to a less optimal orientation of the roof-mounted panels. Therefore, some of the alternative's net-energy demand could be satisfied by utilities that emit greenhouse gas emissions in the production of electricity.

Hazards and Hazardous Materials

The two-level alternative would be expected to result in similar potential impacts with respect to hazards and hazardous materials. The alternative would remain a single-family home in the same location and would not be expected to generate any additional hazards or hazardous materials.

Hydrology and Water Quality

The two-level alternative would be expected to result in similar impacts with respect to hydrology and water quality. The alternative would remain subject to the same Low Impact Development requirements and would introduce a similar, albeit somewhat greater, extent of impervious area to the project parcel.

Land Use and Planning

The two-level alternative would be expected to result in similar impacts with respect to land use and planning. The alternative would remain a single-family home on a residentially zoned, vacant lot, that complies with all applicable land use regulations.

Mineral Resources

The two-level alternative would be expected to result in substantially similar impacts with respect to mineral resources. The alternative would remain a single-family home on a residentially zoned, vacant lot on which commercial mineral extraction is not permitted.

Noise

The two-level alternative would be expected to result in similar potential impacts from noise. Given a similar construction scenario, the alternative would not be expected to result in substantially different noise impacts.

Population/Housing

The two-level alternative would be expected to result in substantially similar impacts with respect to population/housing. The alternative would remain a single-family home on the same residentially zoned, vacant lot, with the same insubstantial increase in the population and housing supply.

Public Services

The two-level alternative would be expected to result in similar impacts with respect to public resources. The alternative would remain a single-family home on the same residentially zoned, vacant lot, with the same public service requirements.

Recreation

The two-level alternative would be expected to result in similar impacts with respect to recreation. The alternative would remain a single-family home on the same residentially zoned, vacant lot.

Transportation

The two-level alternative would be expected to result in similar impacts to transportation. The extent of the building envelope would be similar, and the project would remain a single-family home on the same residentially zoned, vacant lot, with provision for two parking spaces. While less staging area would be available on the project parcel, the alternative would still be required to comply with all applicable regulations governing impedance of traffic on Canyon Crest Road.

Utilities and Service Systems

The two-level alternative would be expected to result in similar impacts to utilities and service systems. The two-level alternative would remain a single-family home on a residentially zoned, vacant lot, with the same characteristic impacts to utilities and service systems.

Wildfire

The two-level alternative would be expected to result in similar potential impacts to wildfire. The alternative would retain similar assemblies and building code requirements for fire resistance.

Conclusion

While all of the two-level alternative project's impacts would be expected to remain less than significant, the alternative would not be expected to result in any substantive net reductions in impact in any area of analysis. As the two-level alternative would also be less effective in meeting some project objectives, there would be no reasonable basis or legitimate public purpose to prefer this alternative to the project as proposed.

7.4 Environmentally Superior Alternative

Pursuant to State CEQA Guidelines Section 15126.6(e)(2), "[i]f the environmentally superior alternative is the "no project" alternative," an EIR must "identify an environmentally superior alternative among the other alternatives." The "no project" alternative was removed from potential consideration for the reasons attributed above. As attributed in the analysis of Section 5, the project as proposed is not expected to result in any potentially significant impacts. Therefore, the consideration of alternatives does not have any meaning in considering whether an alternative could avoid or mitigate below a level of significance. Nevertheless, a consideration of which design would most reduce less than significant impacts was undertaken in Section 7.3.

Table 7-1: Summary of Attributes

Attribute	Project	Two-level Alternative
Building footprint(s)	1,162sqft.	1,900sqft.
Developed Area (footprint + driveway)	<2,000sqft.	<2,500sqft.
Building Footprint percentage of lot	<3%	<5%
Developed Area percentage of lot	<5%	<6%
Grading amount ($yd.^3$)	40 cut / 40 fill	0
Number of Oak Trees Removed	1	4
Maximum Height	~33'	~30'
Maximum Height Above Street Grade Plane	~25'	~15'

Pursuant to that analysis, and as summarized in Table 7-1: Summary of Attributes, the project as proposed is an environmentally superior or equivalent design.

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10. ACRONYMS AND ABBREVIATIONS

Acronyms

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACE	Areas of Conservation Emphasis
AEA	Additional Environmental Analysis
APEFZ	Alquist-Priolo Earthquake Fault Zone
ANSI	American Nation Standards Institute
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
APN	Assessor's Parcel Number
ARA	Agricultural Resource Areas
ASTM	American Society for Testing and Materials
BAU	Business As Usual
BIOS	Biogeographic Information and Observation System
BMP	Best Management Practices
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAP	Community Climate Action Plan
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CDFG	California Department of Fish and Game (now CDFW)
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFC	California Fire Code
CFD	Communities Facilities District
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHRIS	California Historic Resources Inventory System
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database

CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CPS	Cleanup Program Sites
CRHP	California Register of Historic Places
CRPR	California Rare Plant Rank
CSD	Community Standards District
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships Systems
CVC	California Vehicle Code
cy	cubic yards
dB	decibel
DOGGR	Division of Oil, Gas, and Geothermal Resources
DSA	Disturbed Soil Areas
DTSC	Department of Toxic Substances Control
EEP	Energy and Environmental Program
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESCP	Erosion and Sediment Control Plan
EV	Electric Vehicle
FAA	Federal Aviation Administration
FC	Federal Candidate
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal HighWay Administration
FMMP	Farmland Mapping and Monitoring Program
FMZ	Fuel Modification Zone
FOV	Field of View
FP	Fully Protected
FPD	Federally Proposed for Delisting
FPE	Federally Proposed as Endangered
FPT	Federally Proposed as Threatened
FRAP	Forest and Range Assessment Project
FT	Federally Threatened
GHG	GreenHouse Gas
GP	General Plan
gpcd	gallong per capita day
GPMM	General Plan Mitigation Measure
GSA	Gross Structural Area

H&SC	Health and Safety Code
HCD	Housing and Community Development
HCP	Habitat Conservation Plan
HMA	Hillside Management Area
Hz	Hertz
IBC	International Building Code
in./sec.	inches per second
IPAC	Information for Planning And Consulting
IPCC	Intergovernmental Panel on Climate Change
IRA	Identified Resource Area
ITE	Institute of Transportation Engineers
IWMP	Integrated Waste Management Plan
LACDPW	Los Angeles County Department of Public Works
LACSD	Los Angeles County Sanitation District
LAWC	Lincoln Avenue Water Company
LESA	Land Evaluation Site Assessment Model
LID	Low Impact Development
LLAD	Landscaping and Lighting District
LOS	Level of Service
LRTP	Long Range Transportation Plan
LST	Localized Significance Threshold
LTS	Less Than Significant
LTSWM	Less Than Significant With Mitigation
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MCUP	Minor Conditional Use Permit
MLD	Most Likely Descendent
MMTCO2eq	Million Metric Tons of CO2 equivalent
MND	Mitigated Negative Declaration
mph	miles per hour
MPO	Metropolitan Planning Organization
msl	mean sea level
MT	Metric Tons
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Water System
MUTCD	Manual on Uniform Traffic Control Devices
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Planning
NPDES	National Pollutant Discharge Elimination System
NOP	Notice of Preparation
NPL	National Priorities List

NRHP	National Register of Historic Places
OEM	Office of Emergency Management
OES	Office of Emergency Services
OHP	Office of Historic Preservation
OTP	Oak Tree Permit
PM	Particulate Matter
PPA	Park Planning Area
PPV	Peak Particle Velocity
PRC	Public Resources Code
RCM	Regulatory Compliance Measure
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Act Information System
RHNA	Regional Housing Needs Assessment
ROC	Reactive Organic Compounds
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S&U	Significant and Unavoidable
SA	Subsequent Activity
SARB	State Air Resources Board
SB	Senate Bill
SC	State Candidate
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SE	State Endangered
SEA	Significant Ecological Area
SLIC	Spills, Leaks, Investigations, and Cleanups
SMARA	Surface Mining and Reclamation Act
SR	State Rare
SRRE	Source Reduction and Recycling Element
SRA	State Responsibility Areas
SSC	Species of Special Concern
ST	State Threatened
SUSMP	Standard Urban Storm Water Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SZ	Scientific resource Zone
TAC	Toxic Air Contaminants
TCD	Traffic Control Device

TIA	Traffic Impact Analysis
TeNS	Technical Noise Supplement
TNM	Traffic Noise Model
TNW	Traditional Navigable Water
TPZ	Timberland Production Zone
TTCP	Traditional Tribal Cultural Places
UBC	Uniform Building Code
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tanks
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WDR	Waste Discharge Requirement
WL	Watch List
WOTUS	Waters Of The United States
WQC	Water Quality Certification
WRP	Water Reclamation Plant
WTP	Water Treatment Plant

11. APPENDICES

A. NOTICE OF PREPARATION

B. HILLSIDE MANAGEMENT AREA SENSITIVE DESIGN ASSESSMENT

C. CALCULATION DETAILS FOR CALEEMOD

D. BIOLOGICAL RESOURCES ASSESSMENT REPORT

E. ADDENDUM TO OAK TREE REPORT AND OAK TREE REPORT

F. AB52 TRIBAL CULTURAL RESOURCES COMPLIANCES CHECKLIST

G. ADDENDUM TO GEOTECHNICAL REPORT AND GEOTECHNICAL REPORT

H. ARMY CORPS OF ENGINEERS NO PERMIT REQUIRED DETERMINATION

I. STATE CEQA GUIDELINES SECTION 15168 CHECKLIST

J. STATE CEQA GUIDELINES SECTION 15183.3 CHECKLIST

K. STATE CEQA GUIDELINES SECTION 15183.3/APPENDIX N CHECKLIST

L. CATEGORICAL EXEMPTION CHECKLIST

11. APPENDICES

A. NOTICE OF PREPARATION

LA COUNTY PLANNING

AMY J. BODEK, AICP
Director,
Regional Planning

DENNIS SLAVIN
Chief Deputy Director,
Regional Planning

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

DATE: May 8, 2023

TO: State Clearinghouse, Responsible Agencies, Trustee Agencies, Organizations and Interested Parties

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, section 15082(a) of the California Code of Regulations

The County of Los Angeles ("County") is the lead agency pursuant to the California Environmental Quality Act ("CEQA") and intends to prepare an Environmental Impact Report ("EIR") for the proposed project identified below. The County has prepared this Notice of Preparation ("NOP") to provide Responsible Agencies and other interested parties with information describing the project and to identify its potential environmental effects pursuant to State requirements.

AGENCIES: The County requests your agency's views on the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project, in accordance with Title 14 ("State CEQA Guidelines"), section 15082(b) of the California Code of Regulations. Your agency will need to use the EIR prepared by the County when considering any permits that your agency must issue, or other approval for the project.

Pursuant to CEQA Section 21080.4(a), the following list of agencies, among others, have been sent the NOP:

- Regional Water Quality Control Board, Los Angeles Region
- United States Army Corps of Engineers
- South Coast Air Quality Management District
- California Department of Fish and Wildlife
- California Office of Planning and Research

ORGANIZATIONS AND INTERESTED PARTIES: The County requests your comments and concerns regarding the environmental issues associated with construction and operation of the proposed project.

PROJECT & REQUIRED PERMIT(S):
Project Name: 3577 Canyon Crest Road Single-Family Residence
Project Number**:** R2014-02411-(5)
Minor Conditional Use Permit: RMCP-201400014
Oak Tree Permit: ROAK-201400035
Environmental Review: RENV-201400194

PROJECT APPLICANT: Stephen Kuhn

PROJECT LOCATION: APN**:** 5830-003-016, 3577 Canyon Crest Road, Altadena, CA 91001

PROJECT DESCRIPTION:
The proposed project is the construction and occupancy of a 1,555 square-foot, single-family home with a 397 square-foot attached garage on a vacant residential parcel of 1.02 acres ("project") in Altadena, a census-designated place and urbanized area in the unincorporated area of the County of Los Angeles ("County"). The project parcel is located approximately 1,000 feet south of the Angeles National Forest and approximately 14 miles northeast of the County civic center, in the West San Gabriel Valley Planning Area. The project would be sited on the eastern portion of the project parcel in an existing residential neighborhood adjacent to other residences in and adjacent to Millard Canyon.

The proposed development footprint would be located more than 150 feet from the nearest waters, as determined by a United States Army Corps of Engineers wetlands delineation – an intermittent, seasonal feature tributary to the Arroyo Seco in the bottom of Millard Canyon. In association with this feature, a portion of the project parcel outside the development footprint is designated by the County as part of the Altadena Foothills and Arroyos Significant Ecological Area ("SEA"), as of December 2019. The project would continue pre-existing exempt fuel modification activities within the SEA, relative to adjacent existing single-family residences, which would be subject to compliance with the requirements of the SEA ordinance. The project parcel contains the California sagebrush scrub and coast live oak woodland plant communities.

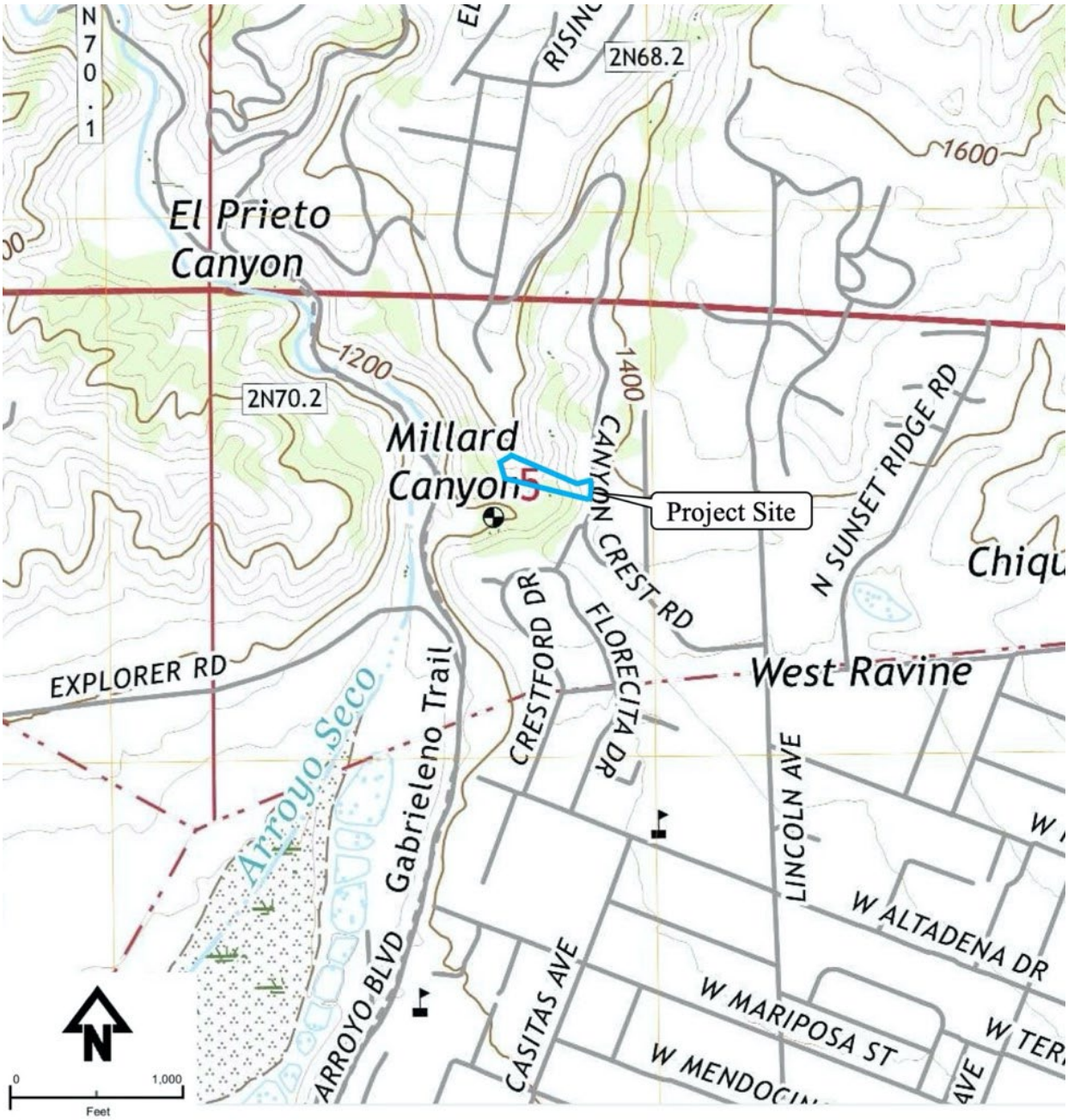
The proposed design is terraced to complement the natural topography, consistent with the County's Hillside Management Area Sensitive Design Guidelines, and is one or two stories above grade in each building segment. The proposed design places most of its volume below the level of Canyon Crest Road, from which the home would be accessed with a driveway comprised of an open-celled tree root protection system. The total development footprint, comprised of the driveway and building footprint at grade, is approximately 2,000 square feet. The project would incorporate no other hardscape.

A single-family residence is permitted with a Site Plan Review in the County's R-1-10,000 (Single-Family Residence - 10,000 Square Feet Minimum Required Lot Area) Zone. However, a Minor Conditional Use Permit ("MCUP") is required in the Altadena Community Standards District to construct on a slope greater than 25 percent. In addition, an Oak Tree Permit ("OTP") is required for the removal of one non-heritage coast live oak (*Q. agrifolia*) tree and encroachment into the protected zones of 10 non-heritage coast live oak trees on and adjacent to the project parcel, which form a part of a degraded oak

woodland that extends through the developed residential area in all directions for hundreds or thousands of feet. Consistent with the standard requirements of the County Oak Tree Ordinance, the project would incorporate replacement plantings for the removed oak tree, at a size and ratio to be determined through the permit process; oak-compatible landscaping comprising a native understory; and Best Management Practices and design features before, during, and after construction to promote the health of the oak trees on the project parcel. The project would also rehabilitate some of the existing impacts from the surrounding residential development that have degraded the oak trees affected by the project.

The following discretionary approvals are required by the County to implement the project:

1. Minor Conditional Use Permit
2. Oak Tree Permit



Project Vicinity Topographic Map[1]

[1] Source: United States Geological Survey, Pasadena Quadrangle. Available at: https://ngmdb.usgs.gov/topoview/viewer/#14/34.1938/-118.1363.

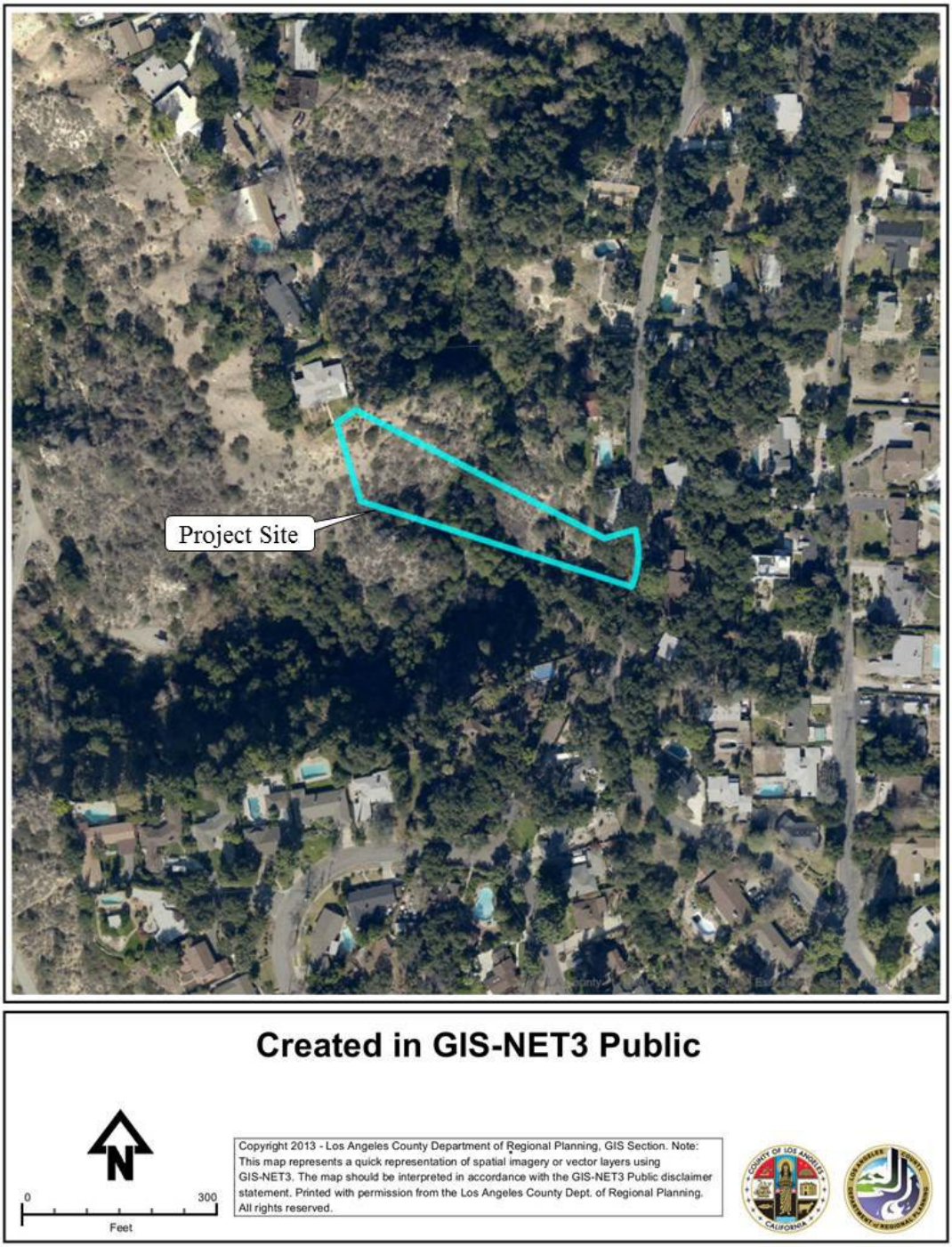


Figure 0-1: Project Vicinity Aerial Photograph[2]

[2] Source: County Department of Regional Planning: Geographic Information System-NET Public. Available at: https://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

PROJECT BACKGROUND

An earlier, substantively equivalent form of the proposed project was previously analyzed with an Initial Study, resulting in a Negative Declaration (SCH#2015121100). No responsible or trustee agency and no member of the public commented during the period of public review. The project's entitlements were subsequently approved by the County Board of Supervisors in 2017.

This EIR is being prepared at the request of the Applicant, a private individual, following litigation challenging that Negative Declaration under Los Angeles Superior Court Case # BS167311 and California Appellate Court Case # B290379 (*Canyon Crest Conservancy v. County of Los Angeles* (2020) 46 Cal.App.5th 398). As a result of the litigation, the Applicant requested the County set aside the earlier entitlement approvals, citing the unsustainable cost of that litigation, which the County did in 2018. In doing so, the County indicated that the application would remain on file should the Applicant wish to resume processing. The County is preparing this EIR in accordance with State CEQA Guidelines Section 15084(d)(3).

As Lead Agency, the County maintains its discretion to consider approval of these entitlements under any other sufficient track(s) of CEQA compliance it may find to be valid, in addition to, or instead of, the project-specific EIR, including:

1. Class 3 and/or 4 Categorical Exemption from CEQA;
2. Subsequent Activity or Continuation of the 2035 County General Plan Already Analyzed in Its Program EIR, Pursuant to State CEQA Guidelines Section 15168;
3. Exemption from Further Analysis of Project Effects Conforming with Provisions of State CEQA Guidelines Section 15183 and CEQA Section 21083.3;
4. "Complete Exemption" Pursuant to State CEQA Guidelines Section 15183.3 Streamlining for Infill Projects.

POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROJECT

Pursuant to State CEQA Guidelines Section 15082(a)(1), a NOP shall include "[p]robable environmental effects of the project" in addition to the project description and location.

Pursuant to State CEQA Guidelines Section 15063(a), "an Initial Study is not required" by CEQA and no Initial Study has been prepared to inform the scope of this EIR. The EIR will address each impact area of analysis in State CEQA Guidelines Appendix G, as set forth below.

As a result of work and analysis on the project to date, the County provides the following list of potential environmental effects across the impact areas of analysis. The County will attribute the expected impact level of significance according to the governing impact significance criteria documented or derived in the EIR, considering the constraints of pre-existing regulation and standard conditions applied to single-family residential development.

Aesthetics
The project would not be visible from any designated scenic viewpoint, roadway or public resource dedicated to the provision of scenic value, such as a public park, trail, garden, or waterway.
The project would alter the visual environment from certain public vantages on Canyon Crest Road by placing a structure and fencing where none existed, by removing one oak tree, and by pruning approximately 25% of the canopy of one other oak tree. Potential impacts related to aesthetics will be evaluated further in the EIR.
Agriculture and Forestry Resources
There is no designated agricultural land on or near the project parcel, and the project parcel is not zoned to permit the harvest of forestry resources. Potential impacts related to agriculture and forestry resources will be evaluated further in the EIR.
Air Quality
During the period of occupancy, the project would generate emissions affecting air quality. These long-term emission sources would be expected to include vehicular exhaust from daily transportation associated with occupant usage; emissions associated with the generation of energy used by the project, site and landscape maintenance; and incidental emissions from typical residential products and equipment.
During construction, the project would generate emissions affecting air quality. These short-term emission sources would be expected to include exhaust from combustion equipment and vehicles used for material and personnel transport, dust generation from soil disturbance areas, and the application of architectural coatings. Potential impacts related to air quality will be evaluated further in the EIR.
Biological Resources
Grading and vegetation disturbance or removal during construction of the project would convert a small amount of common habitat in which designated species may be present, as throughout the neighborhood and residential community of Altadena. However, no sensitive, candidate or special status plant or animal species or sensitive natural communities, as designated by the California or United States Departments of Fish and Wildlife, were observed during qualified surveys of the project footprint of development or surroundings.
The project would remove one coast live oak tree adjacent to the development footprint; establish replacement plantings for the removal; encroach upon portions of the protected zones of 10 additional oak trees on or adjacent to the project parcel, comprising a portion of a stand of degraded oak woodlands; and rehabilitate some of the existing impacts of surrounding development on the protected zones of oak trees on the project parcel.
The project would continue to control plant species and remove dead vegetation consistently with the pre-existing condition, in implementing a standard fuel

modification plan establishing defensible space consistent with fuel modification requirements for structures located in Very High Fire Hazard Severity Zones ("VHFHSZ"). A portion of the project parcel outside the development footprint is designated by the County as part of the Altadena Foothills and Arroyos Significant Ecological Area ("SEA"), as of December 2019. The project would continue pre-existing exempt fuel modification activities within the SEA, relative to adjacent existing single-family residences, which would be subject to compliance with the requirements of the SEA ordinance. Potential impacts related to biological resources will be evaluated further in the EIR.
Cultural and Tribal Cultural Resources
No historic resources, as described in State CEQA Guidelines Section 15064.5, are identified on the project parcel, and the project would not be expected to impact any resource that may conform to criteria for historic value.
During construction, excavation in preserved volumes could disturb artifacts of archaeological or paleontological value, as throughout the Los Angeles region. Potential impacts related to cultural and tribal cultural resources will be evaluated further in the EIR.
Geology/Soils
During construction, pile augering would interact with the geological formations underlying the footprint of the structure. Potential impacts related to geology/soils will be evaluated further in the EIR.
During construction, grading would result in temporary soil disturbance areas adjacent to a slope with the potential for erosion and siltation. Potential impacts related to geology/soils will be evaluated further in the EIR.
Greenhouse Gas Emissions and Energy
During construction and the period of occupancy, the project would generate greenhouse gas emissions and use energy. Potential impacts related to greenhouse gas emissions and energy will be evaluated further in the EIR.
Hazard and Hazardous Materials
The constituent databases of the Cortese List indicate that no known contamination exists on the project parcel that might adversely affect the project.
During construction and the period of occupancy, the project would place a structure and constituent building materials, some of which would be combustible, in a VHFHSZ.
During construction and the period of occupancy, the project would make limited use of substances that could be hazardous if misused. Potential impacts related to hazards and hazardous materials will be evaluated further in the EIR.

Hydrology and Water Quality
During construction and the period of occupancy, the project would alter the flow of stormwater within the footprint of development. Substances that can exist in solute or suspension with water could, if exposed to stormwater, degrade to some extent the quality of that stormwater. Potential impacts related to hydrology and water quality will be evaluated further in the EIR.
Land Use and Planning
The project would comply with all applicable development standards and would be consistent with the Land Use Element of the County General Plan and with the Altadena Community Plan. Potential impacts related to land use and planning will be evaluated further in the EIR.
Mineral Resources
There are no designated mineral resources of statewide or regional significance on or adjacent to the project parcel, and the project parcel is not zoned to permit extraction of mineral resources. Potential impacts related to mineral resources will be evaluated further in the EIR.
Noise
During the period of occupancy, noise levels at nearby sensitive receptors would increase from the addition of a residence where none previously existed, including typical residential activities, equipment, and associated vehicular traffic.
During construction, noise levels would increase at nearby sensitive receptors from construction activities and the use of construction equipment. Potential impacts related to noise will be evaluated further in the EIR.
Population and Housing
The project would add one single-family residence to the housing supply in the County. Potential impacts related to population and housing will be evaluated further in the EIR.
Public Services
Development of the project parcel with one single-family home would not require an expansion to local fire protection resources or result in any environmental impacts involving construction of new fire protection facilities.
Development of the project parcel with one single-family home would not require an expansion to local law enforcement resources or result in any environmental impacts involving construction of new law enforcement facilities.
The project would not generate a substantial number of new students in the school district. New or expanded school facilities would not be required to provide classroom and support space for these low numbers of additional school age children. Potential impacts related to public services will be evaluated further in the EIR.

Recreation
During the period of occupancy, residents of the project would be expected to visit local and regional parks. Potential impacts related to recreation will be evaluated further in the EIR.
Transportation
During the period of occupancy, vehicles carrying future occupants would add to existing usage of the transportation system. 10 or fewer additional trips per day are typically associated with the operation of one new single-family home.
During construction, vehicles carrying workers to and from the project parcel and delivering construction materials would add to existing usage of the transportation system. Seven (7) or fewer additional trips per day are associated with the construction of one new single-family home.
The project's connection to the public sewer main would require the temporary closure of a portion of one lane of traffic on Canyon Crest Road during limited hours of several days.
The project would provide housing in the Pasadena Regional Statistical Area, which has had and is projected to continue to have a high ratio of jobs to housing, thereby contributing to reduced per capita Vehicle Miles Traveled in the County. Potential impacts related to transportation will be evaluated further in the EIR.
Utilities and Service Systems
During construction and the period of occupancy, the project would increase local water demand.
During construction and the period of occupancy, the project would generate wastewater.
During construction and the period of occupancy, the project would consume electricity and limited quantities of transportation fuel.
During construction and the period of occupancy, the project would generate solid waste. Potential impacts related to utilities and service systems will be evaluated further in the EIR.
Wildfire
During construction and the period of occupancy, the project would introduce typical residential uses and activities, including electricity connections and equipment, like cooking grills, with some potential for flame initiation. Potential impacts related to wildfire will be evaluated further in the EIR.

SCOPING MEETING

As to the circumstances for which CEQA requires a scoping meeting, pursuant to State CEQA Guidelines Section 15082(c)(1) and 15206(a)(2)(b)(2), the project does not meet any of the criteria for "statewide, regional or areawide significance." Pursuant to State CEQA Guidelines Section 15082(c)(3), the project does not "affect highways or other facilities under the jurisdiction of the Department of Transportation." Pursuant to CEQA Sections 21104(a) and 21153, the Applicant did not request any scoping meeting for this project. Pursuant to State CEQA Guidelines Section 15082(c), should any responsible agency, trustee agency, or the Office of Planning and Research request a scoping meeting in response to this NOP, a scoping meeting would be scheduled and noticed in accordance with CEQA Section 21083.9.

Given the nature of the project, its potential environmental effects, and because the proposed EIR will include all impact areas of analysis, no scoping meeting is planned at this time.

PUBLIC REVIEW PERIOD: The County has determined to make this NOP available for public review and comment pursuant to Title 14, section 15082(b) of the California Code of Regulations. The comment period for the NOP begins on May 8, 2023 to June 7, 2023.

Any comments provided should identify specific topics of environmental concern and your reason for suggesting the study of these topics in the EIR.

Please direct all written comments to the following address:

Michele Bush
LA County Planning
Foothills Development Services Section
320 West Temple Street
Los Angeles, CA 90012
Tel: (213) 893-7008
Fax: (213) 626-0434
mbush@planning.lacounty.gov

All written responses will be included as Appendices in the Draft EIR and their contents considered in accordance with State and County environmental guidelines.

如果您有任何疑問請致電 (213) 974-6411.

Si necesita más información por favor llame al (213) 974-6411.

DOCUMENT AVAILABILITY: The NOP is available for public review during regular business hours at the following locations:

- Altadena Library, 600 E. Mariposa Street, Altadena, CA 91001

- San Gabriel Valley Field Office, 125 S. Baldwin Avenue, Arcadia, CA 91007

Thank you for your participation in the environmental review of this project.

B. HILLSIDE MANAGEMENT AREA SENSITIVE DESIGN ASSESSMENT

Hillside Sensitive Design Guidelines Assessment

The purpose of this Appendix is to attribute the compliance of the project with the stated success criteria of the County's Hillside Management Area Sensitive Design Guidelines. As attributed in the EIR, this compliance is not mandatory under the County's Hillside Management Ordinance, because the project is exempt from that Ordinance pursuant to County Code Section 22.56.217(C)(1), as one single-family residence with less than 15,000 cubic yards of grading.

As the Design Guidelines state:

"Due to the variety, size, geology, hydrology, and complexity of development projects, there is no set number of design measures required in a project to ensure that it, as stated in subsection A of Section 22.56.217 of Title 22, preserves and enhances the physical integrity and scenic values of HMAs, provides open space, and is compatible with and enhances community character. Staff and project applicants are advised that *four design measures per category* (Site Planning, Grading and Facilities, Road Circulation, Building Design, and Landscaping) is typically the appropriate number of design measures to be included in a project to allow the required Ordinance findings to be made for that project.

Staff and applicants are also advised that these numbers are general recommendations, and not absolute requirements. Because projects are tailored to the individual site requirements and conditions, it is possible that more or less measures may be appropriate. When considering whether to support a request for a lower number of measures from an applicant, factors that staff may consider include density, the size of the project, or whether the project is able to meet several partial credit design measures.

In situations where it is unclear whether a design guideline is being fully utilized, County staff will use its recommendation for whole or partial design measure "credit" towards satisfying the Ordinance findings." (emphasis added).

Generally, a project may comply with a guideline by either implementing it or transcending the scope of an otherwise applicable provision (e.g. as if a guideline applies only where adverse impacts of a particular type are present, such as landscape retaining walls, and the project does not have impacts of that type).

County Code Section 22.56.217.B.9 notes that " 'Sensitive Hillside Design Techniques' means any site planning, engineering, landscaping, and/or architectural design technique(s) that, individually or combined, minimize horizontal and vertical cut or fill hillside disturbance; minimize the total volume of grading; minimize impact to scenic hillside views; and are compatible with or enhance community character. Such techniques may be found in the Hillside Design Guidelines."

1. Site Planning

Conserve land area and form, link open spaces, and promote a more attractive pattern of development that complements the hillside terrain.

The guidelines outlined in this section pertain to the structure of subdivisions or neighborhood layout and thus are not applicable to a single-family residence on an existing lot, though the correspondence of the project with these intentions is referenced.

Design measures

1.1. Locate 50% or more of the project's buildings and developable lots within 500 feet (ft.) of existing sewer, water and roadway infrastructure.

100% of the home is located within 100ft of existing sewer, water and roadway infrastructure. This guideline is satisfied.

1.2. Locate at least 50% of the development footprint on the flattest portions of the site (i.e., those areas having slopes of less than 25%) when that area does not contain rare, sensitive, or State or federally listed threatened or endangered species.

The project makes the fullest possible use of the 1,000+sqft flat area at road level for a permeable gravel driveway, given its required usage as a construction staging area.

1.3. Utilize all previously graded or disturbed areas on the site for new development to the greatest extent possible, before developing new areas, so that new development within undisturbed areas is reduced.

The flat area at road level has been previously graded and disturbed, and this area is made use of to the extent possible for a driveway and staging. However, the placement of part of the structure in this area would have resulted in greater impacts to oak trees and likely inadequate staging area.

1.4. For new land divisions, contain at least 75% of developable lots within blocks that have a perimeter of ¼ mile (1,320 ft.) or less, measured from the roadway centerline. (Note: The purpose of this design measure is to avoid unattractive "superblocks" of development on the hillside and instead use smaller block sizes that are more distinguishable from each other and can better fit in with the natural topography.)

This guideline is not applicable.

1.5. For new land divisions, where lot clustering is allowed and compatible with community character, reduce all single-family lot sizes to 15,000 square feet (sf.) or less.

This guideline is not applicable.

1.6 For new land divisions, utilize a variety of small, medium and large lot sizes (such as 5,000, 10,000 and 20,000 sf.) in such a manner that it will produce different building layouts and sizes.

This guideline is not applicable.

1.7. Throughout the project site, differentiate elevations so that elevations between adjacent pads, between adjacent blocks, or between adjacent streets, range from 1 to 30 ft.

This guideline is not applicable.

1.8. Place the narrow side of the lot (or building pad) such that it allows the building façade to face the roadway.

The minor axis of the project is designed to face the roadway, in contrast to most other homes on lower Canyon Crest Road, which present their major axis. This guideline is satisfied.

1.9. Utilize terraced building pads in select areas within the site to preserve slopes that exceed 50%.

The project incorporates a terraced design in the intent of this guideline but makes limited use of grading to create new building pads because this increased grading would have an adverse impact on oak trees to remain.

1.10. Preserve the most prominent and unique slopes, hilltops and ridgelines on the site for recreational uses within dedicated (or common) open space areas.

This guideline is not applicable to a single existing parcel.

1.11. Exceed the minimum Ordinance open space acreage requirements by 10% or more.

Pursuant to County Code Section 22.56.217.E.1.b, the minimum Ordinance open space acreage requirement for any land use designation except "rural" is 25%. ("Required Open Space. At least 25 percent of the net area of the development site shall be provided as required open space."). As the footprint of development of the home is less than 5% of the coverage of the more than 1-acre project site, it not only meets this requirement but also preserves more than 10% in excess of the "rural" open space acreage requirement of 70%. This guideline is satisfied.

1.12. Preserve contiguous undisturbed open space throughout the site, utilizing segments of land that are at least 150 ft. wide.

This guideline is not applicable.

1.13. Utilize at least 25% of the overall project's disturbed (improved) open space for recreational purposes.

This guideline is not applicable.

1.14. Locate and design improved open space as a buffer (recommended at least 50 ft. wide) between undisturbed open space and development.

The term "improved open space" is intended to refer to landscaped yards, patios and other developed areas in which no structures exist. The native terrain to the south and west of the

project footprint provides a buffer to the undisturbed riparian environment below the project site. This guideline is satisfied.

1.15. Create scenic vista points at prominent locations such as hilltops and ridgelines, providing amenities at the points and making them accessible to the public. When provided, this shall count as improved open space.

This guideline is not applicable.

1.16. Provide private (connector) trails or pedestrian paseos that link together all of the project's open space areas (1 acre or larger) and connect to any onsite or offsite public trails.

This guideline is not applicable.

1.17. For new land division blocks of development that exceed 800 ft. between intersections, design mid-block through-paths such as trails or pedestrian paseos, that connect to intervening streets or open space areas, and make the paths accessible to the public.

This guideline is not applicable.

1.18. Use any other site planning techniques not listed in this section that either through innovation or in consideration of specific site constraints or other specific project factors, are tailored to are tailored to allow the project to meet the findings required by this Ordinance.

The project is sited so as to follow the specific natural topography of the terrain, minimizing grading to a greater extent than much hillside residential construction. (*Compare* project's 30 cubic yards of balanced grading to 2,500 cubic yards of grading for a use permit in the Altadena Community Standards District and 15,000 cubic yards of grading for a use permit in a County Hillside Management Area). This guideline is satisfied.

Summation:

Though much of this section does not apply to one single-family residence on an existing parcel, the project complies with five guidelines, and with the intent of additional guidelines. This meets the generally accepted success criteria.

2. Grading and Facilities

Avoid mass landform alteration, preserve the physical shape of the hillside, and maintain pleasant views.

Design measures

2.1. For projects with more than 100,000 cubic yards of onsite earthwork, avoid any mass cut and fill grading that would result a 25 ft. or greater in elevation change from the existing natural grade to the finished manufactured grade at any one point on the site.

As the home does not have more than 100,000 cubic yards of onsite earthwork, it transcends the adverse effects referenced here. This guideline is satisfied.

2.2. Use contoured grading lines that match or closely match the existing topography, generally avoiding lines that trace 45 to 90 degrees against the natural contour.

The home requires negligible grading of less than a cubic yard outside its footprint, which closely approximates the existing terrain at the south-west corner of the driveway, and so is compliant with the intent of the rule to preserve the existing topography. This guideline is satisfied.

2.3. Utilize undulating banks for graded slopes in order to maintain the natural pattern of the topography to the greatest extent feasible.

The home requires negligible grading outside its footprint, and so is compliant with the intent of the guideline to preserve the existing topography. This guideline is satisfied.

2.4. Design the project's longer graded horizontal slope surfaces and slope increments (typically 300 or more ft. in length) to be variable in terms of height and spacing to replicate natural topographical patterns, taking into account hydrology design and any sewer, water and storm drain infrastructure.

The home requires negligible grading outside its footprint, and so is compliant with the intent of the guideline to preserve the existing topography. This guideline is satisfied.

2.5. Locate water tanks and other similar types of structures that are 20 ft. tall or taller so that their highest point is at least 50 ft. below the crest of the highest hilltop or ridgeline, on or off the site, that is located within 500 ft. of the water tank or similar structure.

This guideline is not applicable.

2.6. Locate visually intrusive structures (such as water tanks) so that they are hidden from public views, placing them behind hills, buildings, landscaping, existing trees or other more appropriate and attractive screening objects.

This guideline is not applicable.

2.7. Avoid berms and block walls that obstruct views from or to buildings. Instead, locate and

design the buildings in accordance with the other site planning, road circulation, building and landscaping design measures contained in these Guidelines.

The home does not make use of berms or block walls, and so is compliant with the intent of the guideline to minimize visual impacts from berms or block walls. This guideline is satisfied.

2.8. Design drainage facilities as multi-purpose site features that are attractively landscaped, conserve water, improve water quality, and provide opportunity for recreational activity. (Note: These features may be counted towards required open space acreage, as improved open space, if designed to the County's satisfaction. Such features should be located in areas already designated for improvement such as park sites, roadsides, or previously-graded flat areas.)

The home requires no new landscape drainage features, and given the reference to recreational activity, this guideline is not applicable.

2.9. Build retaining walls to be less than six ft. in exposed height, and terrace the walls where appropriate and in a manner that does not substantially increase visual impacts. Subject to the approval of Los Angeles County Department of Public Works.

The home does not make use of any exposed retaining walls, and so is compliant with the intent of the guideline to minimize visual impacts from retaining walls. This guideline is satisfied.

2.10. Use earth-tone colors and materials for exposed hardscape surfaces such as block walls, retaining walls, drainage terraces and storm gutters.

The home does not make use of exposed block walls, retaining walls, or drainage terraces. The existing drainage swale that runs across the home site is lined with native stone, and the roof drainage gutters and downspouts are concealed as an integral part of the roof and wall. This guideline is satisfied.

2.11. Use attractive designs and materials that are compatible with, or that enhance, community character for any walls or fencing used to enclose public facilities (such as debris and retention basins), especially when such facilities are in highly-visible locations and/or are designed as "multi-purpose" site features. (Note: Safety and security shall be maintained for the facilities when using a more attractive wall or fence design.)

This guideline is not applicable.

2.12. Use any other grading and public facility design techniques not listed in this section that either through innovation or in consideration of specific site constraints or other specific project factors, are tailored to the site and allow it to meet the findings required by this Ordinance.

The home makes use of stepped levels conforming to the existing grade to minimize the extent of cut and fill on the home site.

Summation:

This section again referenced several guidelines that apply only to larger subdivisions or mixed-use facilities. Many of the guidelines also assume the existence of more impactful design

properties, such as the use of exposed retaining walls, drainage devices, and grading outside the footprint of development. In creating a design that avoids these altogether, the home is compliant with the intention of the rules to minimize their impact, satisfying at least seven guidelines.

3. Road Circulation

Preserve the physical shape of the hillside, maintain good connectivity, and provide scenic roadway views.

All of the guidelines outlined in this section pertain to the structure of subdivisions or neighborhood layout and thus are not applicable to a single-family residence on an existing lot served by an existing roadway. In other words, all of these guidelines are not applicable.

Design measures

3.1. Provide at least two points of paved roadway access to a County highway (major or secondary) for any project (or portion of development) greater than 50 dwelling units and 10 acres in size. (Note: This practice should only be considered when the second road connection will not require a substantial amount of additional grading; special consideration may be given when connecting to an adjacent community or providing access to community services such as schools and parks.)

3.2. Locate and design new roadways to follow the existing natural slope contours, avoiding mass landform alteration and excessive grading.

- *Subject to the approval of Los Angeles County Department of Regional Planning.*
- *May be a private roadway or fire lane but shall be un-gated, accessible by the public, and of sufficient width to meet Los Angeles County Fire Department requirements.*
- *Subject to the sight distance, signing, striping and marking requirements of Los Angeles County Department of PublicWorks.*

3.3. Utilize private drives instead of public streets on 50% or more of the project road circulation system to allow slightly higher gradients (up to 15%) that result in less grading and better conformance to natural slope contours, taking into account hydrology design and any sewer, water and storm drain infrastructure.

3.4. Use undulating patterns and varying grades for roadway segments exceeding 1,000 ft. in length.

3.5. Connect roadways to form blocks wherever feasible (2,000 sf. or less block perimeter), such that at least 75% of the development footprint (to include public facilities) is contained within blocks. (Note: The purpose of this is to provide good access and connectivity for safety reasons, and to use roadways to buffer development from natural vegetated areas.)

3.6. Use culs-de-sac in limited instances, such as where road connections would require grading into 50% or greater slopes or grading into 25% or greater slopes for a distance of more than 500 ft.

3.7. Provide unpaved trail or paved pedestrian path thru-connections (e.g. pedestrian paseos) for all culs-de-sac. (Note: Fee-dedicated strips are recommended instead of easements on private lots.)

3.8. Utilize "edge" (single-loaded) roads along at least 50% of the development perimeter, in areas with steep hillside terrain, and to buffer development from undisturbed open space.

3.9. Place all new roadways and paved driveways at least 100 ft. below the crest of the tallest

hilltop or ridgeline located onsite, or offsite within 500 ft. of the project boundary.

3.10. Design "split" roadways or landscaped medians to preserve unique or important natural features (such as oak trees or rock outcroppings).

3.11. Use bridge design techniques that are attractive, maximize the preservation of natural watercourses, and allow easy wildlife migration beneath the bridge (minimum 6 ft. of vertical and horizontal clearance recommended).

3.12. Use private drives instead of public roadways when it will result in narrower roadway widths that create less grading. (Note: Private drives should conform to the Los Angeles County Private Drives and Traffic Calming Manual, and should not eliminate sidewalks or reduce sidewalk connections throughout the development.)

3.13. Use any other roadway circulation design techniques not listed in this section that either through innovation or in consideration of specific site constraints or other specific project factors, are tailored to the site and allow it to meet the findings required by this Ordinance.

4. Building Design

Promote more attractive views through building siting and orientation, and use of building materials and colors that complement natural hillside features.

Design measures

4.1. Place structures and/or limit their height so that their rooflines are equal to or below the elevation of the roadway grade of the development above.

Placing a home entirely below street grade would encroach nearer riparian habitat with greater ecological value. The three developments above the home are located at 3588 Canyon Crest, 3566 Canyon Crest and 3556 Canyon Crest. Peak and average roofline elevations above the street grade plane for those portions of the home visible from the road were obtained with LIDAR scans.

3588 Canyon Crest Road:

This home presents more than 60ft of frontage, with offsets to the road at peak elevations varying from ~28’ to ~49’. The height of the home above the street grade plane varies from ~27.5' to ~28.8'. As the roofline is uniform across this frontage, the average height above the street grade plane is therefore ~28.1', and the maximum height above the street grade plane is 28.8'.

Figure 1: Height of 3588 Canyon Crest above the street grade plane at SW corner

Figure 2: Height of 3588 Canyon Crest above the street grade plane at NW corner, and width

3566 Canyon Crest Road:

This home with its garage presents more than 105’ of frontage, with offsets to the road at peak elevations varying from ~39’ to ~52’, and offsets to the road at lower elevations closer still. The height of the home above the street grade plane varies from ~19.4' to ~25.6'. The average height of the garage above the street grade plane is no less than 19.4'. The average height of the home itself above the street grade plane is ~25.1'.

Figure 3: Height of 3566 Canyon Crest Road above the street grade plane at north of house

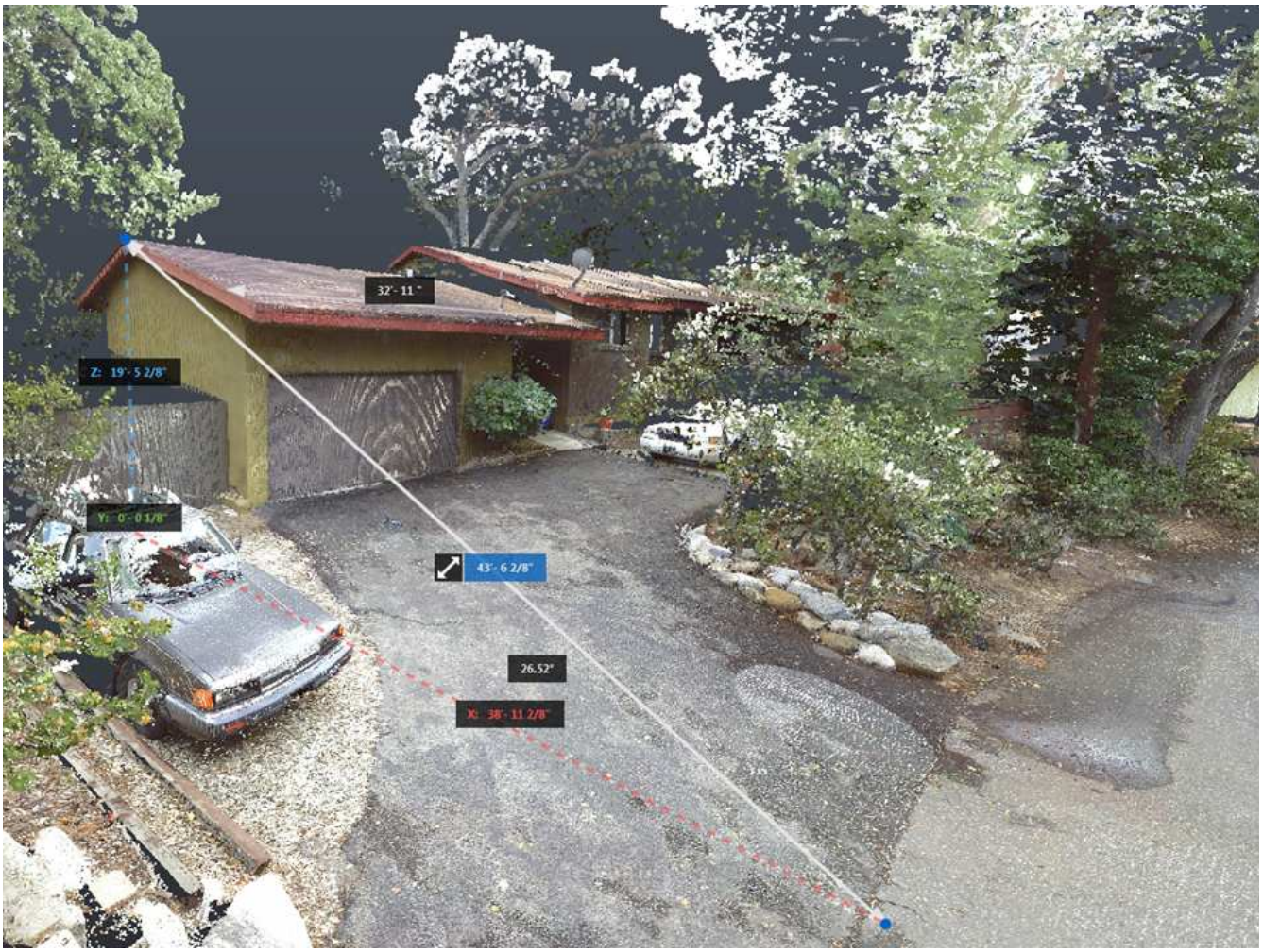


Figure 4: Height of 3566 Canyon Crest Road above the street grade plane at garage, and width

Figure 5: Height of 3566 Canyon Crest Road above the street grade plane at south of house, and width

3556 Canyon Crest Road:

This home presents nearly 30' of frontage in a profile of 2.5 stories, and an additional ~17' of frontage in a profile of 1.5 stories, with offsets to the road at peak elevations ranging from ~49' to ~51'. The height of the home above the street grade plane varies from ~29.6' to 38.2'. The average height above the street grade plane of the 2.5-story building segment is ~37.2'. The average height above the street grade plane in the 1.5-story building segment is ~29.6'. The maximum height of the home above grade is ~27'.

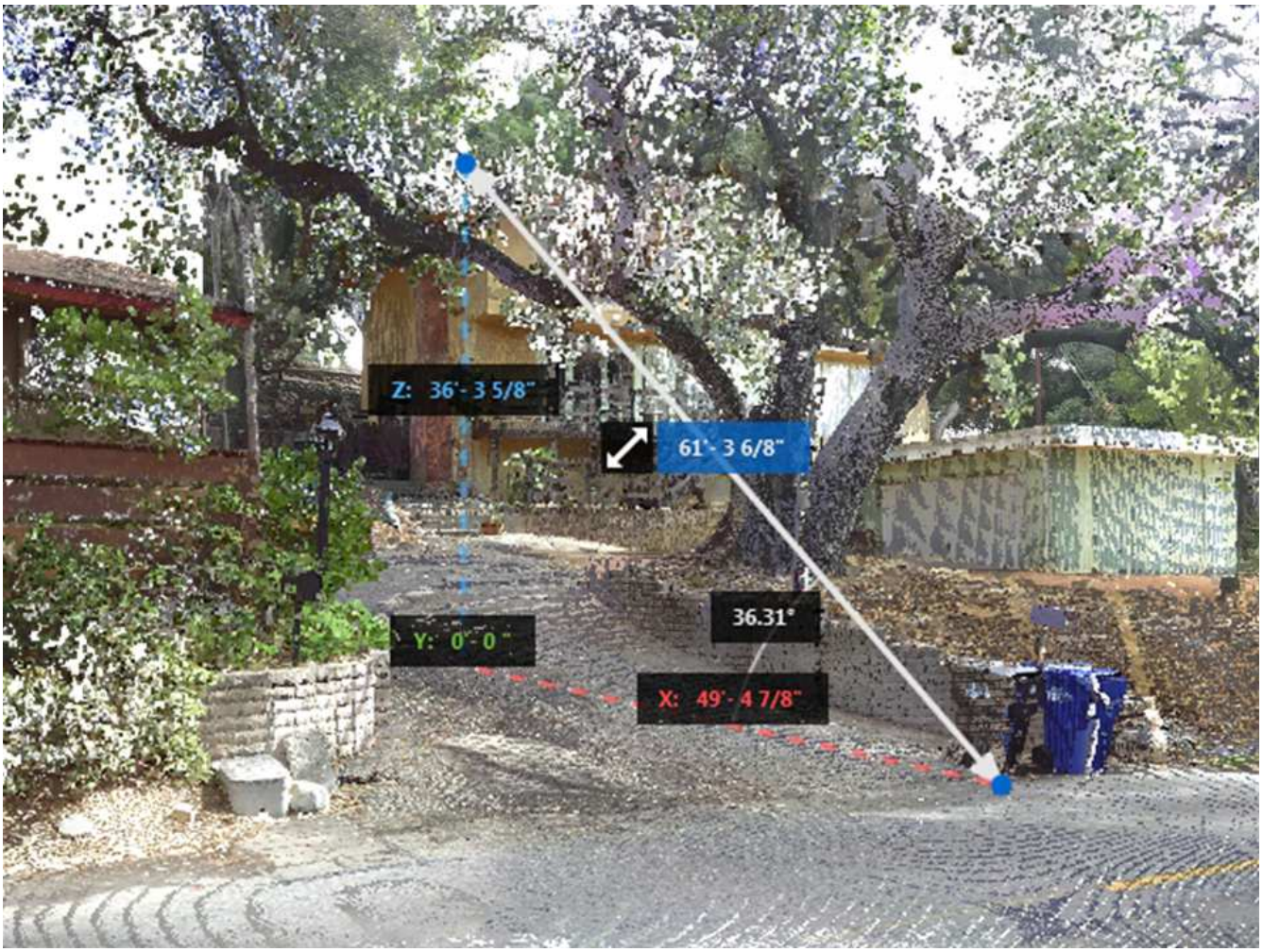


Figure 6: Height of 3556 Canyon Crest Road above the street grade plane, at north of house

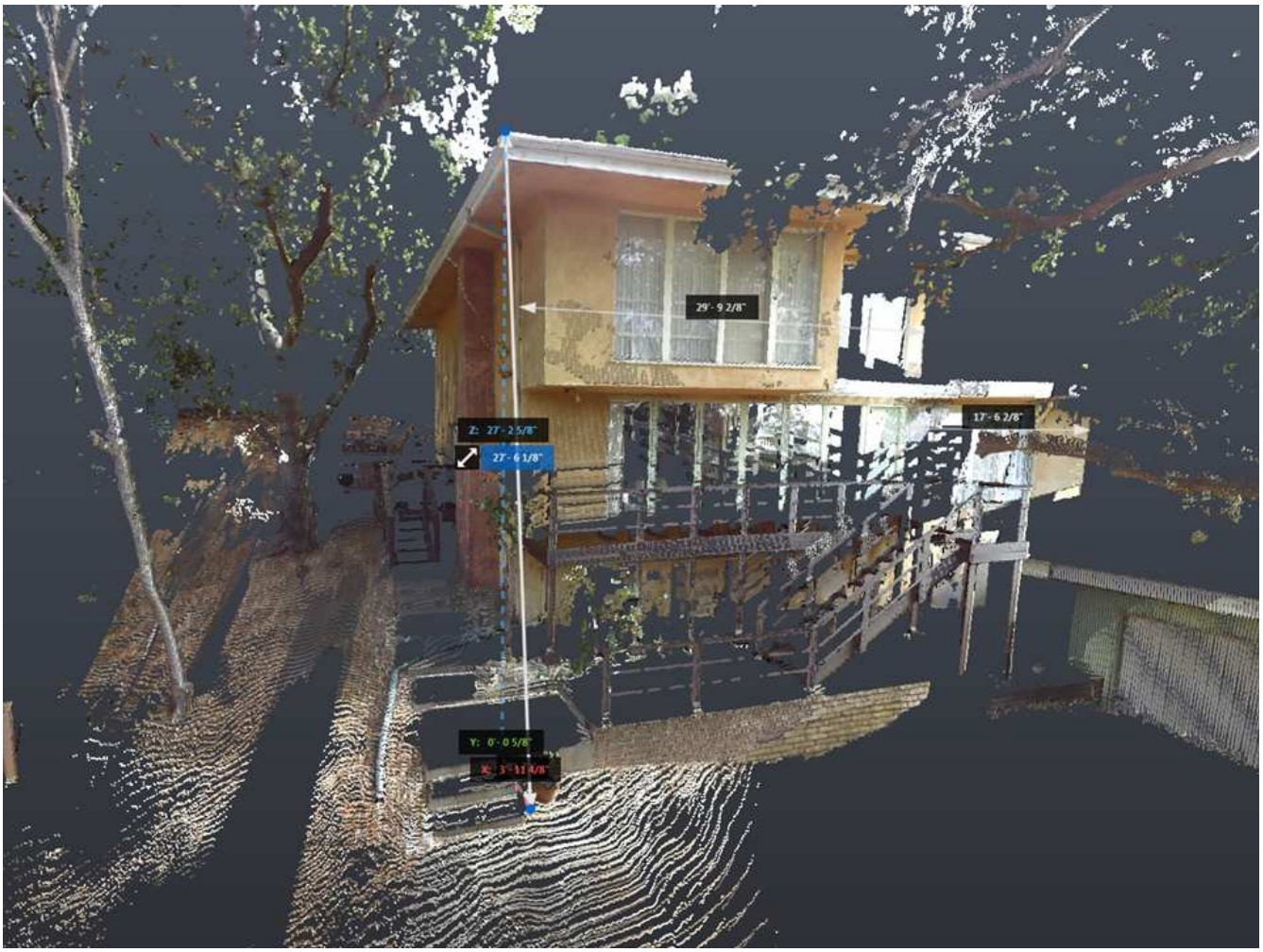


Figure 7: Height of 3588 Canyon Crest above grade, and width of 2.5-story and 1.5-story building segments.

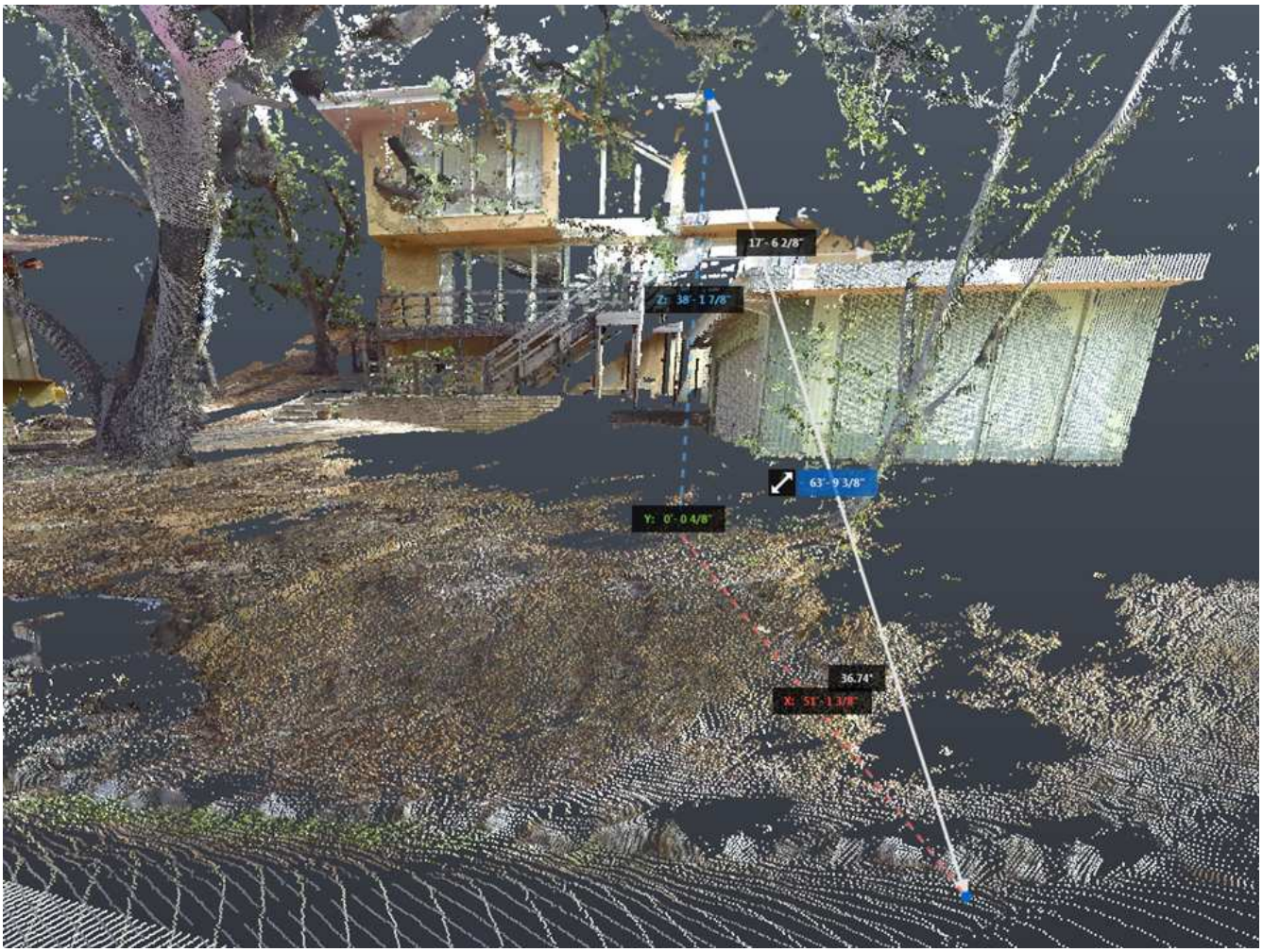


Figure 8: Height of 3556 Canyon Crest Road above the street grade plane at south of 2.5-story building segment

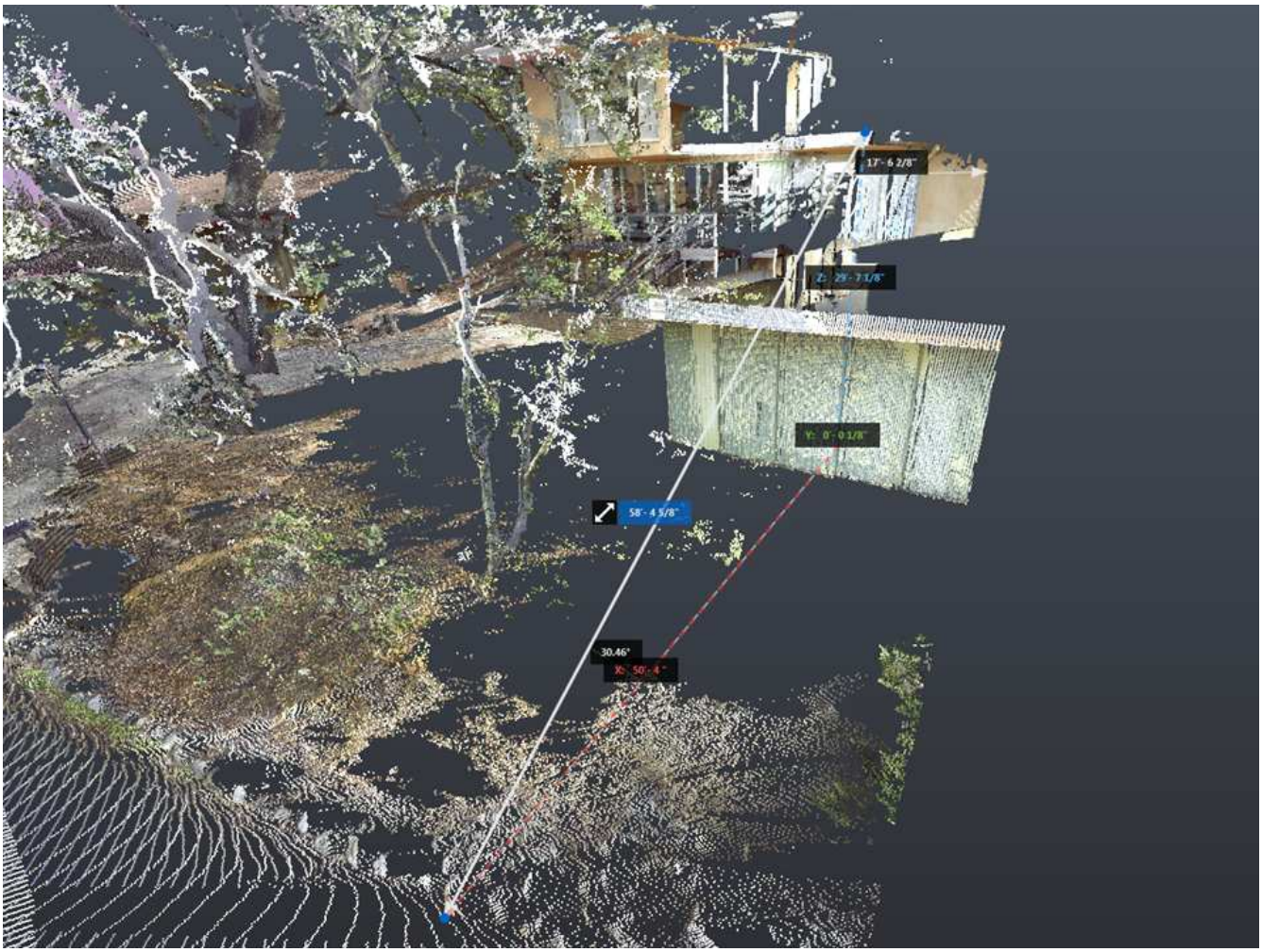


Figure 9: Height of 3556 Canyon Crest Road above the street grade plane at 1.5-story building segment

As portrayed in the east elevation of the home, the home presents less than 30' of frontage facing the road. The maximum roofline elevation is less than 25' above the street grade plane, which is less than the maximum elevation of the residences across the street. The roofline drops to ~11' above the street grade plane, for an average height above the street grade plan of ~18'. This is less than the average height of a two-story home with a flat or parapet roof. Therefore, the project meets the intent of the guideline that downslope development should if possible not project above upslope development.

4.2. Utilize terraced (split-level) or "cantilevered" building designs wherever feasible on 25% or greater slopes. (Note: Split-level homes should have a second floor exterior that is visibly set-back from the first floor exterior so that a terraced profile can be seen from the public view.)

The home employs a split-level, terraced design on 25% or greater slopes. The roofline of the home echoes the existing grade to reveal this terraced design. This guideline is satisfied.

4.3. Use a variety of house, garage and other building placements that better responds to the hillside terrain and created a more interesting and attractive streetscape.

A principal attribute of the design is that it responds to the hillside terrain and limits the footprint of the house and garage itself to less than 1200sqft. The design of the home preserves existing trees to the extent feasible, such that the canopy softens the outlines of the home and provides visual screening. This guideline is satisfied.

4.4. Limit building heights to 2 stories (or 25 ft.) when sited on 25% or greater slopes or when the building pad elevation is located less than 50 ft. below the crest of the nearest hilltop or ridgeline located within a linear distance of 500 ft.

In conjunction with the guidance for a split-level design, this design guideline intends to limit the number of stories above grade. The home is nowhere more than two stories above grade. Over much of the footprint, it is also less than 25ft in height above grade. However, to reduce height in a terraced design is also to increase the amount of grading. The design has provisioned to make use of building segments that step above the grade, to minimize grading and reduce impacts to oak tree roots.

4.5. Use a wider variety of architectural treatments and materials for the facades and exteriors of buildings that are located in highly visible areas on the site (such as main entryways, higher elevations, and isolated lots or building pads that can be seen from public view).

The home is characterized by a variety of naturally compatible and complementary building materials, colors, and textures. These include a brownish gray board-formed concrete, understated concealed fastener vertical seam green cladding, cedar soffit and siding and bronze anodized window frames. This guideline is satisfied.

4.6. Use pitched roofs (at least 1.5:1) and shingles for new residences.

The home employs a pitched roof. In a Very High Fire Severity Zone, a standing seam roof provides better protection and a longer service life. As the roof is pitched in a direction that is not facing the road, much of it will not be visible. A large percentage of the roof will also be covered in solar panels.

4.7. Utilize architectural design techniques to screen rooftop mechanical equipment from public view.

The home is designed such that no mechanical equipment will be visible on the roof, or at any location visible from the road, and so is compliant with the intent of the guideline to limit visual impacts from this equipment. This guideline is satisfied.

4.8. Design building exteriors with stonework and/or woodwork that matches rock and tree varieties found in visible locations on the site or in the surrounding community within a distance of one mile. (Note: Materials shall not be sourced from sensitive or scarce local resources such as oak trees, unless the project design is already removing these materials on site due to other project constraints and reusing them).

The grayish-brown board-formed concrete complements the grayish brown granitic boulders in

the vicinity as well as wooded vegetation, and native granodiorite is expected to be used as riprap in the rain gardens and to maintain the drainage swale. The cladding and soffit in the vicinity of the entryway will also be of cedar that complements the existing trees. This guideline is satisfied.

4.9. For business signs, use wood construction materials and painted lettering/logos, avoiding the use of metal and plastic, and with 18 sf. or less total sign surface area (10 sf. for projecting signs) per business establishment.

- *Such as metal, stone, wood, brick, plaster, and concrete.*
- *Subject to approval by the Los Angeles County Fire Department.*

This guideline is not applicable.

4.10. Design monument signs to be constructed with wood, stone, brick and/or decorative concrete, and to be no more than 6 ft. in height. (Note: The placement of all monument signs shall accommodate an adequate line of sight to the adjacent roadway.)

This guideline is not applicable.

4.11. Limit all signs so that they project upward no higher than the roofline of the building (or nearest adjacent building), and do not disrupt sightlines to the horizon.

This guideline is not applicable.

4.12. Illuminate signs from the exterior, with downward-projecting, hooded light fixtures that minimize light trespass.

This guideline is not applicable.

4.13. Use any other building design techniques not listed in this section that either through innovation or in consideration of specific site constraints or other specific project factors, are tailored to the site and allow it to meet the findings required by this Ordinance.

The design of the home is tailored to the site and to the existing oak trees on it.

Summation:

This section again referenced several guidelines that apply only to mixed-use facilities. The project complies with five guidelines, and with the intent of additional guidelines. This meets the generally accepted success criteria.

5. Landscaping

Preserve existing vegetation, conserve water and provide more attractive and shaded settings within the developed areas of the hillside project.

Design measures

5.1. Retain and incorporate 50% or more of existing on-site trees and woodlands (particularly native and drought-tolerant species, and oak woodlands) into the overall project landscaping plan.

The home removes one of 20 oak trees on the home site, incorporating the trees to remain to help screen the home. This guideline is satisfied.

5.2. Avoid all healthy oak tree encroachments and removals through the sensitive location and design of development.

The design has minimized the extent of oak tree removal and encroachment through sensitive siting and design, but it is not possible to eliminate all encroachment.

5.3. Landscape all graded slopes and improved open spaces in an attractive manner that accomplishes at least two or more of the following beyond a State or County-required minimum (whichever is more restrictive): a) restores habitat; b) conserves water or improves water quality; c) provides shade for pedestrians and bicyclists; d) enhances slope stability (must landscape all slopes ≥ 5 ft. high); e) increases fire protection; and f) provides recreational opportunities.

The minimum requirements for new development in Los Angeles County already include two Low Impact Development Best Management Practices to improve water quality, requirements related to fuel modification, and requirements relating to drought-tolerant landscaping with natives. However, the county does not *require* that a slope be landscaped, only that any new landscaping conform to fuel modification guidelines. The home landscapes with natives that will provide habitat for native biota, conserve water and enhance slope stability, beyond the sparse native chaparral and other non-native plants that presently exist. This guideline is satisfied.

5.4. Utilize native and drought-tolerant trees, shrubs and ground cover over all exposed graded areas.

- *May require consultation with the County biologist prior to conceptual landscaping plan approval.*
- *As determined by a qualified arborist. Only applies to oaks that are the minimum ordinance size or larger.*

The home proposes no exposed, graded areas, and so is compliant with the intent of the guideline to retain the character of graded areas. This guideline is satisfied.

5.5. Landscape at least 50% of all graded slopes and improved open spaces at a minimum ratio of one new shrub per 100 sf. of total graded slopes and improved open space area, and one new tree per 800 sf. of total graded slopes and improved open space area.

The home proposes no graded slopes, and so is compliant with the intent of the guideline to retain

the character of graded areas. This guideline is satisfied.

5.6. Vary the height, placement and color of appropriate landscaping materials throughout the site.

The existing and additional proposed landscaping of the home site is characterized by a mixture of native trees, shrubs and ground-covers, some with colorful flowers or berries. This guideline is satisfied.

5.7. Use a wide variety of local and non-invasive plant species within the project's improved open space areas, matching or exceeding the variety found on-site and listed in the project's plant surveys and biota reports.

The existing and additional proposed landscaping of the home site is characterized by a mixture of natives noted for low water consumption and improvement of slope stability. This guideline is satisfied.

5.8. Plant new native and drought-tolerant trees and shrubs of a sufficient interval, size and height to screen hardscape surfaces and unadorned features such as block walls; infrastructure; and exposed and prominently located building facades.

The home does not propose any hardscape surfaces outside the small footprint of the structure, or block walls. The building facade is already screened to a large extent by oak trees to remain, such that planting new trees is not feasible.

5.9. Use plant materials and irrigation systems that, combined, conserve water 20% or more beyond State and County requirements.

The use of native chaparral that is suited to tapering off of any supplemental irrigation whatsoever except in time of drought will conserve water in excess of requirements. The use of targeted irrigation to establish and sustain native landscaping as needed is more efficient than the sprinklers typical of many homes in the area. This guideline is satisfied.

5.10. Reapply the graded topsoil to manufactured slopes and improved open space areas.

The home requires negligible grading outside the footprint, and so is compliant with the intent of the guideline to retain the character of graded areas. This guideline is satisfied.

5.11. Use any other landscaping design techniques not listed in this section that either through innovation or in consideration of specific site constraints or other specific project factors, are tailored to the site and allow it to meet the findings required by this Ordinance.

The home is designed to slot into and fold around the existing oak trees on the project site.

Summation:

Many of the guidelines in this section assume the existence of more impactful design properties, such as grading outside the footprint of development. In creating a design that avoids this altogether, the home is compliant with the intention of the rules to minimize their impacts,

satisfying at least eight guidelines.

C. CALCULATION DETAILS FOR CALEEMOD

Kuhn Residence

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1.00	Dwelling Unit	1.02	1,555.00	4

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Override defaults to reflect project lot acreage, square feet, and population.

Construction Phase - Override defaults to reflect no demolition or paving. Assume a longer building period of 18 months will be spread over the same number of days and/or work effort as the default project of 1800 square feet.

Off-road Equipment -

Off-road Equipment - Override defaults to reflect lack of use of forklifts and generator sets.

Off-road Equipment - Override defaults to reflect no demolition equipment.

Off-road Equipment - Override defaults to reflect grading by hand tools.

Off-road Equipment - Override defaults to reflect no pavers.

Off-road Equipment - Override defaults to reflect site preparation by hand tools.

Trips and VMT - Override defaults to reflect expected 12 concrete truck trips and 24 material deliveries.
Grading - No graded volumes imported or exported.

Architectural Coating - Interior area to be applied with architectural coating is limited to sealant/finish for mass timber. No exterior surfaces will have any architectural coatings applied.

Vehicle Trips - Use of defaults is expected to be conservative because the occupants are expected to walk to work, reducing the number of trips. Trip lengths are also conservative.

Vehicle Emission Factors - Use of defaults is conservative as project is expected to include at least one electric vehicle

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Override defaults to reflect no woodstoves or fireplaces.

Area Coating - Override defaults to reflect actual interior/exterior area to be applied with architectural coating.

Landscape Equipment -

Energy Use - Override default to reflect no natural gas. Project will be a net-zero consumer of electricity, and therefore the electricity usage embodied in more typical heating with natural gas is irrelevant.

Water And Wastewater - Override defaults to reflect treatment in wastewater treatment facility.

Land Use Change - The removal of one tree does not constitute an appreciable land usage change.

Sequestration - Oak plantings.

Construction Off-road Equipment Mitigation -

Area Mitigation - Override defaults to reflect low VOC architectural coatings and cleaning supplies and lack of combustion landscaping equipment.

Energy Mitigation - Override defaults to reflect expected improvements above Title 24, the use of LED lighting, and net-zero operation from a 7.5kW solar array sized to render the home net-zero energy.

Water Mitigation - Override defaults to reflect native landscaping, lack of turf, and water-efficient fixtures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,050.00	0.00
tblAreaCoating	Area_Residential_Exterior	1050	0
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	9/28/2021	8/31/2021
tblConstructionPhase	PhaseEndDate	7/27/2022	7/13/2022

tblEnergyUse	NT24NG	6,281.00	0.00
tblEnergyUse	T24NG	23,546.37	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	0.85	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.05	0.00
tblLandUse	LandUseSquareFeet	1,800.00	1,555.00
tblLandUse	LotAcreage	0.32	1.02
tblLandUse	Population	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblSequestration	NumberOfNewTrees	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	36.00
tblTripsAndVMT	WorkerTripNumber	0.00	13.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0605	0.4704	0.4214	7.4000e-004	0.0162	0.0233	0.0394	8.1400e-003	0.0224	0.0305	0.0000	60.9310	60.9310	0.0114	0.0000	61.2154
2022	0.1185	0.8729	0.8880	1.5500e-003	2.9000e-004	0.0411	0.0413	8.0000e-005	0.0397	0.0397	0.0000	127.5002	127.5002	0.0220	0.0000	128.0494
Maximum	**0.1185**	**0.8729**	**0.8880**	**1.5500e-003**	**0.0162**	**0.0411**	**0.0413**	**8.1400e-003**	**0.0397**	**0.0397**	**0.0000**	**127.5002**	**127.5002**	**0.0220**	**0.0000**	**128.0494**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0605	0.4704	0.4214	7.4000e-004	7.5500e-003	0.0233	0.0308	3.7400e-003	0.0224	0.0261	0.0000	60.9310	60.9310	0.0114	0.0000	61.2153
2022	0.1185	0.8729	0.8880	1.5500e-003	2.9000e-004	0.0411	0.0413	8.0000e-005	0.0397	0.0397	0.0000	127.5001	127.5001	0.0220	0.0000	128.0493
Maximum	**0.1185**	**0.8729**	**0.8880**	**1.5500e-003**	**7.5500e-003**	**0.0411**	**0.0413**	**3.7400e-003**	**0.0397**	**0.0397**	**0.0000**	**127.5001**	**127.5001**	**0.0220**	**0.0000**	**128.0493**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.31**	**0.00**	**10.65**	**53.53**	**0.00**	**6.26**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	0.3516	0.3516
2	12-1-2021	2-28-2022	0.4708	0.4708
3	3-1-2022	5-31-2022	0.4665	0.4665
4	6-1-2022	8-31-2022	0.2298	0.2298
		Highest	0.4708	0.4708

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.2900e-003	1.2000e-004	0.0103	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0169	0.0169	2.0000e-005	0.0000	0.0173
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6563	2.6563	1.1000e-004	2.0000e-005	2.6658
Mobile	2.6800e-003	0.0123	0.0376	1.4000e-004	0.0123	1.1000e-004	0.0124	3.2800e-003	1.0000e-004	3.3900e-003	0.0000	13.2463	13.2463	6.5000e-004	0.0000	13.2625
Waste						0.0000	0.0000		0.0000	0.0000	0.3329	0.0000	0.3329	0.0197	0.0000	0.8248
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.4157	0.4364	2.1400e-003	5.0000e-005	0.5059
Total	**8.9700e-003**	**0.0124**	**0.0479**	**1.4000e-004**	**0.0123**	**1.7000e-004**	**0.0124**	**3.2800e-003**	**1.6000e-004**	**3.4500e-003**	**0.3536**	**16.3352**	**16.6888**	**0.0226**	**7.0000e-005**	**17.2762**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.1500e-003	9.0000e-005	7.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0118	0.0118	1.0000e-005	0.0000	0.0120
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.6800e-003	0.0123	0.0376	1.4000e-004	0.0123	1.1000e-004	0.0124	3.2800e-003	1.0000e-004	3.3900e-003	0.0000	13.2463	13.2463	6.5000e-004	0.0000	13.2625
Waste						0.0000	0.0000		0.0000	0.0000	0.3329	0.0000	0.3329	0.0197	0.0000	0.8248
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.3721	0.3928	2.1400e-003	5.0000e-005	0.4621
Total	**8.8300e-003**	**0.0124**	**0.0455**	**1.4000e-004**	**0.0123**	**1.5000e-004**	**0.0124**	**3.2800e-003**	**1.4000e-004**	**3.4300e-003**	**0.3536**	**13.6302**	**13.9838**	**0.0225**	**5.0000e-005**	**14.5614**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**1.56**	**0.24**	**5.15**	**0.00**	**0.00**	**11.76**	**0.16**	**0.00**	**12.50**	**0.58**	**0.00**	**16.56**	**16.21**	**0.53**	**28.57**	**15.71**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	2.9360
Vegetation Land Change	0.0000
Total	**2.9360**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	8/31/2021	5	0	
2	Site Preparation	Site Preparation	9/29/2021	9/30/2021	5	2	
3	Grading	Grading	10/1/2021	10/6/2021	5	4	
4	Building Construction	Building Construction	10/7/2021	7/13/2022	5	200	
5	Paving	Paving	7/14/2022	7/13/2022	5	0	
6	Architectural Coating	Architectural Coating	7/28/2022	8/10/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 3,149; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	36.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	**1.5600e-003**	**0.0174**	**7.5600e-003**	**2.0000e-005**	**5.8000e-003**	**7.7000e-004**	**6.5700e-003**	**2.9500e-003**	**7.0000e-004**	**3.6500e-003**	**0.0000**	**1.5118**	**1.5118**	**4.9000e-004**	**0.0000**	**1.5241**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**3.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0791**	**0.0791**	**0.0000**	**0.0000**	**0.0792**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	**1.5600e-003**	**0.0174**	**7.5600e-003**	**2.0000e-005**	**2.6100e-003**	**7.7000e-004**	**3.3800e-003**	**1.3300e-003**	**7.0000e-004**	**2.0300e-003**	**0.0000**	**1.5118**	**1.5118**	**4.9000e-004**	**0.0000**	**1.5241**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	3.0000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0792
Total	**3.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0791**	**0.0791**	**0.0000**	**0.0000**	**0.0792**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**9.8300e-003**	**1.2800e-003**	**0.0111**	**5.0500e-003**	**1.1700e-003**	**6.2200e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	6.1000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1582	0.1582	0.0000	0.0000	0.1583
Total	**7.0000e-005**	**5.0000e-005**	**6.1000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1582**	**0.1582**	**0.0000**	**0.0000**	**0.1583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**4.4200e-003**	**1.2800e-003**	**5.7000e-003**	**2.2700e-003**	**1.1700e-003**	**3.4400e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	6.1000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1582	0.1582	0.0000	0.0000	0.1583
Total	**7.0000e-005**	**5.0000e-005**	**6.1000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1582**	**0.1582**	**0.0000**	**0.0000**	**0.1583**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0562	0.4227	0.3999	6.8000e-004		0.0212	0.0212		0.0205	0.0205	0.0000	56.2798	56.2798	0.0101	0.0000	56.5310
Total	**0.0562**	**0.4227**	**0.3999**	**6.8000e-004**		**0.0212**	**0.0212**		**0.0205**	**0.0205**	**0.0000**	**56.2798**	**56.2798**	**0.0101**	**0.0000**	**56.5310**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.5400e-003	3.6000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.4254	0.4254	3.0000e-005	0.0000	0.4261
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0000e-005**	**1.5400e-003**	**3.6000e-004**	**0.0000**	**2.6000e-004**	**0.0000**	**2.6000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.4254**	**0.4254**	**3.0000e-005**	**0.0000**	**0.4261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0562	0.4227	0.3999	6.8000e-004		0.0212	0.0212		0.0205	0.0205	0.0000	56.2797	56.2797	0.0101	0.0000	56.5309
Total	**0.0562**	**0.4227**	**0.3999**	**6.8000e-004**		**0.0212**	**0.0212**		**0.0205**	**0.0205**	**0.0000**	**56.2797**	**56.2797**	**0.0101**	**0.0000**	**56.5309**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.5400e-003	3.6000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.4254	0.4254	3.0000e-005	0.0000	0.4261
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0000e-005**	**1.5400e-003**	**3.6000e-004**	**0.0000**	**2.6000e-004**	**0.0000**	**2.6000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.4254**	**0.4254**	**3.0000e-005**	**0.0000**	**0.4261**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1138	0.8627	0.8781	1.5200e-003		0.0406	0.0406		0.0393	0.0393	0.0000	125.2881	125.2881	0.0218	0.0000	125.8336
Total	**0.1138**	**0.8627**	**0.8781**	**1.5200e-003**		**0.0406**	**0.0406**		**0.0393**	**0.0393**	**0.0000**	**125.2881**	**125.2881**	**0.0218**	**0.0000**	**125.8336**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	3.1900e-003	7.9000e-004	1.0000e-005	2.9000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.9355	0.9355	6.0000e-005	0.0000	0.9371
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-004**	**3.1900e-003**	**7.9000e-004**	**1.0000e-005**	**2.9000e-004**	**1.0000e-005**	**2.9000e-004**	**8.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**0.9355**	**0.9355**	**6.0000e-005**	**0.0000**	**0.9371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1138	0.8627	0.8781	1.5200e-003		0.0406	0.0406		0.0393	0.0393	0.0000	125.2879	125.2879	0.0218	0.0000	125.8335
Total	**0.1138**	**0.8627**	**0.8781**	**1.5200e-003**		**0.0406**	**0.0406**		**0.0393**	**0.0393**	**0.0000**	**125.2879**	**125.2879**	**0.0218**	**0.0000**	**125.8335**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	3.1900e-003	7.9000e-004	1.0000e-005	2.9000e-004	1.0000e-005	2.9000e-004	8.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.9355	0.9355	6.0000e-005	0.0000	0.9371
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0000e-004**	**3.1900e-003**	**7.9000e-004**	**1.0000e-005**	**2.9000e-004**	**1.0000e-005**	**2.9000e-004**	**8.0000e-005**	**1.0000e-005**	**8.0000e-005**	**0.0000**	**0.9355**	**0.9355**	**6.0000e-005**	**0.0000**	**0.9371**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**4.6700e-003**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	**4.6700e-003**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.6800e-003	0.0123	0.0376	1.4000e-004	0.0123	1.1000e-004	0.0124	3.2800e-003	1.0000e-004	3.3900e-003	0.0000	13.2463	13.2463	6.5000e-004	0.0000	13.2625
Unmitigated	2.6800e-003	0.0123	0.0376	1.4000e-004	0.0123	1.1000e-004	0.0124	3.2800e-003	1.0000e-004	3.3900e-003	0.0000	13.2463	13.2463	6.5000e-004	0.0000	13.2625

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	9.52	9.91	8.62	32,282	32,282
Total	9.52	9.91	8.62	32,282	32,282

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.6563	2.6563	1.1000e-004	2.0000e-005	2.6658
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	8336.84	2.6563	1.1000e-004	2.0000e-005	2.6658
Total		**2.6563**	**1.1000e-004**	**2.0000e-005**	**2.6658**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.1500e-003	9.0000e-005	7.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0118	0.0118	1.0000e-005	0.0000	0.0120
Unmitigated	6.2900e-003	1.2000e-004	0.0103	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0169	0.0169	2.0000e-005	0.0000	0.0173

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e-004	1.2000e-004	0.0103	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0169	0.0169	2.0000e-005	0.0000	0.0173
Total	**6.2900e-003**	**1.2000e-004**	**0.0103**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0169**	**0.0169**	**2.0000e-005**	**0.0000**	**0.0173**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e-004	9.0000e-005	7.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0118	0.0118	1.0000e-005	0.0000	0.0120
Total	**6.1400e-003**	**9.0000e-005**	**7.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0118**	**0.0118**	**1.0000e-005**	**0.0000**	**0.0120**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.3928	2.1400e-003	5.0000e-005	0.4621
Unmitigated	0.4364	2.1400e-003	5.0000e-005	0.5059

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0410754	0.4364	2.1400e-003	5.0000e-005	0.5059
Total		**0.4364**	**2.1400e-003**	**5.0000e-005**	**0.5059**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0.065154 / 0.0287528	0.3928	2.1400e-003	5.0000e-005	0.4621
Total		**0.3928**	**2.1400e-003**	**5.0000e-005**	**0.4621**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.3329	0.0197	0.0000	0.8248
Unmitigated	0.3329	0.0197	0.0000	0.8248

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.64	0.3329	0.0197	0.0000	0.8248
Total		**0.3329**	**0.0197**	**0.0000**	**0.8248**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	1.64	0.3329	0.0197	0.0000	0.8248
Total		**0.3329**	**0.0197**	**0.0000**	**0.8248**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	2.9360	0.0000	0.0000	2.9360

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Others	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	4	2.9360	0.0000	0.0000	2.9360
Total		**2.9360**	**0.0000**	**0.0000**	**2.9360**

D. BIOLOGICAL RESOURCES ASSESSMENT REPORT

Single-Family Residence
APN 5830-003-016
Biological Site Assessment
June 2024

PREPARED FOR:

Mr. Stephen Kuhn
443 W Poppyfields Drive
Altadena, CA 91001

PREPARED BY:

Sapphos Environmental, Inc.
430 N Halstead Street
Pasadena, CA 91107

July 2, 2024

EXECUTIVE SUMMARY

This biological assessment report documents the results and associated analysis of the biological survey that took place on May 29, 2018, at the Kuhn Residence project ("proposed residence") located in Altadena, within the jurisdiction of the County of Los Angeles. A subsequent biological survey was conducted on March 28, 2024, to confirm site conditions are still consistent with the 2018 survey.

The proposed residence will be a terraced two-story, two-bedroom single-family home of approximately 1,555 square feet with a 397-square-foot attached garage (project area).

Prior to conducting the field survey, Sapphos Environmental, Inc. Qualified Biologist (Mr. Brandon Lotts) conducted a literature and database search for the most current lists of species potentially occurring within the project area.

During the site visits, the project area was surveyed to the extent feasible given terrain and vegetation features to assess the presence of biological resources according to California Environmental Quality Act Guidelines. This included the determination of suitable habitat for sensitive, candidate and special-status species and an evaluation of potential corridors for wildlife movement. During the site visits, Sapphos Environmental, Inc. Qualified Biologists documented the current site conditions and noted all species observed, including existing native and non-native vegetation, wildlife, and wildlife sign.

No sensitive or special-status species, sensitive plant communities, or active bird nests were observed on the proposed residence site. No impacts to sensitive plant communities (with rarity ranks of S1 through S3) are anticipated as a result of the construction of the proposed residence.

Of the two plant communities found to be present during both site visits, Coast Live Oak Woodland has a state rarity rank of S4, indicating that it is considered apparently secure. California sagebrush scrub has the lowest state rarity rank of S5, indicating that it is considered secure.

Although no sensitive species or communities were observed during the site visits, there is some potential for the presence of special-status species in riparian habitat present on the proposed residence site.

In addition, although no active nests were observed during the site visit, suitable nesting substrate exists throughout the proposed residence site and in the surrounding residential area, and native migratory and resident birds may build nests within these substrates at any time during the nesting season.

TABLE OF CONTENTS

SECTIONS ***PAGE***

EXECUTIVE SUMMARY ES-1

1.0 INTRODUCTION 1
1.1 Project Description 1
1.2 Project Location 1
1.3 Physical Conditions of Site 1

2.0 REGULATORY FRAMEWORK 1
2.1 Federal 1
2.2 State 2
2.3 Local 4

3.0 METHODS 6
3.1 Literature and Database Review 6
3.2 Site Surveys 6
3.3 Limitations That May Influence Results 7

4.0 RESULTS 8
4.1 Sensitive Species 8
4.2 Plant Communities 13
4.3 Oak and Native Trees 13
4.4 Nesting Birds and Roosting Bats 14
4.5 Wildlife Movement 14

5.0 DISCUSSION 14
5.1 Potential Impacts 14
5.2 Avoidance and Minimization 15

6.0 REFERENCES 17

TABLES ***PAGE***

4.1-1 Special-Status Species Potentially Present on the Proposed Residence Site 10
4.2-1 Plant Communities within the Project Area 13

FIGURES ***FOLLOWS PAGE***

1 Regional Vicinity Map 1
2 Project Area Map 1
3 Significant Ecological Areas 5
4 CNDDB Sensitive Plant and Animal Species within 5 miles of the Project Site 9
5 Vegetation Community Map 13

APPENDICES

A Site Photographs
B Qualifications of Biologists
C Species Compendium
D CNNDB, CNPS, and USFWS Species Lists

1.0 INTRODUCTION

1.1 Project Description

Mr. Stephen Kuhn ("Applicant") proposes to build a terraced two-story, two-bedroom single-family residence on a 1.02-acre parcel in Altadena within the County of Los Angeles, California. The building will be approximately 1,555 square feet with an attached garage of approximately 397 square feet (work area). A permeable gravel driveway will connect the garage to Canyon Crest Road. No hardscape and negligible grading is proposed outside the work area. The work area includes the footprint of the development and the gravel driveway, is expected to be less than approximately 2,500 square feet. An Environmental Impact Report (EIR) SCH #2023050207 has been prepared to evaluate potential impacts.

1.2 Project Location

The building footprint is Assessor's Parcel Number (APN) 5830-003-016 in Altadena, California, within the boundaries of unincorporated Los Angeles County. The project area is located approximately 1.75 miles north of U.S. Interstate 210 (I-210), 2.0 miles east of State Route (SR) 2, and less than 1 mile northeast of the Hahamongna Watershed Park, within the U.S. Geological Survey (USGS) 7.5-minute series Pasadena topographic quadrangle (Township 1 N, Range 12 W, Section 5) (Figure 1, *Regional Vicinity Map*). The project area is located on Canyon Crest Road west of Lincoln Avenue in the foothills of Altadena (Figure 1; Figure 2, *Project Area Map*).

1.3 Physical Conditions of Site

The topography of the project area encompasses a canyon area with steep terrain that includes west facing and east facing slopes. The west-east elevation change of the property site ranges from approximately 1,388 feet in the west, 1,220 feet at the midpoint, and 1,336 feet to the east, above mean sea level. A tributary of Arroyo Seco bisects the project parcel. Since the 2018 survey, a portion of the property that was considered a ("conceptual") extension to the Altadena Foothills and Arroyos Significant Ecological Area (SEA) has since been adopted into the SEA. This area contains habitat for sensitive species and a corridor for wildlife movement. Plant communities are relatively dense and pristine within the SEA (Appendix A, *Site Photographs*). Portions of the proposed single-family residence within the work area are to be built on a slope greater than 25 percent.

2.0 REGULATORY FRAMEWORK

2.1 Federal

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) defines listed species as "endangered" or "threatened" and provides regulatory protection for listed species. The FESA provides a program for conservation and recovery of threatened and endangered species; it also ensures the conservation of designated critical habitat that the U.S. Fish and Wildlife Service (USFWS) has determined is required for the survival and recovery of these listed species. Section 9 of the FESA prohibits the "take" of species listed by USFWS as threatened or endangered. Take is defined as follows: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct." In recognition that take cannot always be avoided, Section 10(a) of the FESA includes provisions for take that is incidental to, but not the purpose of, otherwise lawful

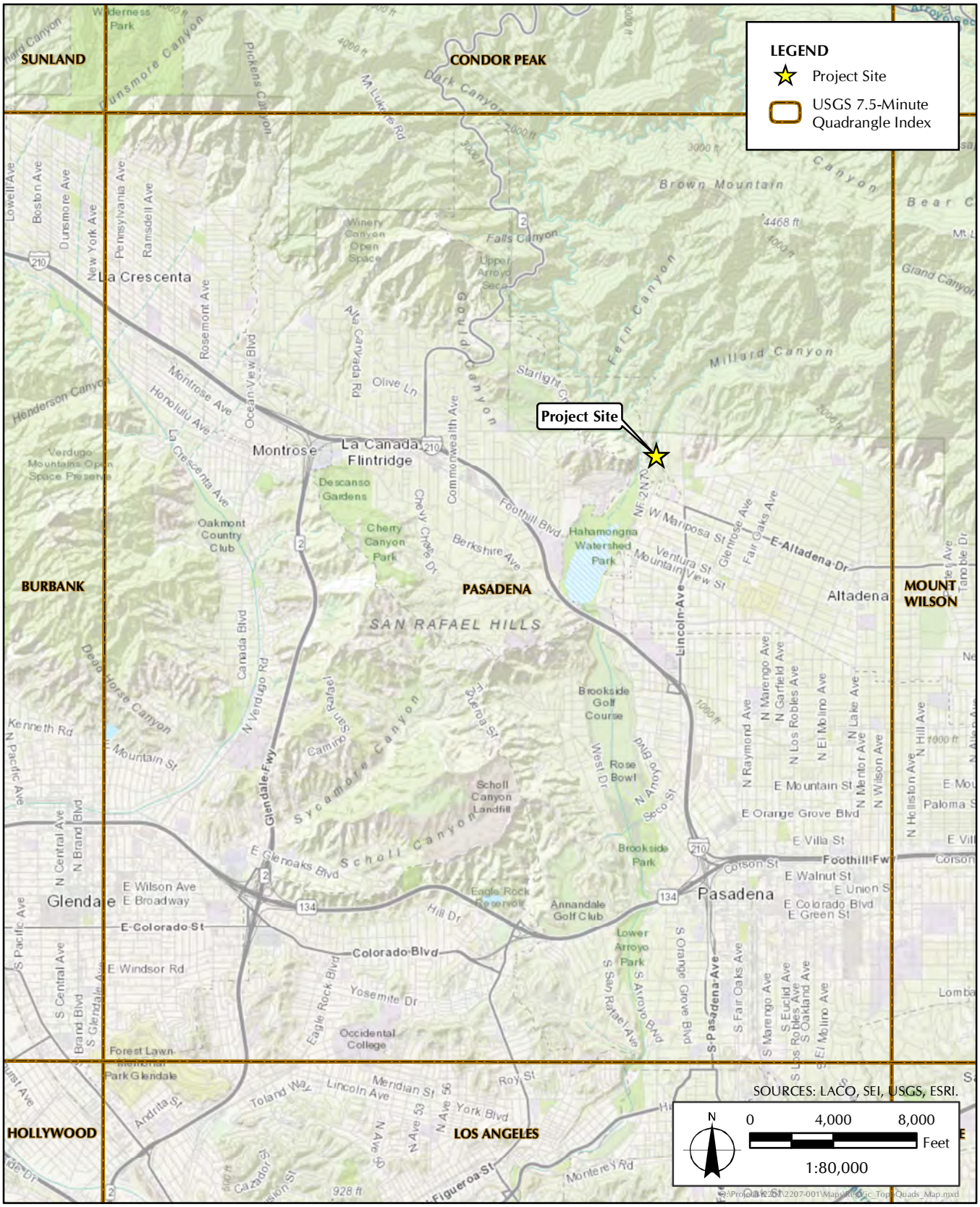


FIGURE 1

Regional Vicinity Map

FIGURE 2

Project Area Map

activities. Section 10(a)(1)(B) permits (incidental take permits) may be issued if take is incidental and does not jeopardize the survival and recovery of the species. As defined in the FESA, individuals, organizations, states, local governments, and other nonfederal entities are affected by the designation of critical habitat only if their actions occur on federal lands; require a federal permit, license, or other authorization; or involve federal funding.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and Russia (formerly the Soviet Union). Migratory birds are defined to include all members of bird families considered migratory, whether or not the species in question exhibit migratory behavior. In practice, virtually all birds native to North America are covered by the MBTA, with exceptions including quail, turkey, and grouse. Several commonly present, non-native, urban species, such as house sparrow (*Passer domesticus*), rock dove (*Columba livia*), and European starling (*Sturnus vulgaris*), are not subject to MBTA protection. As of December 22, 2017, the MTBA only prohibits any action where the purpose is to take or kill a migratory bird. Incidental take is no longer prohibited. [1]

2.2 State

2.2.1 State Fish and Game Code

Sections 1900–1913—Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the California ESA (CESA). The Native Plant Protection Act provides limitations that no person would import into the State—or take, possess, or sell within the State—any rare or endangered native plant, except in compliance with provisions of the Native Plant Protection Act. Where individual landowners have been notified by the CDFW that rare or native plants are growing on their land, the landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

Sections 2080 and 2081—California Endangered Species Act

The CESA (California Fish and Game Code §§ 2050 et seq.) prohibits the take of listed species, except as otherwise provided in state law. *Take* for the CESA is defined as it is in the FESA; however, unlike the FESA, the CESA also applies the take prohibitions to species petitioned for listing as State candidates rather than only those listed species. State lead agencies are required to consult with CDFW to ensure that any actions undertaken by the lead agency are not likely to jeopardize the continued existence of any state-listed species or result in destruction or degradation of required habitat. CDFW is authorized to enter into Memoranda of Understanding (MOUs) with individuals, public agencies, universities, zoological gardens, and scientific or educational institutions to import, export, take, or possess listed species for scientific, educational, or management purposes. Permits for incidental take of species protected pursuant to the

[1] U.S. Department of the Interior, Office of the Solicitor. 22 December 2017. *The Migratory Bird Treaty Act Does Not Prohibit Incidental Take* (M-37050). Memorandum. Accessed March 2024. Available at: https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf

California ESA are available under certain circumstances as described in Sections 2080 and 2081 of the California Fish and Game Code described below.

Section 2080 of the CESA states:

> *No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act.*

Pursuant to Section 2081 of the Fish and Game Code, CDFW may authorize individuals or public agencies to import, export, take, or possess, any state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or MOUs as follows: (1) if the take is incidental to an otherwise lawful activity, (2) if impacts of the authorized take are minimized and fully mitigated, (3) if the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and (4) if the applicant ensures adequate funding to implement the measures required by CDFW. CDFW shall make this determination based on available scientific information and shall include consideration of the ability of the species to survive and reproduce.

Section 2800–2835, Natural Community Conservation Planning Act of 1991, As Amended

The Natural Community Conservation Planning Act of 1991, as amended in 2003 (California Fish and Game Code Sections 2800–2835) established the Natural Community Conservation Planning (NCCP) program for the protection and perpetuation of the State's biological diversity. The CDFW established the program in order to conserve natural communities at the ecosystem level while accommodating compatible land use. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The CDFW provides support, direction, and guidance to participants in order to ensure that NCCPs are consistent with the CESA.

Sections 3503 and 3503.5 State Protection for Birds

Sections 3503 and 3503.5 of the State Fish and Game Code provide regulatory protection to resident and migratory birds and all birds of prey within the State, including the prohibition of the taking of nests and eggs, unless otherwise provided for by the Code. Specifically, these sections of the Code make it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code.

Sections 3511, 4700, 5050, and 5515 State Fully Protected Species

The State classifies certain animals as "Fully Protected," in Section 3511 of the State Fish and Game Code. This classification was the state's initial effort in the 1960s to identify and provide additional protection to certain species that were rare or faced possible extinction. Lists were made for fish, mammals, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or federal ESAs. Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code state that Fully Protected species (birds, mammals, fish, reptiles, amphibians) or parts thereof may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Section 4150—Non-Game Mammal or Furbearing Mammal

All mammals occurring naturally in California that are not game mammals, fully protected mammals, or fur-bearing mammals are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission. The regulations of take of furbearing mammals are established within the California Code of Regulations (CCR), Title 14, Division 1 (Subdivision 2), Chapter 5. Take is prohibited for several furbearing mammals under Title 14, § 460 of the CCR, including but not limited to desert kit fox (*Vulpes macrotis arsipus*), coyote (*Canis latrans*), and American badger (*Taxidea taxus*). Title 14 § 460 is supported by Sections 200, 202, 203, and 4009.5 of the Fish and Game Code.

2.3 Local

2.3.1 Los Angeles County 2035 General Plan

The project area is located entirely within unincorporated Los Angeles County and is subject to the County of Los Angeles 2035 General Plan. Its Conservation and Natural Resources (C/NR) Element has established 2 goals and 12 policies related to biological resources.[2] The one goal and three supporting policies that apply to sensitive species in the project area are:

- ***Goal C/NR 3:*** Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and Significant Ecological Areas (SEAs).

    - Policy C/NR 3.6: Assist State and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.

    - Policy C/NR 3.9: Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:
        - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;
        - Protection of special status resources on the site within open space; and
        - Placement of the development in the least biologically special status areas on the site (prioritize the preservation or avoidance of the most special status biological resources onsite).

    - Policy C/NR 3.10: Require environmentally superior mitigation for unavoidable impacts on biologically special status areas, and permanently preserve mitigation sites.

[2] County of Los Angeles Department of Regional Planning. Adopted 6 October 2015. "Chapter 9: Conservation and Natural Resources Element." *Los Angeles County General Plan*. Available at: planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch9.pdf

2.3.2 Los Angeles County Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance requires a permit prior to the cutting, removing, destroying, relocating, inflicting damage on, or encroaching into a protected zone of any tree within the oak genus.[3] The Ordinance regulates only oak trees (genus *Quercus*) located within unincorporated areas of Los Angeles County. In addition, the circumference of an oak tree with one trunk must be 25 inches (8 inches in diameter) or more. For oak trees with multiple trunks, any two trunks must have a circumference of 38 inches (12 inches in diameter) or more. Measurements must be recorded at 4.5 feet above mean natural grade.

2.3.3 Altadena Community Plan

The Altadena Community Plan establishes the framework of goals, policies, and programs for decision making regarding allocation of resources, pattern, density, and character of development in Altadena. Section 10.2 established the goal of maintaining "a high level of environmental quality for the Altadena community." The community plan includes, but is not limited to, the following policies regarding environmental resources:

- Prohibit the disruption of riparian corridors and other significant environmental habitats in the San Gabriel Mountain foothills.
- Minimize grading in foothill areas.
- Require new developments in foothill areas minimize siltation of streams and canyons.

2.3.4 Altadena Community Standards District Ordinance

The Altadena Community Standards District Ordinance established guidelines for new and expanded structures that are to consider size, scale, for protecting light, air, aesthetics, and minimize the visual and environmental impacts of development on hillside management areas.

2.3.5 Altadena Significant Ecological Area

The Altadena SEA is located along the south-flank of the San Gabriel Mountains, above the community of Altadena (Figure 3, *Significant Ecological Areas*). A large portion of the SEA lies within the Angeles National Forest. Wildlife movement occurs along this area, via west-east and/or north-south linkages. Oak woodland (upland and riparian) and chaparral are common vegetation communities within the SEA.

The SEA program states:

> *"Significant Ecological Areas (SEA) are officially designated areas within LA County with irreplaceable biological resources. The SEA Program objective is to conserve genetic and physical diversity within LA County by designating biological resource areas that are capable of sustaining themselves into the future. The SEA Ordinance establishes the permitting, design standards, and review process for development within SEAs, balancing preservation of the County's natural biodiversity with private property rights.*

[3] Los Angeles County, California, Code of Ordinances – Title 22 Planning and Zoning. Available at: http://library.municode.com/index.aspx?clientId=16274

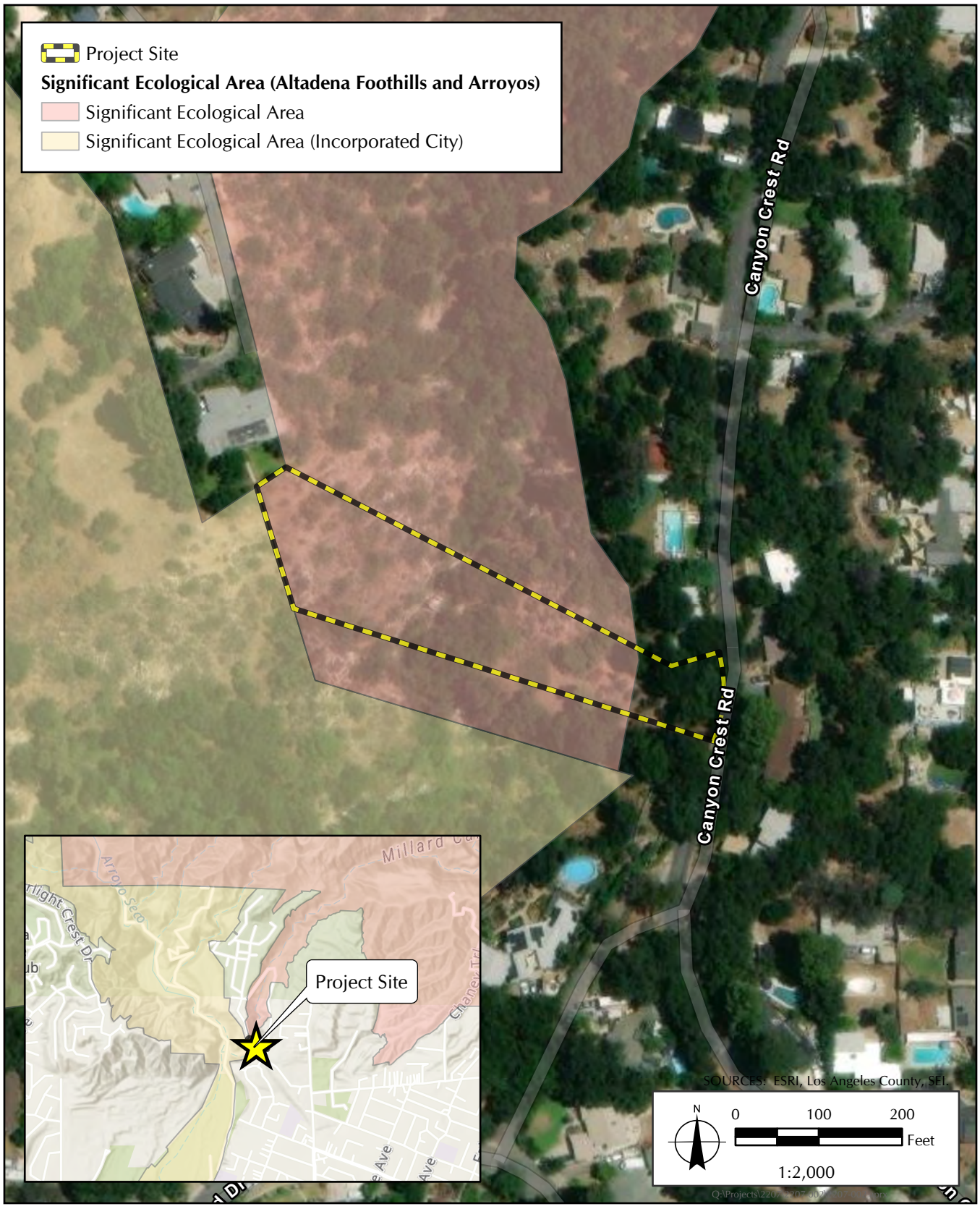


FIGURE 3
Significant Ecological Areas

The SEA Program, through goals and policies of the General Plan and the SEA ordinance (Title 22 zoning regulations) help guide development within SEAs. The General Plan goals and policies are intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible with the ability of SEAs to thrive in the long term."[4]

3.0 METHODS

3.1 Literature and Database Review

Prior to conducting the field survey, Sapphos Environmental, Inc. Qualified Biologist (Mr. Brandon Lotts; Appendix B, *Qualifications of Biologists*) conducted a literature and database search for the most current lists of species potentially occurring within the project area. Species lists were obtained from California Natural Diversity Database (CNDDB),[5] California Native Plant Society (CNPS) Rare Plant Inventory,[6] and the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPAC)[7]. The Pasadena USGS 7.5-minute Pasadena topographic quadrangle, as well as those applicable of the eight surrounding quadrangles (Sunland, Condor Peak, Chilao Flat, Waterman Mountain, Burbank, Mount Wilson, Hollywood, Los Angeles, and El Monte), were queried in the CNDDB and CNPS databases to establish reported occurrences within a 5-mile radius of the project area. Additional resources referenced include the Calflora database[8] and the Consortium of California Herbaria Database.[9] The National Wetlands Inventory Wetlands Mapper was reviewed to establish the delineation of riparian habitat associated with blueline drainages.[10]

3.2 Site Surveys

A previous survey was conducted for onsite trees and specific impacts to oak trees within the property are addressed in a separate Oak Tree Report. Additionally, delineation and permitting requirements associated with wetlands were addressed by the United States Army Corps of Engineers (USACE) in their jurisdictional determination (2018) which found that the canyon bottom constituted the only wetlands on the project area, consistent with the National Wetlands Inventory.

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4 County of Los Angeles Department of Regional Planning. "Significant Ecological Areas Program." Available at: http://planning.lacounty.gov/site/sea/home/

5 California Department of Fish and Wildlife. 2018. Rarefind 5.0: A Database Application for the Use of the California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Available at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data

6 California Native Plant Society. 2018. Inventory of Rare, Threatened, and Endangered Species. Available at: http://www.rareplants.cnps.org/

7 U.S Fish and Wildlife. "Information for Planning and Consultation." Accessed May 25, 2018. Available at: https://ecos.fws.gov/ipac/

8 Calflora. 2018. Information on California plants for education, research and conservation [web application]. Berkeley, CA: The Calflora Database. Accessed May 25, 2018. Available at: http://www.calflora.org

9 Consortium of California Herbaria. 25 May 2018. Data provided by the participants of the Consortium of California Herbaria. Reagents of California. Available at: http://ucjeps.berkeley.edu/consortium

10 National Wetlands Inventory. 2018. Wetlands Mapper. Available at: https://www.fws.gov/wetlands/Data/Mapper.html

SK: "On March 28, 2024, a Sapphos Environmental, Inc. Qualified biologist (Mr. Brandon Lotts) conducted an additional spring site survey.

On May 29, 2018, a Sapphos Environmental, Inc. Qualified biologist (Mr. Bruce Eilerts; Appendix B) conducted a spring site survey across the proposed project area. The Qualified Biologist surveyed the entire footprint of development and other areas of the project area in order to: (1) identify all existing plants, as feasible; (2) identify all present wildlife and/or their sign, as feasible; (3) spatially identify and map all existing plant communities; (4) determine the presence and potential presence of nesting birds on the proposed residence site; and (5) evaluate the site and footprint of development for its value as a wildlife corridor. A subsequent survey was performed on March 29, 2024, to confirm site conditions, and update findings as necessary.

The biological assessment was conducted by walking all accessible areas within the site and recording plant and wildlife habitat and species observations. Where foot access was not possible, the Sapphos Environmental, Inc. Qualified Biologist surveyed the area with binoculars. All biological resources observations were recorded as field notes. A global positioning system (GPS) unit was used where necessary. Photographs were taken to document the site conditions and notable plant and wildlife observations.

Upon returning from the field, Sapphos Environmental, Inc. generated a floral and faunal compendium encompassing all species and species-sign observed during the site visits (Appendix C, *Species Compendium*). Specimens were identified to at least the taxonomic level necessary to determine their rarity status (*i.e.*, species, subspecies, or variety).

Plant communities within the survey area were classified in general accordance with *A Manual of California Vegetation* in order to identify habitat values for plants and wildlife within the study area.[11] Plant community boundaries were mapped based on field photographs and aerial imagery, according to guidance in *A Manual of California Vegetation*.

3.3 Limitations That May Influence Results

It is common that considerable time elapses between the submission of a biological report and the start of construction. The results presented herein are contingent on the understanding that biological resources are variable and unpredictable in nature and that biological field data collection is subject to the limitations that environmental factors may impose. The detectability of living organisms can differ spatially and temporally based on a range of variables (rainfall, blooming period, sensitivity to human disturbance, climatic conditions, migrations, etc.). For this reason, a pre-construction survey immediately prior to construction has been recommended.

Given the location of the project on its site, the expectation of little to no impact to riparian habitat, and negative results for recent protocol-level surveys in and around coast live oak woodlands, California sagebrush and other hydrologically connected riparian habitat within 0.5 mile of the project site as part of the Arroyo Seco Canyon Project,[12] no protocol-level surveys are warranted for this project. Therefore, no protocol-level surveys were conducted that would impose specific time limits on the validity of the conclusions made in this study.

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[11] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. 2nd edition. Sacramento, CA: California Native Plant Society.

[12] City of Pasadena Department of Water and Power. October 2014. *Arroyo Seco Canyon Project Mitigated Negative Declaration*. Prepared by: BonTerra Psomas, Pasadena, CA. Available at: http://www.arroyoseco.org/ascp/ismnd/Arroyo%20Seco%20IS-MND%20100814.pdf

Surveys for plant species occurred within the traditional flowering period for most of the species considered in this assessment, during the spring months when wildlife is also more active, nesting, or breeding. While all the proposed work area and the riparian habitat were passable on foot and surveyed unaided, not all of the project area was accessible due to the density of vegetation and steepness of slope. Where foot access was not possible, binoculars were used to survey the resources.

4.0 RESULTS

4.1 Sensitive Species

The database search results provided species lists for the on-site survey effort (Appendix D, *CNNDB, CNPS, and USFWS Species Lists*). Records for previously documented occurrences of sensitive, candidate or special-status species (as defined in the EIR) listed in the CNDDB as either "presumed extant" or only "possibly extirpated" exist within 5 miles of the project area, inclusive of the accuracy shapefiles provided in the CNDDB. Records dating to times and locations for which habitat was overcome by development, as well as occurrences that were listed by the CNDDB as "extirpated," are not listed. Likewise, where the USFWS has documented federally listed extant populations and potential reestablishment areas in their most recent recovery plans or 5-year reviews that do not include the project vicinity or watershed, this recent and most detailed analysis was assumed to be controlling.

The resulting species include nineteen (19) plants (California muhly, Coulter's goldfields, Greata's aster, Mt. Gleason paintbrush, Nevin's barberry, Parish's gooseberry, Parry's spineflower, Plummer's mariposa lily, Riversidian alluvial fan sage scrub, Robinson's pepper grass, San Gabriel bedstraw, San Gabriel chestnut, San Gabriel linanthus, Sonoran maiden fern, mesa horkelia, salt spring checkerbloom, slender-horned spineflower, southern tarplant, white rabbit-tobacco); three (3) reptiles (coast horned lizard, Southern California legless lizard, western pond turtle); five (5) birds (least Bell's vireo, southwestern willow flycatcher, American peregrine falcon, burrowing owl, coastal California gnatcatcher); five (5) mammals (western mastiff bat, hoary bat, pallid bat, silver-haired bat, southern grasshopper mouse); three (3) amphibians (coastal range newt, southern mountain yellow-legged frog, western spadefoot); and three (3) invertebrates (Crotch's bumblebee, American bumblebee, Dohrn's elegant eucnemid beetle). None of these species are listed in Fish & Game Code §§ 3511, 4700, 5050, or 5515.

Based on habitat requirements, 9 of the 38 species would not be expected to be encountered on the proposed residence site (American bumble bee, Dohrn's elegant eucnemid beetle, burrowing owl, coast horned lizard, Southern California legless lizard, Coulter's goldfields, Parry's spineflower, San Gabriel bedstraw, slender-horned spineflower). Based only on habitat requirements, 7 remaining species could reasonably have some potential for encounter on the project site. The record occurrences for these species are portrayed in Figure 4, *CNDDB Sensitive Plant and Animal Species within 5 Miles of the Project Site*.

Based on the potential for special-status species to occur, site surveys were performed. No species listed by the USFWS or CDFW as threatened, endangered, special status, or on a watch list for possible special status was observed during the site survey. No species designated as rare or on a watch list for possible rarity by the CNPS were observed. The wildlife observations were primarily of birds (Appendix C), for which the coast live oak and large shrubs on site (*i.e.*, sagebrush, laurel sumac, chamise, sugar bush, elderberry, etc.) provide suitable nesting habitat. While no nests were observed and survey results were negative, species were still determined to have the potential to be present because these species have low detectability and/or fluidity of

movement, either as residents throughout the year and/or as migrants from year to year, and there was suitable habitat on site. Therefore, these species may be present but not detected or may enter the site in the future (Table 4.1-1, *Special-Status Species Potentially Present on the Proposed Residence Site*).

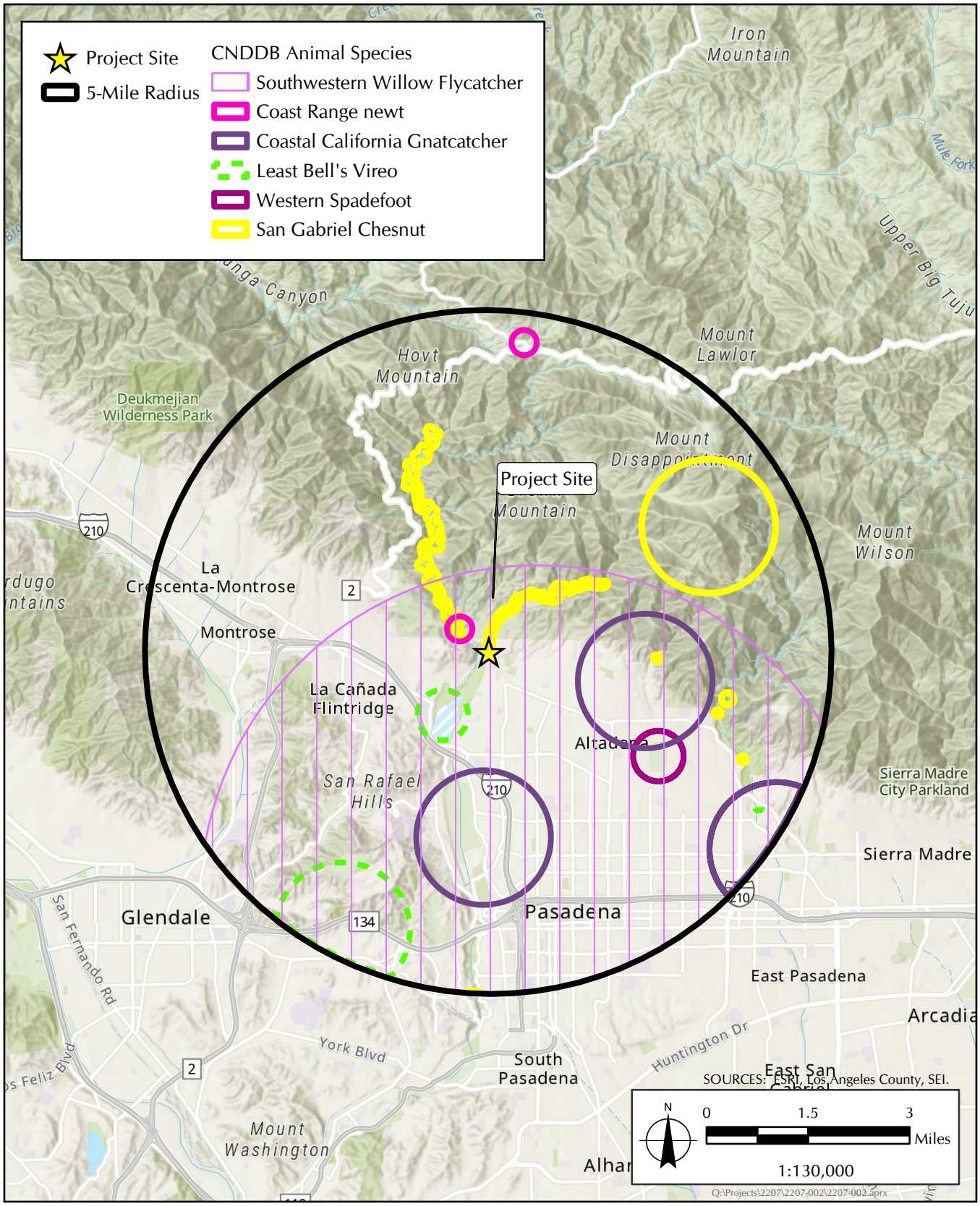

FIGURE 4

CNDDB Records of Animal Species within 5 Miles of the Project Site

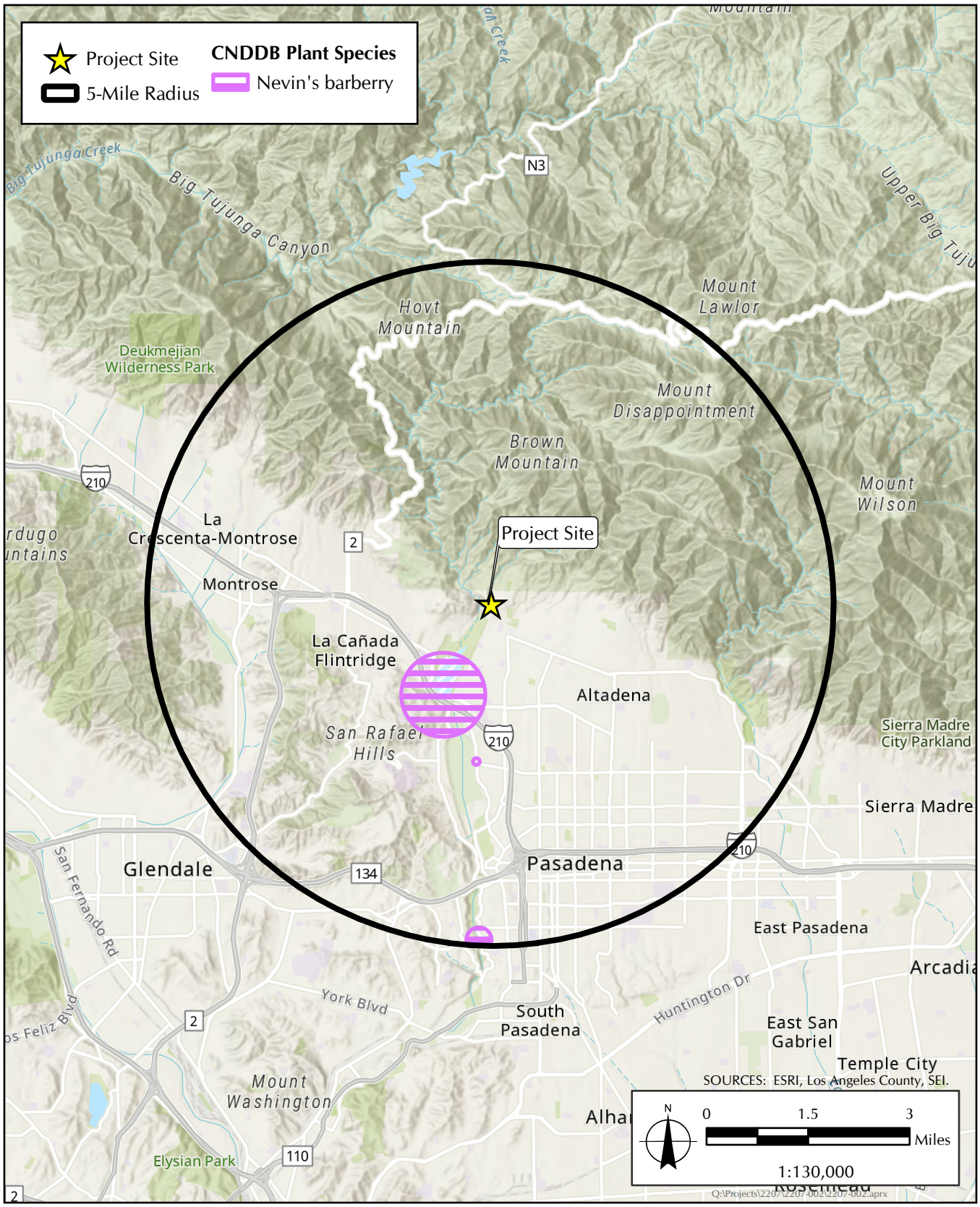

FIGURE 4

CNDDB Records of Plant Species within 5 Miles of the Project Site

TABLE 4.1-1
SPECIAL-STATUS SPECIES POTENTIALLY PRESENT ON THE PROPOSED RESIDENCE SITE

Common Name (*Scientific Name*)	Status	Description	Potential Presence
Amphibians			
Coast Range newt (*Taricha torosa*)	SSC	Native species with aquatic breeding phase in ponds, lakes and streams from December to May and a terrestrial phase during the dry months. Breeding season rains often initiate group migrations.	Suitable breeding habitat for this species is riparian habitat on-site. This species was not observed during site surveys but due to bi-phased lifecycle and migration habits may enter the site at a later date.
Western spadefoot (*Spea hammondii*)	SA, BLM_S, SSC	Toads with smooth skin, and sometimes have a light stripe on their backs. Their eyes are pale gold, with vertical pupils. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains.	Most recent occurrence was more than 3 miles from the project site. Potential to occur in the riparian habitat on site, however, this area will not be affected by project activities.
Birds			
Coastal California gnatcatcher (*Polioptila californica californica*)	FT, SSC	A tiny gray bird with a tiny range, the California gnatcatcher flits through coastal sage scrub and desert scrub from Southern California to southern Baja California, Mexico. California gnatcatchers live in coastal sage scrub, desert scrub, and coastal dune scrub year-round. In California they occur along the coast in areas dominated by California sagebrush.	Suitable habitat for this species is coastal sage scrub on site. This species was not observed during surveys but may occur within undisturbed sage scrub in the surrounding area. This species was not observed during surveys but is an inconspicuous species and may enter the site at a later date.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE, SE	Native migratory species that is present in Southern California during the spring and summer months. It is known to create cup nests in densely vegetated riparian associations, 5–20 feet from the ground. Nesting substrates include lowland riparian	Suitable habitat for this species is riparian habitat on site. This species was not observed during surveys but is an inconspicuous species and may enter the site at a later date.

TABLE 4.1-1
SPECIAL-STATUS SPECIES POTENTIALLY PRESENT
ON THE PROPOSED RESIDENCE SITE, *Continued*

Common Name (*Scientific Name*)	Status	Description	Potential Presence
		woodlands dominated by willows (*Salix* spp.), primarily in tree form, and cottonwoods (*Populus* spp.) or smaller spring-fed or boggy areas with willow or alders (*Alnus* spp.), ash (*Fraxinus* spp.), and buttonbush (*Cephalanthus* spp.).	
Least Bell's vireo (*Vireo bellii pusillus*)	FE, SE	Native migratory species that may be present in Southern California during the spring and summer months. It is known to create cup nests in shrubs and small trees in dense riparian vegetation in vicinity of water, 1–3 feet from the ground. Nesting substrates include willow (*Salix* sp.), mule fat (*Baccharis glutinosa*), California wild rose (*Rosa californica*), poison oak (*Toxicodendron diversilobum*), mugwort (*Artemisia douglasiana*), and cottonwood (*Populus fremontii*).	Suitable habitat for this species is riparian habitat on site. This species was not observed during surveys but is an inconspicuous species and may enter the site at a later date.
Plants			
Nevin's barberry (*Berberis nevinii*)	FE, SE	Nevin's barberry is a large rounded shrubby member of the barberry family (Berberidaceae) that grows up to 4 m tall, with blue-green, spiny pinnate leaves. Generally, grows in sandy/gravelly places between 240 and 820 m (800–2,700 feet) in elevation, on steep north-facing slopes or on low gradient, (south-facing) washes. Bedrock is typically of sedimentary origin. Associated plant communities are alluvial scrub, riparian scrub or woodland, coastal sage scrub, chaparral, and/or oak woodland.	Potential to occur as there is suitable habitat on site. However, the species was not observed during site surveys.
Mollusks			
San Gabriel chestnut	S3	The San Gabriel chestnut snail is dark and	Potential to occur in the riparian

TABLE 4.1-1
SPECIAL-STATUS SPECIES POTENTIALLY PRESENT
ON THE PROPOSED RESIDENCE SITE, *Continued*

Common Name (*Scientific Name*)	Status	Description	Potential Presence
(*Glyptostoma gabrielense*)		glossy, with a spiraled shell that is chestnut in color and a little more than 1 inch wide. The San Gabriel chestnut snail is restricted to an "island" of habitat in the San Gabriel Mountains, part of the Transverse Ranges situated between the Los Angeles Basin and the Mojave Desert.	habitat on site, however, this area will not be affected by project activities

KEY:
BLM_S = Bureau of Lang Management Sensitive Species
FE = Federally Endangered
SA = CNDDB Special Animal
SC = State Candidate for listing
SE = State Endangered
SSC = CDFW Species of Special Concern

State Rarity Ranking
S1 = At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
S2 = At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 = At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 = At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 = At very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.

4.2 Plant Communities

On the project site, two (2) plant communities described in the *Manual of California Vegetation*[13] were found to be present in the 2019 survey and confirmed in 2024: (1) *Quercus agrifolia* (Coast Live Oak) Woodland Alliance (also known in riparian settings by the legacy Holland Code used in the legacy CNDDB natural community lists as "Southern Coast Live Oak Riparian Forest") and (2) California sagebrush scrub (Figure 5, *Vegetation Community Map;* Table 4.2-1*, Plant Communities within the Project Parcel*). Coast Live Oak Woodland has a state rank of S4, indicating that it is apparently secure. California sagebrush scrub has a state rank of S5, indicating that it is secure. These plant communities correspond to an association of *Quercus agrifolia* / *Artemisia californica* in the California Sensitive Natural Communities List maintained by the CDFW, which is designated by the CDFW with a state rank of S4. Plant communities with state ranks of S1 through S3 are considered to be sensitive by the CDFW for purposes of CEQA evaluation, and communities with ranks of S4 and S5 are considered not to be sensitive. No plant communities with a rank of S1 through S3 are present on the project site.

Coast Live Oak Woodland is characterized by the dominance or co-dominance of coast live oak with other oak trees or willows (*Salix* spp.) potentially present in the canopy layer. Trees in this community are typically less than 30 meters tall with an open to continuous canopy layer and less dense shrub and herb layers. This community occurs in canyon bottoms, along stream banks, and slopes. Soils are typically sandy or loamy with high organic matter.

California sagebrush scrub is characterized by the dominance or co-dominance of California sagebrush (*Artemisia californica*) and *Salvia* spp. (*Salvia mellifera* and/or *Salvia leucophylla*). This "soft chaparral" has an intermittent to continuous shrub layer less than 2 meters in height. This community occurs on steep, sunny slopes and on rarely flooded, low-gradient deposits along streams.

TABLE 4.2-1
PLANT COMMUNITIES WITHIN THE PROJECT AREA

Vegetation Cover Type	Acre
California sagebrush scrub (*Artemisia californica* Shrubland Alliance)	0.60
Coast Live Oak Woodland (*Quercus agrifolia Woodland* Alliance)	0.40
Total	**1**

4.3 Oak and Native Trees

Coast live oak trees were observed within both the project area and work area. These trees are protected under the County of Los Angeles Oak Tree Ordinance. Specific expected impacts to these trees from the project are addressed under a separate Oak Tree Report, prepared in 2014. However, this report addresses the role of the coast live oak woodlands in the site's ecology.

[13] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*. 2nd edition. Sacramento, CA: California Native Plant Society.

FIGURE 5

Vegetation Community Map

4.4 Nesting Birds and Roosting Bats

No active bird or raptor nests were observed on or in visual proximity to the proposed work area. The proposed residence site contains dense chaparral vegetation, which contains substrates suitable for bird nesting and some trees suitable for raptor use.

Suitable roosting habitat, including mature trees and cliff faces, were observed for several special status bat species. However, no bats or signs thereof, such as guano or uric acid were observed during the site surveys.

4.5 Wildlife Movement

The Coast Live Oak Woodland community within the western riparian area outside of the work area provides connectivity between habitat in the Angeles National Forest and the Arroyo Seco that may act as a wildlife corridor.

The majority of the site is located within the Altadena Foothills and Arroyos SEAs. SEAs are considered conducive to wildlife movement throughout Los Angeles County.

Due to the steepness of the slope separating this SEA linkage habitat from the work area, its proximity to existing development, and lack of connectivity to appreciable areas of natural habitat, the work area is not expected impact any established wildlife corridors.

As the work area is not planned to have fencing across its frontage, wildlife movement between the riparian habitat on site and the developed areas surrounding the work area would not be obstructed.

5.0 DISCUSSION

5.1 Potential Impacts

No sensitive, candidate, or special-status plant or animal species or active bird nests were observed on the proposed residence site, and no associated impacts are anticipated as a result of the construction of the proposed residence. However, there is potential for the presence of several special-status species. No active nests were observed during the project area survey. However, potential nesting substrates exist on the proposed residence site, and native migratory and resident birds may build nests at any time during the nesting season. Therefore, development in proximity to vegetation that provides suitable nesting substrate has the potential to impact bird species. However, most of the listed bird species identified to be potentially present are more likely to nest in the riparian habitat and away from the footprint of development. The project site also contains suitable habitat for several amphibians within the riparian habitat. During breeding season (in the rainy season, usually from December through March), amphibians would be expected in the riparian habitat away from the footprint of development. Outside of the breeding season amphibians may be found outside of riparian habitat but would be expected to be able to escape disturbance on their own.

Although no active roosts were observed during the site visit, it should be assumed that an active bat roost may be built in these areas of vegetation at any time during the maternity roosting season (March 1–September 30).

Direct impacts to California sagebrush scrub and Coast Live Oak Woodland communities resulting from construction of the proposed residence within the work area are expected to be minimal given the fragmented residential setting and small footprint of development. The footprint of the work area is within the eastern part of the Altadena SEA, which is outside of the undisturbed riparian habitat to the west that is conducive to wildlife movement (Figure 5). Minimal impacts are anticipated to occur within the SEA, including riparian habitat and wildlife movement within the riparian corridor.

Direct impacts to wildlife species are associated with habitat removal to accommodate the footprint of development. These are expected to be minimal given the low amount of vegetation removed and small footprint of development. Temporary impacts to wildlife species are also associated with activities that generate noise, light, dust, vibration, and other disturbances at intensities that affect wildlife differently than the level of disturbance that already exists in the residential neighborhood. These marginal indirect impacts are addressed in the EIR and are not expected to significantly deviate from the existing baseline during construction and operation of the project, especially for nocturnal animals that would be more sensitive to disturbance.

5.2 Avoidance and Minimization

Construction of the proposed residence is not expected to result in impacts to any sensitive, candidate, or special-status plants or wildlife.

The principal concerns are during vegetation removal during nesting bird season, for incidental take, including of a bird nest or juvenile bird learning to fly in the vicinity, and disturbance of a bird nest that would not otherwise have been established. No potential impacts to riparian habitat or incidental take of the any special status species are expected.

The project area is already characterized by disturbances from adjacent residential uses and traffic that is similar in nature to that expected during construction and operation of the project, including excursions of noise levels above those otherwise permitted by the County Code in the construction or operation of a single-family residence. Construction that does not involve habitat removal and that started prior to bird nesting season, but continued into it, would not be expected to create disturbances that were more adverse for any species sufficiently tolerant to form a nest in the neighborhood, while work activities were underway.

The following typical avoidance and minimization efforts are recommended. While their suitability cannot be anticipated in all circumstances, any alterations to the recommended buffer distances shall be coordinated with and require written permission from the CDFW and/or USFWS, according to the species impacted. A “Qualified Biologist” refers to a professional biologist with at least four years of experience performing such work in the County.[14]

- Grading and vegetation disturbance or removal during construction of the proposed residence shall be performed to the greatest extent feasible outside of the bird nesting season (February 15–August 31). If grading and vegetation disturbance or removal activities must commence during the bird nesting season, a nesting bird survey shall be performed by a Qualified Biologist within one week of the start of such activities. If grading and vegetation disturbance or removal activities commence prior to but continue into the

[14] County of Los Angeles Department of Regional Planning. *Certified Biological Consultant Minimum Qualifications*. Available at https://planning.lacounty.gov/wp-content/uploads/2023/12/Certified-Biological-Consultant-Minium-Qualifications_12.4.23.pdf

bird nesting season, work shall halt at the start of the nesting season until a nesting bird survey is performed by the Qualified Biologist. Should any bird nest be discovered within 250 feet of the development footprint, construction shall be halted. If grading and vegetation disturbance or removal activities must resume during the nesting season, a 250-foot buffer centered on the active nest shall be established to preclude such activities until a Qualified Biologist has determined that the young are flying well enough to avoid incidental take, or the nest has failed.

- A Qualified Biologist shall perform a sweep of the project site no more than one week prior to the start of grading or vegetation disturbance/removal. A Qualified Biologist shall also identify any animal or nest encountered by the contractor during vegetation disturbance or removal, prior to any take. If any sensitive, candidate or special-status animal species are identified that do not escape of their own volition, or if such a plant is encountered, construction shall halt. The Applicant shall consult with the CDFW and/or USFWS, according to the listing, as to permitting requirements for further action. Such requirements are expected to include, but are not limited to, formulation, approval by the CDFW and/or USFWS, and implementation of a salvage and transportation plan by a Qualified Biologist with a valid California Scientific Collecting Permit to relocate these species to the conserved open area on the project site or to other suitable habitat.

In addition, it is recommended that the following steps are taken to further reduce impacts to these and other plant and animal species regardless of their status as sensitive, candidate, or special-status species and to facilitate compliance with the Fish and Game Code:

- The removal of native vegetation during construction shall be avoided to the greatest extent feasible, and architectural and landscape design shall preserve native vegetation to the greatest extent feasible.

- During the pre-construction sweep, any other encountered low-mobility animal or native plant with preservation value, as determined by the Qualified Biologist, shall also be relocated as feasible.

- If tree removal occurs during the bat breeding season (March 1 – August 31), a bat survey shall be performed by a Qualified Biologist prior to tree removal, which may include direct observations and/or acoustic monitoring using ultrasonic detectors. If a roost is encountered, construction shall be halted. If tree removal must resume during the breeding season, a 300-foot buffer centered on the active roost shall be established to preclude such activities until a Qualified Biologist has determined that the young are flying well enough to avoid incidental take, or the roost has failed.

- The trunk and scaffold branches of any tree removed at any time shall be retained on-site for at least one night prior to further disturbance, including transportation or chipping, in order to provide any roosting bat an opportunity to escape.

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APPENDIX A
SITE PHOTOGRAPHS

PHOTO 1
Facing west down east slope

PHOTO 2
Facing east, upslope

PHOTO 3
Project site facing downslope northwest, 2024

PHOTO 4
Project site facing upslope, east, in 2024

APPENDIX B
QUALIFICATIONS OF BIOLOGISTS

Sapphos environmental inc.

RESUME

Brandon Lotts

Biological Resources Specialist

Role: Biological Resources Specialist

Background

Botanical and wildlife surveys; biological and habitat assessments, construction and environmental compliance monitoring for County of Los Angeles, SoCalGas, Caltrans, SCE, and city infrastructure projects, SWPPP Monitoring inspections, and sampling

Years of Experience: 5

Value Added to Team

- Species Life History Surveys
- Biological Resources Evaluations
- Agency and Client Reports
- Plant and Wildlife Surveys
- Remote Sensing
- CEQA

Education

MS, Environmental Studies, CSU Fullerton, 2019

BS, Biology, Bushnell University, 2016

Training and Certification

Plant Voucher Collecting Permit

Desert Tortoise Field Techniques Workshop (DTC)

SW Willow Flycatcher Survey Workshop

Yellow Billed Cuckoo Workshop

Level II BNLL Surveyor

CDFW Scientific Collecting Permit (SC-191430007)

Wetland Delineation Certificate

Brandon Lotts is a Biological Resources Specialist at Sapphos Environmental, Inc. with 5 years of experience in the field of wildlife biology including construction monitoring and surveys, trapping, remote sensing, and biological resource analysis for California Environmental Quality Act (CEQA) programmatic and project-level documents. Mr. Lotts performed surveys and documented biological resources in support of various Southern California Edison (SCE) projects throughout California. These projects involved preconstruction clearance surveys and monitoring; including for nesting birds, sensitive plant communities, rare plants, and special status wildlife species. As a wildlife biologist for SCE, Mr. Lotts conducted focused biological resource surveys for special status plants and animals including burrowing owl (*Athene cunicularia*), as well as conducting habitat assessments and waters/wetland monitoring in support of SCE projects.

Mr. Lotts has provided biological resources analysis for more than 100 different projects, including residential, commercial, institutional facilities, park and school modernization efforts, transportation projects, undeveloped lands, and urban spaces. Some of the projects for which Mr. Lotts has authored the biological resources section include technical documents such as the Exposition Park Master Plan Subsequent EIR, a Class 32 Categorical Exemption for a multi-family residential project in the City of Los Angeles, Los Angeles County Green Zones Program EIR, as well as several MNDs. Mr. Lotts has worked on the Program Construction Management (PCM) team for the California High Speed Rail (CHSR) Project to amend the Incidental Take Permit (ITP), the Master Streambed Alteration Agreement (MSAA), and provide environmental compliance oversight to the Design-Build companies on the project.

Mr. Lotts is the project manager for several ongoing Los Angeles County Public Works projects, including the Eaton Reservoir Annual Maintenance and Mowing project. His primary duties included project management, authoring the Biological Resources report (BR) and coauthoring the Jurisdictional Delineation (JD). Through these reports, Public Works will be able to make an accurate assessment of the potential environmental effects of the project and apply for the necessary permits. He has performed nesting bird surveys, least Bell's vireo (*Vireo bellii pusillus*) surveys, sensitive plant surveys, flagging to create nesting bird buffer zones, construction monitoring, and daily monitoring report forms, and addenda to the Master Streambed Alteration Agreement (MSAA). Mr. Lotts is the project manager and lead biologist for the Los Angeles County Public Works One Carter Debris Basin Permitting project. Through his efforts, he has ensured that the client accurately applied for all necessary permits for the transfer of the debris basin to Public Works control. Mr. Lotts was responsible for implementing Avoidance and Mitigation Measures, facilitating repairs to the basin and coordination between Public Works and the City of Sierra Madre.

Selected Project Experience

Various On-call (CWA) Southern California Edison (SCE) Projects. Biologist. Mr. Lotts has conducted focused special status species surveys, habitat assessments, nesting bird surveys, construction monitoring, and reporting to support SCE's Distribution Det Pole, Distribution GRM and Transmission Projects. Special-status animal experience includes sensitive herpetofauna species, riparian birds including, southwestern willow flycatcher, California gnatcatcher, least Bell's vireo, and yellow breasted chat, rare plants and various watchlist species.

Taylor Yard Bikeway Project at the Los Angeles River, Los Angeles, CA. Lead Biologist. Mr. Lotts was the lead biologist and ensured that the client followed all Avoidance and Mitigation measures. Additionally, he performed nesting bird surveys, Least Bell's Vireo surveys, sensitive plant surveys, flagging to create nesting bird buffer zones, construction monitoring, and daily monitoring report forms.

SoCalGas Advanced Meter Initiative. Supporting Biologist. SoCalGas scheduled the maintenance of several gas lines in the unincorporated territory of San Luis Obispo County. Sapphos Environmental, Inc. was contracted by SoCalGas to provide biological surveys prior to any installation. Mr. Lotts conducted biological field and desktop surveys to assess sensitive plant and animal species in the area in order to prevent potential negative impact to any special status wildlife. These surveys included multiple days of Blunt-nose leopard lizard (*Gambelia sila*) and giant kangaroo rat (*Dipodomys ingens*) surveys. Under supervision of the designated biologist, Mr. Lotts used Sherman live traps to capture and release small mammals such as Heermanns kangaroo rats (*Dipodomys heermanni*) and big-eared woodrats (*Neotoma macrotis*), among others.

Eaton Reservoir Annual Maintenance. Lead Biologist. Mr. Lotts was a construction monitor and ensured that the client followed all Avoidance and Mitigation measures associated with the Master Streambed Alteration Agreement. Additionally, he performed preconstruction surveys, nesting bird surveys, daily monitoring report forms, tree surveys, and monitoring for endangered species. He coauthored a Habitat Assessment MFR for the western pond turtle (*Actinemys marmorata*) and several bat species.

LACDPW, Santa Clara River Floodplain/Floodway Mapping. Supporting Biologist. Los Angeles County Public Works scheduled the revisions to the mapping of the Santa Clara River floodplain and floodway in Los Angeles County. Mr. Lotts performed habitat assessment surveys to determine the presence/absence of sensitive species with critical habitat for Least Bell's Vireo and southwestern willow flycatcher. Mr. Lotts subsequently authored the biological resources section of the CEQA exemption document. The County Board of Supervisors certified the CEQA documentation in June 2022.

SoCalGas PSEP l235 Newberry Station Replacement Project. Environmental Monitor. Mr. Lotts is a California Department of Fish and Wildlife– and U.S. Fish and Wildlife Service–approved Environmental Monitor for the SoCalGas L235 Newberry Station Replacement Project. Mr. Lotts conducted the pre-activity surveys for nesting birds and desert tortoise (*Gopherus agassizii*). Mr. Lotts monitored work activities for over a week and maintained daily reports in the SoCalGas templates.

SoCalGas L2001W Santa Ana River Project. Environmental Monitor. Mr. Lotts is a California Department of Fish and Wildlife– and U.S. Fish and Wildlife Service–approved Environmental Monitor for the SoCalGas L2001W Santa Ana River project and ensured all avoidance and minimization measures were implemented and maintained, including, but not limited to, determining, and delineating appropriate avoidance and construction buffer areas; maintaining delineated access routes and work areas; monitoring for the presence of, and potential impacts to, special-status species; and maintaining/repairing/replacing any exclusionary fencing. Monitors maintained daily reports in the SoCalGas templates.

Sapphos environmental inc.

RESUME

Bruce Eilerts

Biological Resources Manager

Role: Biological Resources Manager

Certifications

- Southwest Willow Flycatcher Survey Protocol
- Cactus Ferruginous Pygmy Owl Survey and Detection Protocol
- Regulatory IV Wetlands Delineation and Classification
- NAUI Scuba Diving

Years' Experience: 20+

Value Added to Team

- Special Status Species
- Project Management
- NEPA
- Agency coordination
- Training

Education

BS, Zoology, College of Idaho

Mr. Bruce D. Eilerts, Biological Resources Manager for Sapphos Environmental, Inc., has a broad background in environmental compliance and biological resources analysis. He has over 20 years of professional experience providing program and project management, natural resources management, biological surveys and monitoring, and regulatory compliance services. He has served as a lecturer and provided environmental training, education and presentations to a variety of professional audiences.

Mr. Eilerts began his professional career as a biological technician with the US Fish and Wildlife Service (USFWS), where he operated a remote field research station in Hawaii. After that Mr. Eilerts worked for a number of years as a civilian for the military, working as a Natural Resources Manager for a U.S. Navy Command in the Pacific, and as Chief Natural and Cultural Resources Program Manager for the U.S. Air Force in the Sonoran desert of Arizona. Mr. Eilerts also worked as an Agency Department Head responsible for the Natural Resources Management Group for the Arizona Department of Transportation. Immediately prior to joining Sapphos Environmental, Inc., Mr. Eilerts worked as Project Manager and Lead Biologist, (and designated "authorized" desert tortoise biologist) for the Sanberg Group, Inc.

Mr. Eilerts is an expert in the field of wildlife connectivity. While working for the Arizona Department of Transportation, he oversaw a multi-agency effort to identify crucial habitats, locate heavily used wildlife crossing areas, and install wildlife collision reduction devices and wildlife crossing structures. He also utilized radio and satellite telemetry systems and equipment, GPS/GIS data collection and database management, and was co-author of the *Arizona Wildlife Linkages Assessment*, a statewide wildlife connectivity planning document that identified, described, and mapped 137 "linkages" throughout the State of Arizona. Mr. Eilerts was the recipient of national awards and international acclaim as one of the first successful pioneers of a statewide wildlife connectivity process and program.

Some of Mr. Eilerts' specific biological surveying, management and monitoring experience includes: Desert Tortoise; Gila Monster; Chuckwalla; Blunt-Nosed Leopard Lizard; Flat Tailed Horned Lizard; Tiger Rattlesnake, Green Sea Turtle, Lesser Long-Nosed Bat; California Leaf-Nosed Bat; Idaho Ground Squirrel, Sonoran Pronghorn; Desert Bighorn Sheep; Black Bear; Rocky Mountain Elk; Hawaiian Monk Seal, Mariana Fruitbat; Southwest Willow Flycatcher, Mexican Spotted Owl, Cactus Ferruginous Pygmy Owl; Sage Grouse; nesting raptors; seabirds, Micronesian Kingfisher; and Mariana Crow. Mr. Eilerts has also managed an invasive species interdiction program for the brown tree snake on Guam, successfully completed a "Judas" goat eradication project for Kaho'olawe island, Hawaii; and conducted trapping and control programs for feral cats, Cattle Egrets, mongooses and rodents on several Pacific islands.

Mr. Eilerts has extensive experience with habitat restoration, conservation and management projects that include jurisdictional delineations of wetlands, vegetation mapping and monitoring, and the preparation of Habitat Conservation Plans and related mitigation.

Additionally, Mr. Eilerts managed a Bird Air Strike Hazard Survey (BASH) program for the U.S. Navy at Midway Atoll in the Hawaiian Islands, where over 3 million albatross reside. He completed surveys, behavioral and habitat studies, monitored flyways, feeding and resting areas near airstrips, and experimented with scare and exclusion devices and strategies. He was ultimately able to reduce the number of aircraft and bird collisions through various habitat modifications and behavioral research methods in association with ongoing military flight operations, getting military personnel to incorporate avoidance techniques into their training exercises.

Project Experience

Desert Tortoise Surveys and Monitoring, California/Nevada. Biology Lead, Authorized Desert Tortoise Biologist. Mr. Eilerts conducted surveys and monitoring as part of Eldorado-Ivanpah Transmission Project (EITP) using Desert Tortoise survey and monitoring protocol and radio/satellite telemetry.

Herpetological (General) Surveys and Monitoring, California/Nevada. Biology Lead. Mr. Eilerts conducted surveys and monitoring as part of EITP. Used standard reptile survey and monitoring protocol. Species included (but were not limited to) Gila Monster, Desert Horned Lizard, Chuckwalla, and Blunt-nosed Leopard Lizard.

Lesser Long-nosed Bat and California Leaf-nosed Bat Surveys, California. Biology Lead. Mr. Eilerts conducted mine exit counts, radio telemetry, and chemical light marking and tracking; Saguaro flower feeding surveys (using lens paper).

Vernal Pool Management, California. Biology Lead. Identification, mapping, protection and management of vernal pools. Fairy shrimp capture and monitoring.

Experience while working at the Sanberg Group, Inc., 2010 – 2018, Henderson, NV. Project Manager and Lead Biologist. Mr. Eilerts served as biology lead on major infrastructure projects on the California and Nevada border. “Authorized Biologist” responsible for surveys and monitoring of threatened and endangered species, primarily Desert Tortoise. Responsible for supervising field personnel and advancing time-sensitive projects with significant environmental impact through management of the environmental team, quality assurance, reporting and comprehensive regulatory compliance.

Experience while working for the Arizona Department of Transportation (ADOT), 2001 – 2010, Arizona. Agency Department Head responsible for the Natural Resources Management Group. Mr. Eilerts’ duties included program management and responsibility for five regional offices, two satellite offices, and forty-eight employees with a multi-million dollar annual budget. He was responsible for project management of natural resources along thousands of miles of roads and highways throughout Arizona. Environmental planning and compliance were additional responsibilities. Mr. Eilerts received national awards and international acclaim as one of the first successful pioneers of a Wildlife Connectivity process and program.

APPENDIX C
SPECIES COMPENDIUM

ATTACHMENT C
SPECIES COMPENDIUM

Common Name	Scientific Name
Birds	
Acorn woodpecker	*Melanerpes formicivorus*
Allen's hummingbird	*Selasphorus sasin*
American crow	*Corvus brachyrhynchos*
American goldfinch	*Spinus tristis*
American robin	*Turdus migratorius*
Anna's hummingbird	*Calypte anna*
Bushtit	*Psaltriparus minimus*
California scrub-jay	*Aphelocoma californica*
Oak titmouse	*Baeolophus inornatus*
Red-tailed hawk	*Buteo jamaicensis*
Turkey vulture	*Cathartes aura*
Reptiles	
Southern alligator lizard	*Elgaria multicarinata*
Plants	
Coast live oak	*Quercus agrifolia*
California bay laurel	*Umbellularia californica*
Century plant	*Agave americana*
Miner's lettuce	*Claytonia perfoliata*
Poison oak	*Toxicodendron pubescens*
Elderberry	*Sambucus mexicana*
California mugwort	*Artemisia douglasiana*
Unidentified brome sp.	*Bromus* sp.
Umbrella papyrus	*Cyperus alternifolius*
Himalayan blackberry	*Rubus armeniacus*
California cudweed	*Pseudognaphalium californicum*
Mule fat	*Baccharis salicifolia*
Clover	*Trifolium* sp.
London rocket	*Sisymbrium irio*
Goosefoot	*Chenopodium album*
Branching phacelia	*Phacelia ramosissima*
Greenspot nightshade	*Solanum douglasii*
Arroyo willow	*Salix lasiolepis*
Castor bean	*Ricinus communis*
Nasturtium (watercress)	*Nasturtium officinale*
Tree tobacco	*Nicotiana glauca*
Milk thistle	*Silybum marianum*
Velcro weed	*Galium aparine*
Ripgut brome	*Bromus diandrus*
California sagebrush	*Artemisia californica*
White sage	*Salvia apiana*
Black sage	*Salvia mellifera*
Bur parsley	*Anthriscus caucalis*
Opuntia cactus	*Opuntia* sp.
Sugar bush	*Rhus ovata*
Chamise	*Adenostoma fasciculatum*
Laurel sumac	*Malosma laurina*
Mammals	
California ground squirrel	*Otospermophilus beecheyi*
Eastern fox squirrel	*Sciurus niger*

APPENDIX D
CNNDB, CNPS, AND USFWS SPECIES LISTS

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Sunland (3411833) OR Condor Peak (3411832) OR Chilao Flat (3411831) OR Burbank (3411823) OR Pasadena (3411822) OR Mt. Wilson (3411821) OR Hollywood (3411813) OR Los Angeles (3411812) OR El Monte (3411811))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	ABPBX91091	235	1	None	None	G5T3	S4	null	CDFW_WL-Watch List	Chaparral, Coastal scrub
Anaxyrus californicus	arroyo toad	Amphibians	AAABB01230	139	4	Endangered	None	G2G3	S2	null	CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Desert wash, Riparian scrub, Riparian woodland, South coast flowing waters, South coast standing waters
Anniella spp.	California legless lizard	Reptiles	ARACC01070	125	20	None	None	G3G4	S3S4	null	CDFW_SSC-Species of Special Concern	null
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	427	37	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Coastal dunes, Coastal scrub
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	7	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Aphyllon validum ssp. validum	Rock Creek broomrape	Dicots	PDORO040G2	12	1	None	None	G4T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Pinon & juniper woodlands
Arctostaphylos glandulosa ssp. gabrielensis	San Gabriel manzanita	Dicots	PDERI042P0	35	12	None	None	G5T3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral
Arenaria paludicola	marsh sandwort	Dicots	PDCAR040L0	19	1	Endangered	Endangered	G1	S1	1B.1	SB_SBBG-Santa Barbara Botanic Garden	Freshwater marsh, Marsh & swamp, Wetland
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	260	3	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern	null
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	ARACJ02143	148	10	None	None	G5T5	S3	null	CDFW_SSC-Species of Special Concern	null
Astragalus brauntonii	Braunton's milk-vetch	Dicots	PDFAB0F1G0	57	4	Endangered	None	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Coastal scrub, Limestone, Valley & foothill grassland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2057	2	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran

											of Conservation Concern	desert scrub, Valley & foothill grassland
Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	15	1	None	None	G1G2	S1	1B.1	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive	Alkali playa, Chenopod scrub, Meadow & seep, Vernal pool, Wetland
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	PDCHE041T1	26	2	None	None	G5T1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal scrub
Berberis nevinii	Nevin's barberry	Dicots	PDBER060A0	32	7	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub
Bombus crotchii	Crotch's bumble bee	Insects	IIHYM24480	437	17	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null
Bombus pensylvanicus	American bumble bee	Insects	IIHYM24260	408	51	None	None	G3G4	S2	null	IUCN_VU-Vulnerable	Coastal prairie, Great Basin grassland, Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2576	1	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
California Walnut Woodland	California Walnut Woodland	Woodland	CTT71210CA	76	2	None	None	G2	S2.1	null	null	Cismontane woodland
Calochortus clavatus var. gracilis	slender mariposa-lily	Monocots	PMLIL0D096	143	2	None	None	G4T2T3	S2S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	Monocots	PMLIL0D122	111	7	None	None	G3T2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Lower montane coniferous forest, Meadow & seep
Calochortus plummerae	Plummer's mariposa-lily	Monocots	PMLIL0D150	230	49	None	None	G4	S4	4.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley & foothill grassland
Calochortus striatus	alkali mariposa-lily	Monocots	PMLIL0D190	113	1	None	None	G3	S2S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Chenopod scrub, Meadow & seep, Mojavean desert scrub, Wetland
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	PMLIL0D1J1	197	2	None	None	G3G4T3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Calystegia felix	lucky morning-glory	Dicots	PDCON040P0	10	2	None	None	G1Q	S1	1B.1	null	Meadow & seep, Riparian scrub
Castilleja gleasoni	Mt. Gleason paintbrush	Dicots	PDSCR0D140	33	16	None	Rare	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Lower montane coniferous forest, Pinon & juniper woodlands
Catostomus santaanae	Santa Ana sucker	Fish	AFCJC02190	28	2	Threatened	None	G1	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Aquatic, South coast flowing waters
Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	94	6	None	None	G3T2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic	Marsh & swamp, Salt marsh, Valley & foothill

											Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, SB_SBBG-Santa Barbara Botanic Garden	grassland, Vernal pool, Wetland
Centromadia pungens ssp. laevis	smooth tarplant	Dicots	PDAST4R0R4	137	1	None	None	G3G4T2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Chenopod scrub, Meadow & seep, Riparian woodland, Valley & foothill grassland, Wetland
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Dicots	PDPGN040J1	21	3	None	Endangered	G2T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Coastal scrub, Valley & foothill grassland
Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	PDPGN040J2	150	3	None	None	G3T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Cladium californicum	California saw-grass	Monocots	PMCYP04010	15	1	None	None	G4	S2	2B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Alkali marsh, Freshwater marsh, Meadow & seep, Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	1	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, USFS_S-Sensitive	Riparian forest
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	3	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	1	None	None	G4	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	PDCUS01111	6	1	None	None	G5T4?	SH	2B.2	null	Marsh & swamp, Wetland
Cypseloides niger	black swift	Birds	ABNUA01010	46	1	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFWS_BCC-Birds of Conservation Concern	null
Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	ARADB10015	14	1	None	None	G5T2T3	S2?	null	USFS_S-Sensitive	null
Dodecahema leptoceras	slender-horned spineflower	Dicots	PDPGN0V010	42	7	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub
Dudleya multicaulis	many-stemmed dudleya	Dicots	PDCRA040H0	154	2	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic	Chaparral, Coastal scrub,

											Garden, USFS_S-Sensitive	Valley & foothill grassland
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	70	2	Endangered	Endangered	G5T2	S3	null	null	Riparian woodland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1559	13	Proposed Threatened	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Eugnosta busckana	Busck's gallmoth	Insects	IILEM2X090	15	1	None	None	G1G3	S2S3	null	null	Coastal dunes, Coastal scrub
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	9	None	None	G4G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Falco peregrinus anatum	American peregrine falcon	Birds	ABNKD06071	75	1	Delisted	Delisted	G4T4	S3S4	null	CDF_S-Sensitive	null
Galium grande	San Gabriel bedstraw	Dicots	PDRUB0N0V0	9	3	None	None	G1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest
Gila orcuttii	arroyo chub	Fish	AFCJB13120	49	1	None	None	G2	S2	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, South coast flowing waters
Glyptostoma gabrielense	San Gabriel chestnut	Mollusks	IMGASB1010	24	15	None	None	G2	S3	null	null	null
Gonidea angulata	western ridged mussel	Mollusks	IMBIV19010	158	2	None	None	G3	S2	null	IUCN_VU-Vulnerable	Aquatic
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	PDAST4N102	7	3	None	None	G5TX	SX	1A	null	Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Helminthoglypta traskii pacoimensis	Pacoima shoulderband	Mollusks	IMGASC2472	2	1	None	None	G1G2T1	S1	null	null	null
Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	103	14	None	None	G4T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Cismontane woodland, Coastal scrub
Icteria virens	yellow-breasted chat	Birds	ABPBX24010	101	1	None	None	G5	S4	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Imperata brevifolia	California satintail	Monocots	PMPOA3D020	32	1	None	None	G3	S3	2B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Meadow & seep, Mojavean desert scrub, Riparian scrub, Wetland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	1	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern	Lower montane coniferous forest, Oldgrowth, Riparian forest
Lasiurus cinereus	hoary bat	Mammals	AMACC05032	238	10	None	None	G3G4	S4	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland,

												Lower montane coniferous forest, North coast coniferous forest
Lasiurus frantzii	western red bat	Mammals	AMACC05080	128	1	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
Lasiurus xanthinus	western yellow bat	Mammals	AMACC05070	58	1	None	None	G4G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Desert wash
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	111	1	None	None	G4T2	S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Alkali playa, Marsh & swamp, Salt marsh, Vernal pool, Wetland
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	PDBRA1M114	142	5	None	None	G5T3	S3	4.3	null	Chaparral, Coastal scrub
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	AMAEB03051	103	1	None	None	G5T3T4	S3S4	null	null	Coastal scrub
Linanthus concinnus	San Gabriel linanthus	Dicots	PDPLM090D0	43	4	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest
Malacothamnus davidsonii	Davidson's bush-mallow	Dicots	PDMAL0Q040	78	36	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	7	1	None	None	G5T2T3	S2	null	CDFW_SSC-Species of Special Concern	null
Monardella australis ssp. gabrielensis	San Gabriel Mountains monardella	Dicots	PDLAM18114	14	3	None	None	G4T2	S2	1B.2	null	Broadleaved upland forest, Chaparral, Lower montane coniferous forest
Muhlenbergia californica	California muhly	Monocots	PMPOA480A0	5	1	None	None	G4	S4	4.3	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Coastal scrub, Lower montane coniferous forest, Meadow & seep
Nasturtium gambelii	Gambel's water cress	Dicots	PDBRA270V0	13	1	Endangered	Threatened	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	61	1	None	None	G2	S2	1B.2	null	Coastal scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	AMAFF08041	132	2	None	None	G5T3T4	S3S4	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	32	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	null
Onychomys torridus ramona	southern grasshopper mouse	Mammals	AMAFF06022	28	2	None	None	G5T3	S3	null	CDFW_SSC-Species of Special Concern	Chenopod scrub
Open Engelmann Oak Woodland	Open Engelmann Oak Woodland	Woodland	CTT71181CA	2	2	None	None	G2	S2.2	null	null	Cismontane woodland
Opuntia basilaris var. brachyclada	short-joint beavertail	Dicots	PDCAC0D053	199	7	None	None	G5T3	S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic	Chaparral, Joshua tree woodland, Mojavean desert scrub, Pinon &

											Garden, USFS_S-Sensitive	juniper woodlands
Palaeoxenus dohrni	Dohrn's elegant eucnemid beetle	Insects	IICOL5K010	3	1	None	None	G3?	S1S2	null	null	null
Pelazoneuron puberulum var. sonorense	Sonoran maiden fern	Ferns	PPTHE05192	27	3	None	None	G5T3	S2	2B.2	USFS_S-Sensitive	Meadow & seep, Wetland
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	15	1	None	None	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal dunes, Coastal scrub
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	841	21	None	None	G4	S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	1087	21	Threatened	None	G4G5T3Q	S2	null	CDFW_SSC-Species of Special Concern	Coastal bluff scrub, Coastal scrub
Pseudognaphalium leucocephalum	white rabbit-tobacco	Dicots	PDAST440C0	62	6	None	None	G4	S2	2B.2	null	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Quercus dumosa	Nuttall's scrub oak	Dicots	PDFAG050D0	180	1	None	None	G3	S3	1B.1	BLM_S-Sensitive, IUCN_EN-Endangered, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive	Chaparral, Closed-cone coniferous forest, Coastal scrub
Rana muscosa	southern mountain yellow-legged frog	Amphibians	AAABH01330	186	14	Endangered	Endangered	G1	S2	null	CDFW_WL-Watch List, IUCN_EN-Endangered, USFS_S-Sensitive	Aquatic
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	AFCJB3705K	13	1	None	None	G5T1	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, South coast flowing waters
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	PDGRO020F3	5	4	None	None	G5TX	SX	1A	null	Riparian woodland
Riparia riparia	bank swallow	Birds	ABPAU08010	299	2	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	CTT32720CA	30	7	None	None	G1	S1.1	null	null	Coastal scrub
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	PDLAM1U0A1	43	1	None	None	G4T3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Chaparral, Cismontane woodland, Lower montane coniferous forest
Setophaga petechia	yellow warbler	Birds	ABPBX03010	78	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Sidalcea neomexicana	salt spring checkerbloom	Dicots	PDMAL110J0	30	3	None	None	G4	S2	2B.2	USFS_S-Sensitive	Alkali playa, Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Wetland
Southern California Arroyo Chub/Santa Ana Sucker Stream	Southern California Arroyo Chub/Santa Ana Sucker Stream	Inland Waters	CARE2330CA	4	1	None	None	GNR	SNR	null	null	null

Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	CTT61310CA	246	33	None	None	G4	S4	null	null	Riparian forest
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	CTT61330CA	111	4	None	None	G3	S3.2	null	null	Riparian forest
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest	Riparian	CTT61340CA	14	4	None	None	G2	S2.1	null	null	Riparian forest
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	CTT62400CA	230	52	None	None	G4	S4	null	null	Riparian woodland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1444	6	Proposed Threatened	None	G2G3	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Spermolepis lateriflora	western bristly scaleseed	Dicots	PDAPI23080	4	1	None	None	G5	SH	2A	null	Sonoran desert scrub
Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	102	2	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank, USFS_S-Sensitive	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Valley & foothill grassland
Symphyotrichum greatae	Greata's aster	Dicots	PDASTE80U0	56	21	None	None	G2	S2	1B.3	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland
Taricha torosa	Coast Range newt	Amphibians	AAAAF02032	88	3	None	None	G4	S4	null	CDFW_SSC-Species of Special Concern	null
Taxidea taxus	American badger	Mammals	AMAJF04010	647	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub,

												North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Thamnophis hammondii	two-striped gartersnake	Reptiles	ARADB36160	184	7	None	None	G4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Marsh & swamp, Riparian scrub, Riparian woodland, Wetland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	505	19	Endangered	Endangered	G5T2	S3	null	null	Riparian forest, Riparian scrub, Riparian woodland
Walnut Forest	Walnut Forest	Forest	CTT81600CA	6	1	None	None	G1	S1.1	null	null	Broadleaved upland forest

CNPS Rare Plant Inventory

Search Results

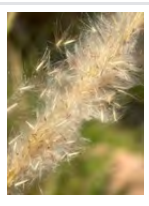
79 matches found. Click on scientific name for details

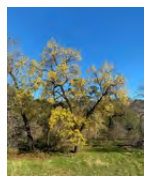
Search Criteria: 9-Quad include [**3411822:3411811:3411812:3411833:3411832:3411831:3411823:3411821:3411813**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Acanthoscyphus parishii var. *parishii*	Parish's oxytheca	Polygonaceae	annual herb	Jun-Sep	None	None	G4? T3T4	S3S4	4.2	Yes	2007-04-05	© 2014 Keir Morse
Aphyllon validum ssp. *validum*	Rock Creek broomrape	Orobanchaceae	perennial herb (parasitic)	May-Sep	None	None	G4T2	S2	1B.2	Yes	1974-01-01	No Photo Available
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	Ericaceae	perennial evergreen shrub	Mar	None	None	G5T3	S3	1B.2	Yes	1994-01-01	© 2016 Neal Kramer
Arctostaphylos parryana ssp. *tumescens*	interior manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	None	None	G4T3T4	S3S4	4.3	Yes	2001-01-01	No Photo Available
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	G1	S1	1B.1		1984-01-01	No Photo Available
Asplenium vespertinum	western spleenwort	Aspleniaceae	perennial rhizomatous herb	Feb-Jun	None	None	G3?	S4	4.2		1974-01-01	No Photo Available
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	FE	None	G2	S2	1B.1	Yes	1974-01-01	© 2009 Thomas Stoughton
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1		1988-01-01	No Photo Available
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2		1994-01-01	No Photo Available

Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	None	None	G3G4	S3S4	4.2	Yes	1974-01-01	No Photo Available
Calochortus clavatus var. *gracilis*	slender mariposa-lily	Liliaceae	perennial bulbiferous herb	Mar-Jun(Nov)	None	None	G4T2T3	S2S3	1B.2	Yes	1994-01-01	No Photo Available
Calochortus palmeri var. *palmeri*	Palmer's mariposa-lily	Liliaceae	perennial bulbiferous herb	Apr-Jul	None	None	G3T2	S2	1B.2	Yes	1994-01-01	No Photo Available
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
Calochortus striatus	alkali mariposa-lily	Liliaceae	perennial bulbiferous herb	Apr-Jun	None	None	G3	S2S3	1B.2		1974-01-01	No Photo Available
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	None	None	G1Q	S1	1B.1	Yes	2014-07-16	No Photo Available
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	None	None	G4	S4	3		1994-01-01	No Photo Available
Castilleja gleasoni	Mt. Gleason paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	May-Jun(Sep)	None	CR	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Castilleja plagiotoma	Mojave paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	No Photo Available
Centromadia parryi ssp. *australis*	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1		1994-01-01	No Photo Available
Centromadia pungens ssp. *laevis*	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	Yes	1994-01-01	No Photo Available
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	None	CE	G2T1	S1	1B.1	Yes	1974-01-01	No Photo Available
Chorizanthe parryi var. *parryi*	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	None	None	G3T2	S2	1B.1	Yes	1994-01-01	© 2012 Keir Morse

Cladium californicum	California saw-grass	Cyperaceae	perennial rhizomatous herb	Jun-Sep	None	None	G4	S2	2B.2		2006-08-17	No Photo Available
Clinopodium mimuloides	monkey-flower savory	Lamiaceae	perennial herb	Jun-Oct	None	None	G3	S3	4.2	Yes	2007-05-04	No Photo Available
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	None	None	G5T4?	SH	2B.2		2011-08-24	No Photo Available
Diplacus johnstonii	Johnston's monkeyflower	Phrymaceae	annual herb	May-Aug	None	None	G4	S4	4.3	Yes	2001-01-01	No Photo Available
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Erythranthe diffusa	Palomar monkeyflower	Phrymaceae	annual herb	Apr-Jun	None	None	G4	S3	4.3		1974-01-01	Ron Vanderhoff, 2019
Frasera neglecta	pine green-gentian	Gentianaceae	perennial herb	May-Jul	None	None	G4	S4	4.3	Yes	1980-01-01	No Photo Available
Galium angustifolium ssp. *gabrielense*	San Antonio Canyon bedstraw	Rubiaceae	perennial herb	Apr-Aug	None	None	G5T3	S3	4.3	Yes	1974-01-01	© 2019 Keir Morse
Galium angustifolium ssp. *gracillimum*	slender bedstraw	Rubiaceae	perennial herb	Apr-Jun(Jul)	None	None	G5T4	S4	4.2	Yes	1994-01-01	© 2011 Duncan S. Bell
Galium cliftonsmithii	Santa Barbara bedstraw	Rubiaceae	perennial herb	May-Jul	None	None	G4	S4	4.3	Yes	1974-01-01	© 2020 Brian Bielfelt

Galium grande	San Gabriel bedstraw	Rubiaceae	perennial deciduous shrub	Jan-Jul	None	None	G1	S1	1B.2	Yes	1984-01-01	© Lauramay Dempster and CNPS
Galium jepsonii	Jepson's bedstraw	Rubiaceae	perennial rhizomatous herb	Jul-Aug	None	None	G3	S3	4.3	Yes	1974-01-01	© 2015 Keir Morse
Galium johnstonii	Johnston's bedstraw	Rubiaceae	perennial herb	Jun-Jul	None	None	G4	S4	4.3	Yes	1974-01-01	© 2015 Keir Morse
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2		1980-01-01	© 2015 Keir Morse
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	None	None	G5TX	SX	1A	Yes	1974-01-01	No Photo Available
Heuchera abramsii	Abrams' alumroot	Saxifragaceae	perennial rhizomatous herb	Jul-Aug	None	None	G3	S3	4.3	Yes	1974-01-01	© 2005 Charles E. Jones
Heuchera caespitosa	urn-flowered alumroot	Saxifragaceae	perennial rhizomatous herb	May-Aug	None	None	G3	S3	4.3	Yes	1974-01-01	© 2015 Keir Morse
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Horkelia cuneata var. *puberula*	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	Yes	2001-01-01	© 2008 Tony Morosco
Hulsea vestita ssp. *gabrielensis*	San Gabriel Mountains sunflower	Asteraceae	perennial herb	May-Jul	None	None	G5T3	S3	4.3	Yes	1994-01-01	© 2013 Anuja Parikh and Nathan Gale
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G3	S3	2B.1		2006-12-26	 © 2020 Matt C. Berger

Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	© 2013 Keir Morse
Lepechinia fragrans	fragrant pitcher sage	Lamiaceae	perennial shrub	Mar-Oct	None	None	G3	S3	4.2	Yes	1974-01-01	© 2014 Debra L. Cook
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	© 2015 Keir Morse
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	None	None	G4T4?	S4?	4.2	Yes	1980-01-01	© 2008 Thomas Stoughton
Linanthus concinnus	San Gabriel linanthus	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	© 2019 RT Hawke
Malacothamnus davidsonii	Davidson's bush-mallow	Malvaceae	perennial deciduous shrub	Jun-Jan	None	None	G2	S2	1B.2	Yes	1974-01-01	© 2016 Keir Morse
Monardella australis ssp. *cinerea*	gray monardella	Lamiaceae	perennial rhizomatous herb	Jul-Aug	None	None	G4T3	S3	4.3	Yes	1974-01-01	No Photo Available
Monardella australis ssp. *gabrielensis*	San Gabriel Mountains monardella	Lamiaceae	shrub	Jul-Sep	None	None	G4T2	S2	1B.2		2022-05-23	No Photo Available
Mucronea californica	California spineflower	Polygonaceae	annual herb	Mar-Jul(Aug)	None	None	G3	S3	4.2	Yes	1988-01-01	© 2018 Debra L. Cook
Muhlenbergia californica	California muhly	Poaceae	perennial rhizomatous herb	Jun-Sep	None	None	G4	S4	4.3	Yes	1994-01-01	No Photo Available
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	FE	CT	G1	S1	1B.1		1980-01-01	No Photo Available

Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Opuntia basilaris var. *brachyclada*	short-joint beavertail	Cactaceae	perennial stem	Apr-Jun(Aug)	None	None	G5T3	S3	1B.2	Yes	1980-01-01	No Photo Available
Pelazoneuron puberulum var. *sonorense*	Sonoran maiden fern	Thelypteridaceae	perennial rhizomatous herb	Jan-Sep	None	None	G5T3	S2	2B.2		1994-01-01	No Photo Available
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	None	None	G4	S4	4.2	Yes	2007-02-02	No Photo Available
Phacelia mohavensis	Mojave phacelia	Hydrophyllaceae	annual herb	Apr-Aug	None	None	G4Q	S4	4.3	Yes	1994-01-01	No Photo Available
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	None	None	G1	S1	1B.1		1994-01-01	No Photo Available
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2		2006-11-03	No Photo Available
Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1		1994-01-01	No Photo Available
Quercus durata var. *gabrielensis*	San Gabriel oak	Fagaceae	perennial evergreen shrub	Apr-May	None	None	G4T3	S3	4.2	Yes	2001-01-01	No Photo Available
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	Mar-Jun	None	None	G3	S3	4.2		1988-01-01	No Photo Available
Ribes divaricatum var. *parishii*	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	None	None	G5TX	SX	1A	Yes	1988-01-01	No Photo Available
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	None	None	G4	S4	4.2		1974-01-01	No Photo Available
Rupertia rigida	Parish's rupertia	Fabaceae	perennial herb	Jun-Aug	None	None	G4	S4	4.3		1974-01-01	No Photo Available
Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	None	None	G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
Senecio astephanus	San Gabriel ragwort	Asteraceae	perennial herb	May-Jul	None	None	G3	S3	4.3	Yes	2006-12-21	No Photo Available
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2		1994-01-01	No Photo Available

Sidotheca caryophylloides	chickweed oxytheca	Polygonaceae	annual herb	Jul-Sep(Oct)	None	None	G4	S4	4.3	Yes	1980-01-01	©2021 Keir Morse
Spermolepis lateriflora	western bristly scaleseed	Apiaceae	annual herb	Mar-Apr	None	None	G5	SH	2A		2016-01-21	No Photo Available
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01	No Photo Available
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	None	None	G2	S2	1B.3	Yes	1974-01-01	© 2006 Michael Charters

Showing 1 to 79 of 79 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 5 April 2024].

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Los Angeles County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

NOT FOR CONSULTATION

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
California Spotted Owl Strix occidentalis occidentalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7266	Proposed Endangered
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
Southwestern Pond Turtle Actinemys pallida Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

Amphibians

NAME	STATUS
Western Spadefoot Spea hammondii Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

Insects

NAME	STATUS

NOT FOR CONSULTATION

Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Braunton's Milk-vetch Astragalus brauntonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5674	Endangered
Nevin's Barberry Berberis nevinii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8025	Endangered
Slender-horned Spineflower Dodecahema leptoceras Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4007	Endangered

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

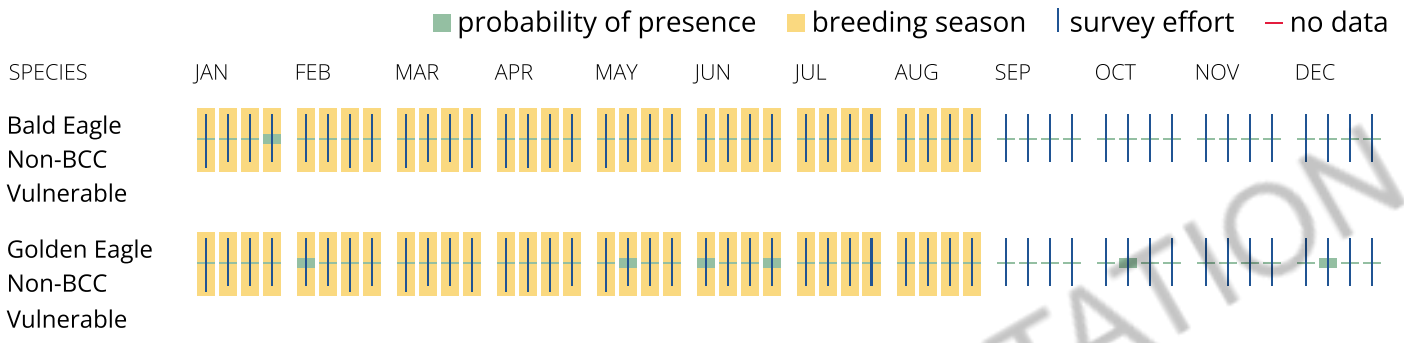
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

NOT FOR CONSULTATION

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

NOT FOR CONSULTATION

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Swift *Cypseloides niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black-chinned Sparrow *Spizella atrogularis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull *Larus californicus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31

NOT FOR CONSULTATION

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

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Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Western Gull Larus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 21 to Aug 25
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

NOT FOR CONSULTATION

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

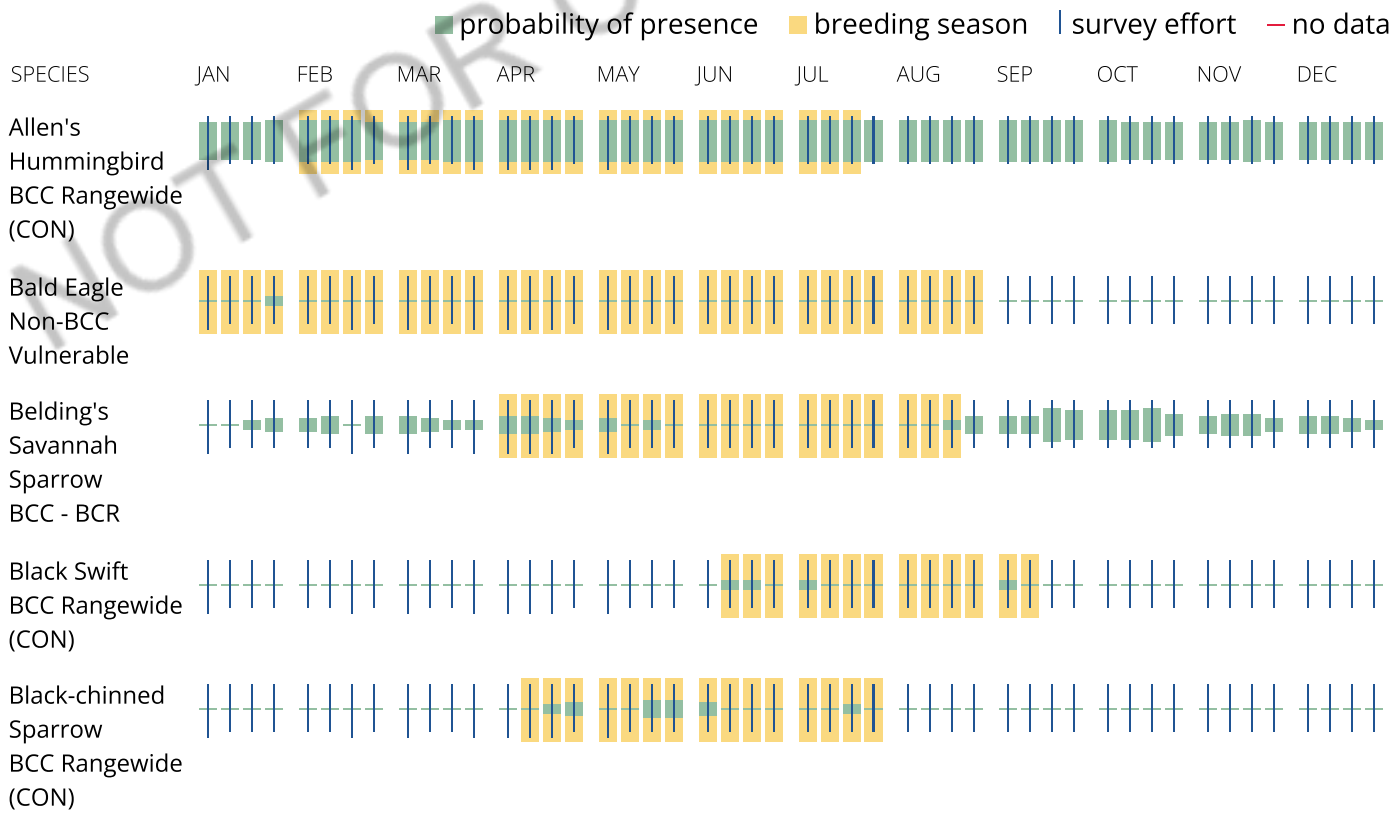
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

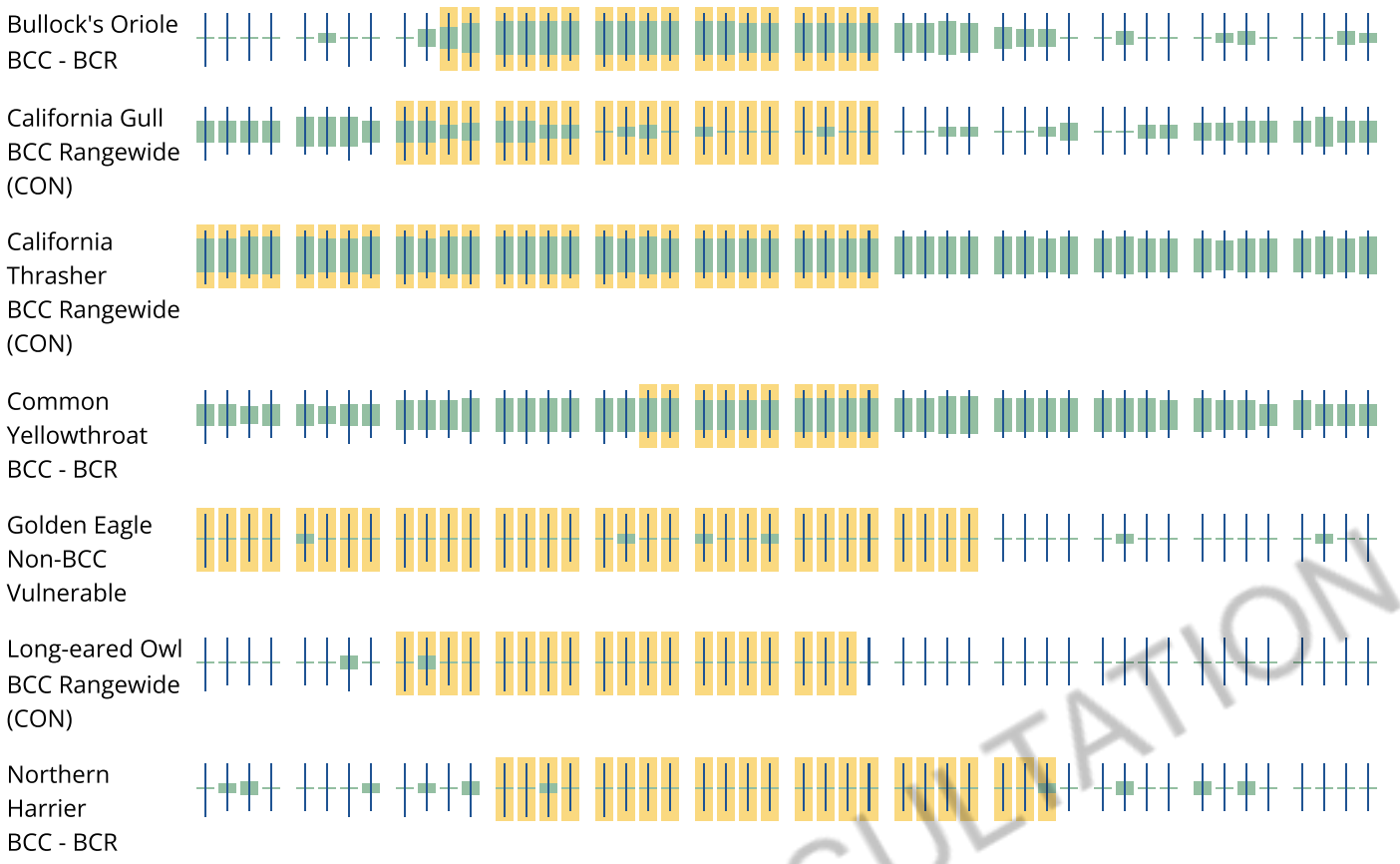
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION



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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

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2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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E. ADDENDUM TO OAK TREE REPORT AND OAK TREE REPORT

Addendum to Oak Tree Report dated August, 2014

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3577 Canyon Crest Road Altadena, CA

APN: 5830-003-016

Los Angeles County Department of Regional Planning

Project # R2014-02411

Oak Tree Permit # ROAK2014-0035

Prepared for

Project Applicant
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Altadena, CA 91001

Prepared by

Scott McAllaster
Land Design Consultants, Inc.
ISA Certified Arborist, WE-7011A
ISA Qualified Tree Risk Assessor

April, 2020

Table of Contents

1. INTRODUCTION 4
2. SCOPE OF WORK 4
3. AUTHORITY 5
4. METHODOLOGY OF ADDITIONAL INVENTORY 5
5. EXISTING CONDITIONS 6
6. CONSTRUCTION IMPACTS 7
7. FRAMEWORK OF IMPACT ASSESSMENT 11
8. CONDITIONS 19
Standard Forestry Division Conditions 19
Standard BMPs 22
Project Design Features 26
9. IMPACT ASSESSMENT 27
Oak Tree #1 28
Oak Tree #2 32
Oak Tree #3 36
Oak Tree #4 39
Oak Tree #5 49
Oak Tree #6 54
Oak Tree #8 60
Oak Tree #9 66
Oak Tree #10 72
Oak Trees #13, 14 and 15 78
Hydrology 79
Physical Damage 80

Combustion Exhaust 80
Deposition of Chemicals 80
Introduction of Pests and Disease 81
10. PRESERVATION ASSESSMENT OF OAK TREE #7 81

1. INTRODUCTION

This addendum to the Oak Tree Report dated August 2, 2014 ("addendum") provides description pursuant to the Oak Tree Ordinance of the County of Los Angeles ("County"), County Code Section 22.56.2090 et seq. The purpose of this addendum is to document minor adjustments to the building volume of the proposed home at 3577 Canyon Crest Road ("home") and to update the condition evaluations of each inventoried tree. The report dated August 2, 2014 was authored with a level of detail that is typical of Oak Tree Reports for modest residential developments in the County of Los Angeles. It inventoried , assessed, and provided recommendations for common and typical Best Management Practices to protect the ten mature coast live oak (*Quercus agrifolia*) trees on and adjacent to the home site that were proposed to sustain impacts in connection with construction of the home.

2. SCOPE OF WORK

I have been asked by Stephen Kuhn (the "Applicant") to go far beyond the typical level of detail in an Oak Tree Report in this addendum, including LiDAR modeling and detailed diagrams of the extent of various types of impact. However, this addendum will not recreate any of the background information or documentation of the Oak Tree Report where it remains accurately descriptive.

The Oak Tree Report inventoried ten mature oak trees, proposing nine to be encroached, and one oak tree (#6) to be removed. This addendum documents the Applicant's decision to instead request removal of oak tree #7, such that oak tree #6 is minorly encroached but not removed. At the request of the Applicant, this addendum also inventoried two additional oak trees on the project site at a distance of very nearly 200 feet from the nearest edge of the development footprint, excepting from documentation those trees that are more than 200 feet distant from the edge of development, pursuant to County Code Section 22.56.2090(E)(1)(i). These two additional oak trees are completely unaffected by the project and do not possess a tributary drainage that includes the project footprint. In my experience, oak trees that are completely unaffected in any vector of arboricultural impact by simple inspection may be referenced in Oak Tree Reports only generally, after consultation with the County Fire Department Forestry

Division. The Forestry Division had previously indicated that according to their standard practice, these trees did not need to be inventoried. I am told that this became a cause of action in litigation and so have included them here solely at the Applicant's request. This addendum also inventories one additional off-site tree in the road right-of-way with a protected zone that is minorly impacted by extension of the sewer main in connection with the project.

3. AUTHORITY

In my experience, where additional information is requested of an Oak Tree Report, the established method is to provide it in a response letter or addendum. This facilitates compartmentalized review and avoids wasted effort. It is also typical that a significant amount of time will pass between the measurements performed in an Oak Tree Report and approval of a project. This is why the County Fire Department Forestry Division imposes a standard condition to apply all otherwise applicable conditions to any tree that becomes mature during the pendency of the entitlement and construction processes. For this addendum, I re-measured the dripline and diameter at breast height of each of the previously inventoried trees and assessed their health. No previously immature tree had attained protected status; no previously non-heritage tree had grown to heritage size; and no tree had sustained changes sufficient to alter any prior recommendation.

4. METHODOLOGY OF ADDITIONAL INVENTORY

The methodology used to inventory the three additional trees included in this addendum is consistent with the conventional practice documented in the Oak Tree Report dated August 2, 2014. Each tree was evaluated for health, structural and aesthetic qualities as indicated on the field inspection worksheet included in Appendix I of this addendum. Their driplines were also measured and are noted on the Oak Tree Location and Impact Map. On-site trees were tagged according to the numbers included on the Oak Tree Location and Impact Map. Off-site trees were not tagged. The tags of on-site trees that had earlier been placed pursuant to the Oak Tree Ordinance had been removed by a party unknown to me or the Applicant. These tags were not replaced. The Oak Tree Ordinance requires placement of tags, not continued maintenance and replacement in the event of theft.

5. EXISTING CONDITIONS

The project site contains two stands of coast live oak trees with canopy separation of approximately 150 feet. One stand (trees #1-10 and #15) is located at street level and is impacted to varying extents by the project and by adjacent residences and Canyon Crest Road. The other stand (#13-14 as well as additional trees beyond 200 feet) is located adjacent to the stream bottom. These stands are tightly spaced (each tree trunk between 5 and 30 feet from that of the nearest neighbor), as oak woodlands in canyon drainages of the County often are, with the canopy of each tree commingled with one to three others.

All of the trees at street-level are growing in an area that appears to have been graded to varying extents during the construction of Canyon Crest Road in the early 20th century. Oak tree #1 is of sufficient size that it pre-dated development of the neighborhood. However, all other trees are situated in or adjacent to fill placed in the course of flattening portions of the hillside for this road and the surrounding residences. According to the Applicant, a previous owner, sometime between 2004 and 2006, illegally imported fill onto the project site, apparently to increase the usable flat area at street grade. It appears that this transitions from a depth of nil near the road to three or more feet at the trunks of oak trees #7 and #8. It is not possible to precisely determine the depth prior to approval of the Oak Tree Permit because, according to the County Department of Regional Planning, the Oak Tree Ordinance prohibits breaking the surface of the ground in the protected zone of an oak tree without a permit enforcing some oversight.

All of the constituents of this stand of trees, except for #10, are impacted over some or all of their protected zones by this re-grading or by compaction from parking usage and/or pavement. A layer of fine mulch, leaf litter and/or humus covers parts of the site, though this layer is thin in places. The Applicant has observed neighbors park large trucks across this area, including when the soil was wet, and it is known that severe compaction can occur from even a single crossing without appropriate protections, especially in wet soil. (Alabama Cooperative Extension System. 2013. “A Guide to Preventing Soil Compaction During Construction.” Alabama Cooperative Extension System). The Applicant currently fences the frontage of the parcel to prevent recurrence.

Trees #2 and #3 are impinged at their collar by an existing concrete drainage device. Most trees have been pruned for parking, roadway, residence or power line clearance. The Applicant has indicated that oak tree #1 was subjected to excavation on both the northern and southern sides of its protected zones, to construct a 5'x35' seepage pit under the driveway of 3589 Canyon Crest Road approximately six feet from the trunk of this tree, and when a previous owner installed a water meter on the project site.

Two small juveniles referenced in the original Oak Tree Report as oak trees #11 and #12 were below the size regulated by the Oak Tree Ordinance and were removed by the Applicant prior to this addendum. These were almost completely shaded out by oak trees #4 and #7, exhibited poor, highly asymmetric structure, lacked any scaffold branches, had been significantly affected by fill deposition in most of their protected zones and were measured not to have grown appreciably in a span of nearly five years. As such, these were not favorably disposed to mature.

6. CONSTRUCTION IMPACTS

Arborists typically propose conditions to manage construction impacts without describing those impacts in detail or attributing how certain classes of impacts would *not* be expected. Nevertheless, I have discussed construction considerations here with the assistance of the Applicant, principally to dispel previous speculation from project opponents about vectors of relevant arboricultural analysis.

The Applicant has indicated that the small amount of cut and spoil required to implement the project would be balanced as fill within the structure's footprint, such that no dump truck or construction dumpsters are expected to be required. Appreciable quantities of fill would be placed only in areas outside the protected zone of any oak tree approved to remain, or that are analyzed in this addendum as requiring complete root removal. About 25% of the structural footprint (or approximately 300 square feet) overlaps with the protected zone of any encroached tree to remain, of which 10% (or approximately 100 square feet) overlaps with a dripline.

The canopy of the oak trees in the staging area permits the passage of a truck as large as the volumetric concrete mixer truck expected to be staged in this area, with sufficient physical clearance in this location and upon ingress/egress.

The use of a small truck-mounted crane staged in the garage to erect beams is not expected to intersect any oak tree canopy to remain. The use of scissor lifts requiring no overhead clearance is a feasible alternative to a crane for any of the modestly sized individual elements of any beam.

The limited access drill rig used to auger piles is designed to fit through interior doors when stowed for movement and is less than 15 feet tall when configured for drilling. It is therefore expected to have ample clearance with respect to oak tree canopy at each of the six pile locations, as this is less than the height of the structure at each pile location. No excavation is required to stage the drill rig, which is designed for limited access operation on slopes.

The Oak Tree Permit does not require that all vehicles and materials be staged outside the protected zone of all oak trees, only those not approved for encroachment, which are monitored pursuant to the Oak Tree Permit. All areas used for staging shall be protected with a layer of oak-compatible wood mulch and stiff sheeting. (Alabama Cooperative Extension System. 2013. "A Guide to Preventing Soil Compaction During Construction." Alabama Cooperative Extension System [citing mulch below stiff sheeting as the most effective form of compaction mitigation, suited for large equipment and repeated traverse]). The project would not construct pavement or slab-on-grade foundation supported by compacted soil. All project loads would be borne through the six piles. So-called "roll off" deliveries of construction materials would not be used. The Applicant has indicated that he expects to minimize the staging of bulk materials on the project site to the extent feasible, bringing over materials delivered or stored elsewhere (e.g. a lumber yard or his off-site residence) in smaller quantities needed for the days' work. Most bulk materials would be staged after the foundation is built, which provides off-loading and/or staging capacity in the garage level, main living level and office floors that would not impact any tree. While no on-site bulk deliveries requiring bulk off-loading to ground in the protected zone of any oak tree are expected prior to this construction stage, off-loading materials such that they are

placed on the ground without any impact force is feasible, recommended, and in accordance with the Applicant's intentions.

The project includes no hardscape outside the footprint, and the foundations are of pier and grade beam with structural slabs that do not require compaction of any part of the project site, limiting cut grading to less than approximately 400 square feet of the project footprint. This type of foundation design is encouraged to reduce compaction. (Lichter, John and Lindsay, Patricia. 1994. "The Use of Surface Treatments for the Prevention of Soil Compaction During Site Construction." Journal of Arboriculture 20(4)) ["By utilizing discontinuous foundations, which are composed of stem walls and piers, grading is limited or not required on most sites, in contrast to the grading and compaction required as preparation for concrete slab foundations."])

The Department of Public Works issues Best Management Practices as part of the Grading and Drainage Plan Check process to control for erosion and debris flows, and all excavation is required to be performed by hand to control the removal and relocation of root systems while minimizing over-excavation. The trees in the riparian stand of oak woodland on the project site are not directly down-slope of the project footprint and could not be affected in the unexpected event of any physical effects propagating down the hillside. Other oak trees on the properties to the south would be protected from physical impacts by these BMPs, and they are located on the opposite side of a swale that already collects runoff or debris in and adjacent to the project footprint of development.

Augering of the six 24" diameter piles or of any smaller gauge fence pole holes is not expected to significantly affect any tree. All piles are located at least five trunk diameters from any encroached tree and subtend a small part of any protected zone. The Applicant has indicated that if a large root is encountered when starting these excavations in the first few feet by hand, the location of the pile may be translated to avoid it (and could typically accommodate translation in the most efficient direction, as the home maintains clearance margins to any zoning regulation with the exception of the southeast corner). No boulders are proposed for removal, and no impacts to oak trees are expected from the removal of boulders. The drilling of piles is capable of switching from an augering to a coring bit if a large subsurface boulder is unexpectedly

encountered in the thin layer of alluvial terrace underlying the site that might contain them, without any additional excavation. Fence post holes are even less impactful, and impacts can be limited in the same way and with even greater ease of alteration. Given their negligible impact when installed in accordance with the conditions herein, fence post holes require no portrayal or further analysis.

Where the retaining wall for the home constituting portions of the northern and eastern walls of the main level is constructed within the protected zone of oak trees to remain, I have recommended that it be constructed with "blind-side" formwork to limit the extent of over-excavation. This common technique is capable of limiting over-excavation to a foot or less, and the use of blind-side formwork would ensure that root removal does not occur within five trunk diameters of any encroached tree requested to remain. Roots encountered in any over-excavated volume are to be wrapped in loose soil and heavy cloth and kept at moisture levels appropriate to the water season until backfill, at the direction of the consulting arborist.

As it was a persistent point of confusion for project opponents throughout earlier administrative proceedings, the County Fire Department Fire Prevention Division does not require any oak tree pruning to satisfy any safety requirement. Their requirement to maintain a pathway of at least 20 feet in width that is at least 13'6" in height within 150 feet of the exterior walls of the first story of the building is fulfilled by Canyon Crest Road. The requirement is intended to ensure that a fire truck (requiring 13'6" of physical clearance) has adequate clearance to park such that a firefighter can deploy a 150-foot length of hose when walking on foot around the perimeter of the home. Accordingly, their requirement to maintain a free path of travel at least five feet wide around the perimeter of the home is intended to ensure that a firefighter on foot is not physically blocked from this access. While the slope of the grade along portions of the perimeter of the home is steep, it is not impassably so, and the Fire Department when questioned concurred that physical clearance is sufficient, without any grading or pavement. The required clearance exists without any additional pruning. Many other homes in the neighborhood do not possess improved steps around the perimeter of the structure. Should the Applicant desire some structure to any part of this perimeter pathway to prevent sloughing of the soil in the event access is necessary in

emergency or for maintenance, the use of the Tree Root Protection System panels keyed in along the minor axis as steps would be negligibly impactful and recommended.

If necessary, these or any other hardware that must be secured temporarily (such as construction fence post bases) can be fixed to the ground by augered ground bolts. These bolts have dull fluting and are meant to be screwed into the ground by hand drill. If roots are encountered, the bolt will refuse without damage, and a different location can be selected. Should any hardware require temporary securing by guy line, the trunk of an oak tree would be preferable to installing larger hardware in the ground in the critical root zone, like soldier piles often used for this purpose. The usage case commonly encountered is securing a tarp. Flat fabric (e.g. nylon or polypropylene) webbing at least 2” in width should be wrapped around the trunk and secured from movement by adequate tensioning, attached only below mean breast height for loads smaller than 50lb for every inch of trunk diameter above 8”.

This discussion, while extensive, cannot be exhaustive. In my professional experience, every project affecting trees encounters circumstances that were not or could not have been anticipated. The consulting arborist and County Forester, in the course of their oversight, maintain the right to impose additional conditions as needed to mediate construction impacts.

7. FRAMEWORK OF IMPACT ASSESSMENT

Impacts to trees exist on a spectrum of severity, from complete loss of function to effective reversibility. Impacts that are slight (e.g. light compaction that is remediated with vertical aeration) are sustainable even where 100% of the protected zone of a tree is impacted in this way. Impacts that are severe (e.g. contamination with certain herbicides or other toxic chemicals that are taken up into a tree’s vascular system) can be significant or fatal to a tree in even a small fraction of one percent of the protected zone. Aggregating different types of encroachment impacts with different severities into single percentage figures can therefore be highly misleading and is not professional practice.

Any encroachment of any kind, however slight, introduces some possibility that a tree will decline or die. Though it is far more typical not to, any root cut or nick through bark introduces a vector for pathogens that could, along with other environmental factors, result in this outcome. A tree can also succumb in this way even without encroachment, as its natural defenses are overcome. As arborists, we are trained to speak in probabilities, and to authorize encroachments where the tree has an adequate probability of sustaining the encroachment. All trees analyzed as encroachments in this addendum have a high probability of sustaining the impacts described without declining substantially in vigor from project impacts. When considering the potential for beneficial in addition to detrimental impacts from the project and in the environment, this means that no more than roughly 1 in 20 encroached trees might decline substantially oro die because of the project, contrary to expectation.

As used in this addendum, a "significant" impact is intended to mean an impact that would have a marginal probability roughly between 1 in 3 and 1 in 20 of resulting in substantial decline or death of the tree, compared to the no-project condition. For projects that are subject to CEQA, this assessment is meant to be an input to the CEQA analysis, not the CEQA analysis itself. The effects of the project on oak tree #7, for instance, are significant for that tree, and I have recommended that it be treated as a removal for purposes of this permit, even should the Applicant choose to retain it. This addendum does not assert that this is a significant impact on the environment. The removal of one oak tree is commonly a minimum level of impact for most residential development requiring an oak tree permit. County Code Section 22.56.2090(F)(2) acknowledges this by allowing expedited permitting procedures for this level of impact. I am told that distortion of the intended meaning of "significance" in the context of this report became a cause of action in litigation and so have included this explanation here solely at the Applicant's request.

Depending on where a significantly impacted tree lies in this range and the role it plays in the aesthetics of a project, it can be either removed or preserved. The Oak Tree Ordinance establishes a line for treating an encroached oak tree as a removal at the impacts sustained by boxing a tree for transplant, which give odds no better than 1 in 2 for sustaining the impact

without substantial decline or death, per a reference cited subsequently. For lower probabilities, the Oak Tree Ordinance relies on the judgment and discretion of a qualified arborist.

While the context-dependent and probabilistic nature of assessing the sustainability of tree encroachment defies any absolute rules of thumb, there are commonly cited thresholds that provide guideposts. In general, these are expressed in three ways:

1. The percentage of the overall canopy requiring removal quantifies what fraction of the foliage (photosynthesizing capacity) is removed when particular branches are removed.

The ANSI 300 pruning standard suggests that no more than 25% of the canopy of a tree should be removed in a single season (averaging across tree species that are more and less tolerant of canopy removal) but does not suggest a total amount of canopy to be removed over multiple seasons. The Oak Tree Ordinance permits pruning of as much as 20% of the canopy without issuance of a permit, though it limits the pruning of individual branches without an arborist's analysis to those less than 2" in diameter. A figure of 25% canopy removal would generally be highly probable to sustain vigor for a tree species at least somewhat tolerant of pruning that is in average or better health and favorability of environment, absent other circumstances. Consideration of encroachment impacts must take into account the species tolerance; age and existing health of the tree; the type and function of any removal from the tree; the suitability of the environment in which the tree is sited; the tree's demonstrated ability to sustain similar past impacts in good or better health for many years thereafter; and some assumptions about care, maintenance and rehabilitation.

A specification for clearance with respect to the structure must be established to accurately estimate required pruning. When questioned, the County Fire Department Forestry Division stated that no minimum offset exists of oak tree branches or canopy to residential structures. They indicated that pruning to prevent contact was sufficient. This was consistent with existing conditions I observed in the neighborhood, which include oak trees in close proximity (often with trunks, branches and/or canopy less than one foot offset) to most residences. County fuel modification guidelines for trees in zone A immediately surrounding a structure recommend that

trees “should be limbed up to at least 6 feet above bare earth and a minimum of 3 times the height of underlying plants.” This guideline is not a requirement, and the extent of pruning to implement this guideline would be small and confined to oak tree #6, the low-hanging branch of which is however at the threshold of zone B. The Applicant has indicated that he does not intend to prune this branch. Furthermore, an overriding consideration for the home is that it is to be constructed using fire-rated assemblies, in contrast to many surrounding residences.

2. The ratio of the distance of impacts from the edge of the trunk to the diameter of the trunk itself is commonly used to define a “Critical Root Zone” in which root removal or damage is discouraged to ensure that a tree remains structurally sound.

The Critical Root Zone is the structural core of the tree, where the larger, buttressing crown roots extend down and outwards, including a longer taproot in coast live oak trees that is functional until extended maturity. These roots extend down to strata that are more continuously moist, helping to provide water uptake when the topsoil is dry. On the project site, decomposed granite bedrock is a particularly advantageous substrate for these roots. The loose, loamy alluvial terrace lying above the decomposed granite is also an ideal medium for feeder roots in the first three feet below the grade.

Generally, it is desirable that root removal occur in one or at most two adjacent quadrants of the protected zone (i.e. a single side), preserving uncompromised capacity in most larger roots. Where this condition is satisfied, the Critical Root Zone is typically defined as a ratio of encroachment distance to trunk diameter at breast height (“dbh”) between 3 and 5. For instance, in a tree 24”dbh, the critical root zone would extend out to between 6’ and 10’ from the outer edge of the trunk. However, lower figures are permissible where larger roots are not encountered. The lower figure of 3 is cited in one well-known reference. (Smiley, E.T., B.R. Fraedrich, N. Hendrickson, and G. Percival. 2007. “Tree Risk Management (2nd Edition).” FA Bartlett Tree Expert Company, Inc.). The higher figure of 5 is “preferred.” (Costello, L., Hagan, B., Jones, K. 2011. “Oaks in the Urban Landscape: Selection Care and Preservation”. University of California Press). An excerpted figure from this latter reference is provided below.

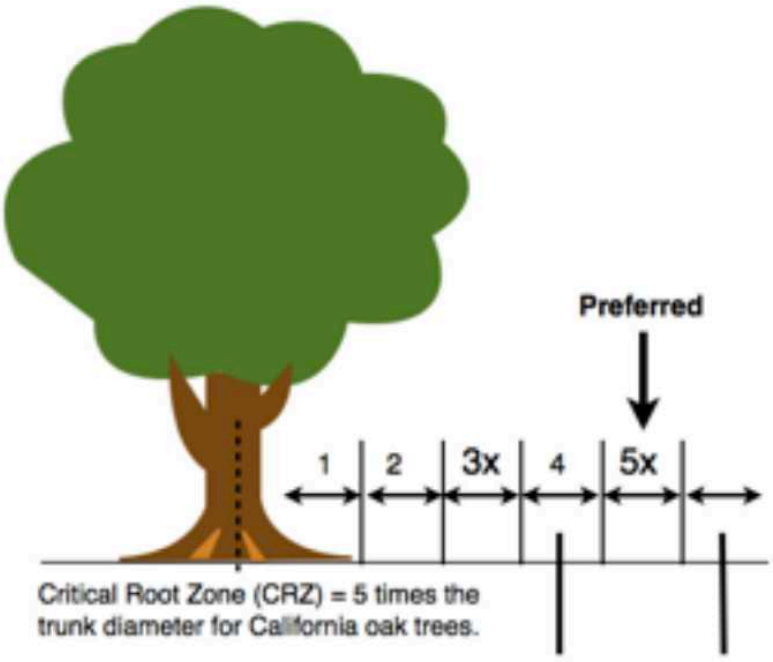

Figure 7-1: Critical Root Zone

The nearby city of La Canada Flintridge recently enacted Tree Protection and Preservation Guidelines in 2014 defining a Tree Protection Zone that prohibits pavement within 2.5 trunk diameters and root removal within 3.5 trunk diameters. (https://docs.google.com/a/lcf.ca.gov/viewer?a=v&pid=sites&srcid=bGNmLmNhLmdvdnxjaXR5LW9mLWxhLWNhbmFkYS1mbGludHJpZGdlLXNpdGV8Z3g6N2MxZGU5OWE4MGI5ZDQ1OQ). A design specification of 5 trunk diameters for permanent impacts of any kind is therefore reasonably conservative to protect the root crown.

3. The percentage of the overall root zone impacts quantifies what fraction of the roots (nutrient and water uptake and gas exchange capacity) in the below-grade volume extending out from the trunk to the greater of 15 feet and five feet beyond the canopy dripline (the “protected zone” under the Oak Tree Ordinance) are impacted along each of the following vectors, in roughly descending order of severity:

a.) root removal (i.e. cut grading);

b.) installation of impervious load-bearing surfaces (i.e. conventional pavement);

c.) un-remediated compaction (e.g. vehicle traverse on earth);

d.) fill grading (of up to several feet);

e.) installation of pervious load-bearing, load-distributing surfaces (e.g. a Tree Root Protection System);
f.) installation of pervious, non-load-bearing but rainfall-intercepting surfaces (e.g. crawlspace);
g.) remediated compaction

While coast live oak tree feeder roots may extend out to twice the distance of a dripline, especially in the direction of water sources, the protected zone is where the large majority of root capacity typically exists. 90% of the feeder roots are expected to occur in the first three feet of soil. As the soils on the project site are loose and sandy, they may be biased somewhat deeper than in tighter, clay-bearing soils.

Chemical contamination or dumping of herbicides is the most severe form of impacts and would not be expected to occur in connection with the home.

Next to such malice, root removal is the most severe construction impact in the protected zone. While no rule of thumb exists for the percentage of root removal tolerated, it is believed to be greater than the extent of canopy removal tolerated. For instance, relocations (trees that matured in the ground but were boxed for transport) typically sustain 90-95% root removal, often accompanied by 30-70% discretionary canopy removal to better preserve root and crown capacity equilibrium. The long-term prospects for coast live oak trees sustaining such enormous impacts has been mixed and is not recommended as a cost-effective preservation mechanism by the arboricultural community. (Dagit, Rosie, Downer, A. James. 1997. “Status of Transplanted Coast Live Oaks (*Quercus agrifolia*) in Southern California.” In: Pillsbury, Norman H.; Verner, Jared; Tietje, William D., technical coordinators. 1997. Proceedings of a symposium on oak woodlands: ecology, management, and urban interface issues; 19–22 March 1996; San Luis Obispo, CA. Gen. Tech. Rep. PSW-GTR-160. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; pp. 257-266). However, this study documented that long-term, approximately half the coast live oak trees that sustained this enormous level of impact at least maintained vigor, and approximately 1 in 6 died. This and other studies have established that coast live oak is regarded as tolerant of root and canopy pruning. (Costello, L., Hagan, B., Jones, K. 2003. “Reducing Infrastructure Damage by Tree Roots: A Compendium of

Strategies." Western Chapter of the International Society of Arboriculture). The removal of roots in a single quadrant of the protected zone that avoided the root collar, or in adjacent quadrants, especially where nearer the periphery of the protected zone, would typically be highly probable to sustain vigor for a tree in average or better health and environment.

Impervious load-bearing surfaces eliminate or severely limit root aeration, eliminate irrigation, and result in compaction of the root zone in preparation of the surface, though roots need not be removed. While arborists do not recommend impacting the root zone in this way, coast live oak trees are frequently encountered that survive and thrive despite encroachment by pavement over most of the protected zone. The protected zone of oak tree #1 is significantly impacted in this way. Nearly 50% of its protected zone is paved over by Canyon Crest Road. Another 20% or more of the protected zone is paved over by the driveway, patio, and slab-on-grade foundation of 3589 Canyon Crest Road. A large seepage pit 5' in diameter and 35' deep was also dug approximately 6 feet from this tree under the driveway of 3589 Canyon Crest Road well after the tree had matured. Nevertheless, I rated this tree an "A" for both health and aesthetics because it has thrived despite these impacts in the otherwise highly favorable conditions. Coast live oak is regarded as tolerant of impervious load-bearing surfaces in a somewhat greater extent of the protected zone than it is of root removal. Several trees in the surrounding residential area and elsewhere in the County are paved in 50-90+% of the protected zone. While trees that mature in the presence of these impacts are somewhat less affected than trees that matured without, such impacts are adverse whether sustained continuously or not, as they block or interfere with the vital processes of air and water exchange that trees need to survive.

Compaction occurs when soil is compressed by forces, such as vehicles traversing, staged materials, and mechanical impact. Compaction increases soil density and associated mechanical impedance and reduces root aeration. Compaction decreases as surface depth increases, and effects are most pronounced in the top few inches of soil. (Lichter, John and Lindsay, Patricia. 1994. "The Use of Surface Treatments for the Prevention of Soil Compaction During Site Construction." Journal of Arboriculture 20(4)). Coast live oak is regarded as tolerant of compaction to an extent similar to its tolerance of impervious load-bearing surfaces, since these also entail compaction.

Fill grading limits root aeration, without resulting in significant compaction of the root zone or removing roots. While arborists do not recommend impacting the root zone in this way, coast live oak trees are frequently encountered that survive and thrive despite deposition of fill in part of the protected zone. Some of the oak trees on the project site in good health have been severely impacted in this way across most of their protected zone for at least 15 years. The severity of the effect is reduced where fill is loose and still permits aeration.

Pervious, load-spreading but load-bearing surfaces like mulch, decomposed granite, gravel, or a reinforced matrix of these materials results in reduced compaction while preserving aeration and irrigation of the root zone. Installation of a Tree Root Protection System following remedial aeration would be expected to reduce compaction below the level currently characteristic of the project driveway, which had been characterized by large vehicle traverse without adequate compaction mitigation.

Utility trenching by hand or air spade at the minimum code-permitted depths while minimizing root severance in threading the laterals under any substantial roots encountered is not expected to result in appreciable permanent impacts. The utilities have been designed along a radial path from tree trunks or beyond the critical root zone at offsets from trunks that are maximized to the extent feasible, and this construction methodology approximates an effective vertical aeration technique known as “radial trenching.” Trenches at code minimum depths do not exceed approximately 1/3 of the expected range of depths of roots, and the small amount of feeder roots that may be removed would be expected to quickly re-establish more effective roots in the well-aerated soil that would backfill. Indeed, this is the mechanism by which radial trenching has exhibited positive benefits in trees suffering from compaction. (W. Watson, Gary & Kelsey, Patrick & Woodtli, Klaus. 1996. “Replacing soil in the root zone of mature trees for better growth.” Journal of Arboriculture 22(4)).

8. CONDITIONS

Oak Tree Permits in the County contain certain conditions or Best Management Practices (BMPs) for interactions of development with oak trees. The County Fire Department Forestry Division has a list of 22 standard conditions (included here for reference only, so that their effect may be attributed without duplication). Adhering to the Best Management Practices ("BMPs") of the consulting arborist is referenced in several of these conditions and is required pursuant to County Code Sections 22.56.2090(F)(1)(c)(v) and 22.56.2090(F)(1)(d). My intent in this section is to comprehensively integrate the recommendations I provided in the Oak Tree Report dated August 2, 2014, expand upon them to a greater level of detail than is typical, and distinguish those BMPs implemented by standard Forestry Division conditions. In my professional opinion, common and typical BMPs are sufficient to conclude with high probability that all encroached oak trees would sustain those impacts without decline in vigor. However, in coordination with the Applicant, I believe additional design features would be feasible and beneficial to incorporate as a part of the project.

Standard Forestry Division Conditions

1. [The Oak Tree Permit] shall not be effective until the permittee and the owner of the property involved (if other than the permittee), have filed at the office of the Department of Regional Planning their affidavit stating that they are aware of and agree to accept all conditions of this grant. Unless otherwise apparent from the context, the term "permittee" shall include the applicant and any other person, corporation or other entity making use of this grant.
2. The permittee shall, prior to commencement of the use authorized by [the Oak Tree Permit], deposit with the County of Los Angeles Fire Department a sum of $300. Such fees shall be used to compensate the County Forester $100 per inspection to cover expenses incurred while inspecting the project to determine the permittee's compliance with the conditions of approval. The above fees provide for one (1) initial inspection prior to the commencement of construction and two (2) subsequent inspections until the conditions of approval have been met. The Director of Regional Planning and the County Forester shall retain the right to make regular and unannounced site inspections.

3. Before commencing work authorized or required by [the Oak Tree Permit], the consulting arborist shall submit a letter to the Director of Regional Planning and the County of Los Angeles Fire Department, Forestry Division, stating that he or she has been retained by the permittee to perform or supervise the work, and that he or she agrees to report to the Director of Regional Planning and the County Forester, any failure to fully comply with the conditions of the [Oak Tree Permit]. The arborist shall also submit a written report on permit compliance upon completion of the work required by the [Oak Tree Permit]. The report shall include a diagram showing the exact number and location of all mitigation trees planted as well as planting dates.

4. The permittee shall arrange for the consulting arborist or a similarly qualified person to maintain all remaining Oak trees on the subject property that are within the zone of impact, as determined by the County Forester for the life of the Oak Tree Permit or the Conditional Use Permit.

5. The permittee shall install temporary chain-link fencing, not less than four (4) feet in height, to secure the protected zone of all remaining Oak trees on site [not approved for encroachment], as necessary. The fencing shall be installed prior to grading or tree removal and shall not be removed without approval of the County Forester. The term "protected zone" refers to the area extending five (5) feet beyond the drip line of the Oak tree (before pruning), or fifteen (15) feet from the trunk, whichever is greater.

6. Copies of the Oak Tree Report, Oak tree map, mitigation planting plan and conditions of approval, shall be kept on the project site and available for review. All individuals associated with the project as it relates to the Oak resource shall be familiar with the Oak Tree Report, Oak tree map, mitigation planting plan and conditions of approval.

7. Trenching, excavation, or clearance of vegetation within the protected zone of an Oak tree shall be accomplished by the use of hand tools or small hand-held power tools. Any major roots encountered shall be conserved and treated as recommended by the consulting arborist.

8. In addition to the work expressly allowed by this permit, remedial pruning intended to ensure the continued health of a protected Oak tree or to improve its appearance or structure may be performed. Such pruning shall include the removal of deadwood and stubs and medium pruning of branches two-inches in diameter or less in accordance with the guidelines published by the National Arborist Association. Copies of these guidelines are available from the County of Los

Angeles Fire Department, Forestry Division. In no case shall more than 20% of the tree canopy of any one tree [not approved under the Oak Tree Permit] be removed.

9. Except as otherwise expressly authorized by this grant, the remaining Oak trees shall be maintained in accordance with the principles set forth in the publication, "Oak Trees: Care and Maintenance," prepared by the County of Los Angeles Fire Department, Forestry Division.

10. The permittee shall provide mitigation trees of the Oak genus at a rate of at least two to one (2:1) for each tree removed. The permittee shall provide mitigation trees of the Oak genus at a rate of two to one (2:1) for any tree specified above that dies as a result of the approved encroachments. In addition, any tree that reaches ordinance size during the life of the project shall be included in the [Oak Tree Permit] and subject to these conditions of approval.

11. Each mitigation tree shall be at least a 15-gallon specimen in size and measure one (1) inch or more in diameter one (1) foot above the base. Free form trees with multiple stems are permissible provided the combined diameter of the two (2) largest stems of such trees measure a minimum of one (1) inch in diameter one (1) foot above the base.

12. Mitigation trees shall consist of indigenous varieties of *Quercus agrifolia*, grown from a local seed source.

13. Mitigation trees shall be planted within one (1) year of the permitted Oak tree removals. Mitigation trees shall be planted either on site or at an off-site location approved by the County Forester. Alternatively, a contribution to the County of Los Angeles Oak Forest Special Fund may be made in the amount equivalent to the Oak resource loss. The contribution shall be calculated by the consulting arborist and approved by the County Forester according to the most current edition of the International Society of Arboriculture's “Guide for Plant Appraisal.”

14. The permittee shall properly maintain each mitigation tree and shall replace any tree failing to survive due to a lack of proper care and maintenance with a tree meeting the specifications set forth above. The two-year maintenance period will begin upon receipt of a letter from the permittee or consulting arborist to the Director of Regional Planning and the County Forester, indicating that the mitigation trees have been planted. The maintenance period of the trees failing to survive two (2) years will start anew with the new replacement trees. Subsequently, additional monitoring fees shall be required.

15. All mitigation Oak trees planted as a condition of this permit shall be protected in perpetuity

by the Los Angeles County Oak Tree Ordinance once they have survived the required maintenance period.
16. Encroachment within the protected zone of any additional tree of the Oak genus [not permitted by this grant] on the project site is prohibited.
17. Should encroachment within the protected zone of any additional tree of the Oak genus on the project site not permitted by this grant result in its injury or death within two (2) years, the permittee shall be required to make a contribution to the Los Angeles County Oak Forest Special Fund in the amount equivalent to the Oak resource damage/loss. Said contribution shall be calculated by the consulting arborist and approved by the County Forester according to the most current edition of the International Society of Arboriculture's "Guide for Plant Appraisal."
18. No irrigation system shall be installed within the dripline of any Oak tree that will be retained.
19. Utility trenches shall not be routed within the protected zone of an Oak tree unless the serving utility requires such locations.
20. Equipment, materials and vehicles shall not be stored, parked or operated within the protected zone of any Oak tree [not approved for encroachment]. No temporary structures shall be placed within the protected zone of any Oak tree [not approved for encroachment].
21. Violations of the conditions of this [Oak Tree Permit] shall result in immediate work stoppage or in a notice of correction depending on the nature of the violation. A time frame within which deficiencies must be corrected will be indicated on the notice of correction.
22. Should any future inspection disclose that the subject property is being used in violation of any one of the conditions of this grant, the permittee shall be held financially responsible and shall reimburse the County of Los Angeles Fire Department, Forestry Division, for all enforcement efforts necessary to bring the subject property into compliance.

Standard BMPs

The following Best Management Practices constraining construction impacts are common and typical as to form, to which the project should adhere:

1. All terminal cutting of branches or roots greater than 2" in diameter[1] for encroached trees to remain shall be performed to the following specifications at the direction of the consulting arborist in accordance with the International Society of Arboriculture ANSI 300 standard. Branches shall be cut using the 3-step Shigo method using a reciprocating saw, chainsaw or manual saw with blade sterilized in alcohol. No sealants shall be applied to cuts except as directed by the consulting arborist and/or County Forester. Root cuts shall be made at a branch node wherever feasible using a reciprocating saw, chainsaw or manual saw with blade sterilized in alcohol. As current arboricultural understanding recommends such work be performed when pests and disease are least active and stresses can be compounded in the hottest and driest months of the year as the tree prepares for dormancy, all cutting of roots and branches greater than 2" in diameter for those encroached trees to remain shall be performed to the greatest extent feasible in the months between August and October.

2. Trenching for utility laterals shall preserve all encountered roots greater than 2" in diameter, with laterals threaded under or around any non-feeder roots to the greatest extent feasible. Preservation of feeder roots is not beneficial, as healthy new feeder roots will quickly in-grow the aerated and enriched backfill. The placement of the laterals within the protected zone of encroached trees should maximize the radial, outward component of travel from the trunk.[2] Laterals shall otherwise be designed to minimize disturbance to the greatest extent feasible, including placement at the minimum depths permitted by code, which are not expected to exceed 12", or less than 1/3 of the range of typical root depths for coast live oak.

3. Any required over-excavation shall preserve encountered non-feeder roots to the greatest extent feasible, and any preserved roots that would otherwise be exposed to air for longer than one day shall be topped or wrapped with heavy, absorptive, biodegradable fabric (e.g. jute or burlap) within one day of exposure. A mix of compost and loose soil shall be spread within or over the cloth as feasible. Any exposed fabric shall be wetted at intervals appropriate to the season and water year performance at the direction of the consulting arborist, until backfill.

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[1] Note: Of the encroached trees to remain, only oak tree #4 is expected to require canopy pruning of any branch greater than 2" in diameter, and only oak tree #4 is expected to sustain any grading within the dripline. The branches to be removed are visually portrayed in the impact assessment below. These include an approximately 9.5" primary scaffold branch or co-trunk (located right at the transition from mean breast height) and one or two lateral branches of 2-3". Oak tree #10 is expected to sustain only slight pruning, of branches smaller than 2". No other trees are expected to sustain canopy pruning.

[2] The laterals portrayed on the Oak Tree Location and Impact Map fulfill this guideline as best as possible.

4. Below grade formwork in the protected zone of oak trees to remain shall be of "blind side" construction to minimize over-excavation to the greatest extent feasible.
5. The consulting arborist shall recommend and the Applicant shall adhere to a supplemental irrigation program for encroached and replacement trees before, during and after construction, as appropriate to the season and water year performance to avoid rot and fungus while providing for the health of the tree. Supplemental irrigation should avoid extended intervals of continuous wetting and generally be confined to soaker hoses near the dripline.
6. The driveway shall be permeable to air and water and constructed with a design that is equivalent or better in compaction reduction performance to the GeoTerra Tree Root Protection system by Presto Geosystems, which has been tested as equivalent in compaction reduction performance to 10-12" of gravel.
7. To minimize compaction, a layer of wood mulch free of pests or disease 4-6" deep shall be placed over any area that may be used for equipment staging or parking, along with rigid sheeting to further reduce loads and mitigate against rutting. These areas are expected to be those relatively flat portions of the site at or above approximately 1342' in elevation. The rigid sheeting layer may be either (or both) a compaction mitigation system equivalent or better in performance to the GeoTerra Tree Root Protection system by Presto Geosystems or a ¾" sheet of plywood or similarly performing engineered wood product with glue rated for exterior usage and tolerance to wetting (but not pressure-treated or otherwise impregnated with substances that may leach when wetted). The mulch and rigid sheeting shall be maintained and replaced if needed throughout construction, at the direction of the consulting arborist. Coarse fir bark nuggets would not degrade over the construction interval and are recommended.[3]
8. The mulch installed prior to commencing construction shall be retained after construction completes. As the mulch breaks down, the soil will be enriched, and accompanying biological activity will further help to remedy the existing soil compaction. Natural leaf litter shall be retained to the greatest extent feasible.
9. The runoff from washout of any tools or equipment, including those for concrete, paint and similar fluids, shall be disposed in the sewer system for proper wastewater treatment. Prior to the viability of sewer disposal on-site, containerized washout stations and off-site transport shall be

[3] Compaction reduction techniques may be used in conjunction for larger loads (e.g. plywood may be placed over a Tree Root Protection system to accommodate the volumetric concrete mixer truck).

used. Under no circumstances shall such runoff infiltrate the protected zone of any tree to remain.

10. Any tree trunk located within five feet of any construction activity shall be protected from mechanical damage prior to that activity to the satisfaction of the consulting arborist and/or County Forester. Such protection may include, but is not limited to, fencing or other physical barrier no less than 4' tall, or a "girdle" comprised of dimensional lumber aligned lengthwise with the trunk, strung together edge to edge around the exposed circumference of the tree. In the unexpected event that any mechanical damage occurs, the wound shall be smoothed with a sharp, alcohol-sterilized chisel to promote healing.[4]

11. Combustion exhaust shall not be permitted within five feet of the live tissue of trees to remain, and idling of combustion equipment in the vicinity of trees shall be minimized to the greatest extent feasible.

12. The Applicant shall be responsible for coordinating the supervision of these project conditions and any other direction by the consulting arborist and/or County Forester that may arise from unanticipated circumstances. Such supervision shall include at a minimum: (1) one site visit before grading commences and after protective BMPs are installed; (2) three site visits spaced during pruning and excavation; (3) bi-annual site visits during construction to assess whether any alterations in tree management would be warranted and to confirm protective BMPs remain intact and effective. Because the project exists in close proximity to oak trees, and work within the protected zones will be continuous during construction, continuous supervision in person of all work in a protected zone would occupy an arborist exclusively for the entirety of the construction interval. However, properly installed BMPs are reasonably expected to be effective, such that continuous presence would not be productive use of an arborist's time. Such a requirement also tends to be self-defeating in its cost-incentivization of haste, undermining the deliberation that best minimizes impacts. The ideal is what the Applicant has represented to me he intends – that he do the grading by hand himself, with no cost-incentive for haste, in full understanding of these conditions, and with strong incentivization to see all trees maintained for the beauty they add to the site. In the event that inspection reveals need for remediation, greater

[4] While trees on-site that are not encroached by construction activities or monitored are often fenced to ensure that no impacts occur, the nearest un-encroached trees on the project site are nearly 200 feet distant and separated by topography that precludes any possible impacts. Therefore, no fencing of un-encroached trees on the project site is required.

frequency of site visit shall be required at the direction of the County Forester in coordination with the consulting arborist, to the extent sufficient to maintain the project in compliance with all conditions.

Project Design Features

I have also been asked by the Applicant to express what other activities could be desirable to rehabilitate the degraded existing condition of the oak trees impacted by the project, above and beyond common and typical BMPs. In my professional opinion, these are not required to maintain a high probability that the encroached trees would sustain the marginal impacts of construction in their current state of health, as mediated by BMPs and design features. However, they are expected to be beneficial, and I support including these as a part of the project.

The existing condition of the entirety of the proposed driveway and some of the project footprint is characterized by compaction from parking. This compaction has also occurred at distances that are too close to the trunks of the trees. For instance, the driveway at 3589 Canyon Crest Road is paved up to the trunk of oak tree #1, with no offset, though at least 15 feet of un-compacted offset would be recommended for a tree of this size. Furthermore, some affected oak trees, including oak tree #1, have sustained severe impacts on multiple sides and over nearly the entirety of the protected zone. Safe deep root aeration may be effective with different methods depending on conditions encountered, including the use of a lightly pressured auger or deep root irrigator, radial trenching by hand, the digging of sumps by hand, and/or use of an air spade. (Smiley, E.T. 1999. “Air excavation, the next arboricultural frontier.” Arbor Age). Such excavations should avoid cutting or damaging non-feeder roots and be backfilled with a mix of aerated soil and compost, or natural humus from leaf litter.

I recommend that the area out to at least five times the trunk diameter of each tree be protected from further vehicular passage, as with especially oak compatible landscaping using specimens from the genera *Rhamnus* and/or *Ribes.* A limited footprint of moderately sized rocks or other landscaping features may also be used to define the edges of these zones.

The fill that was dumped on the site by previous owners has likely infilled with feeder roots but could contribute to reduced aeration where infill has not been complete. I recommend cautious interrogation of this fill, with incremental removal unless or until oak tree feeder roots are encountered. Generally, because compaction damage trails off strongly with soil depth, the retention of a buffer layer of fill is more likely than not to be beneficial during construction, given that the trees have sustained these impacts for at least 15 years. However, the Applicant could elect to perform remediation at any point in time in any area not expected to bear any load during construction (to help provide some beneficial impact during construction) or where the Tree Root Protection System is installed thereafter.

I would recommend that before construction commences, the Applicant dig by hand pits 5-8” in diameter as deep as 2’ and as tightly spaced as 3’ on center in the area of fill deposition, to create a map of eventual fill removal and provide some immediate compaction remediation and aeration that does not compromise the buffering effect of the fill soil on the eventual grade. The pits may then be backfilled with a mixture of loose soil and compost or natural humus from leaf litter. This map may then help inform any later construction detail affected by the final elevations of this area, such as the transition between below and above grade walls, precise driveway contours, etc. These contours are expected to vary by no more than a foot or so depending on conditions encountered.

I would recommend that where an existing concrete drainage device is impinging on the collar of any oak tree, the concrete is carefully chiseled out to a distance several inches beyond the trunk and any resulting wound in the tree smoothed with a sharp, alcohol-sterilized chisel to promote healing.

9. IMPACT ASSESSMENT

This impact assessment documents the extent of each type of impact to each of the nine encroached trees approved to remain. The analysis quantifies the overlapping encroachment percentages that pre-exist the project and that describe the project, in the different types of impact. From these, an effective negative marginal impact of the project is derived. The

preventive and beneficial effects of the conditions imposed are considered in their mediation of the existing impacts and marginal project impacts to derive a sustainability conclusion.

In the figures below, excerpted from the (north-aligned) project site plan, the solid scalloped line is the dripline of the canopy, the dashed line beyond it is the boundary of the protected zone, and the dotted circle is the critical root zone (five times the trunk diameter). Impacts are overlapped as appropriate.

Oak Tree #1

Existing Known Root Removal: estimated at 20+%
Existing Impervious Load-bearing Surface Encroachment: 65+%
Existing Fill Encroachment: 15+%
Existing Pervious Load-bearing Surface and Compaction Encroachment: 20+%
Existing Canopy Removal: Unknown, but substantial, for roadway, parking and power line clearance
Existing Total Spatial Extent of Impacts of Any Kind: 95+%

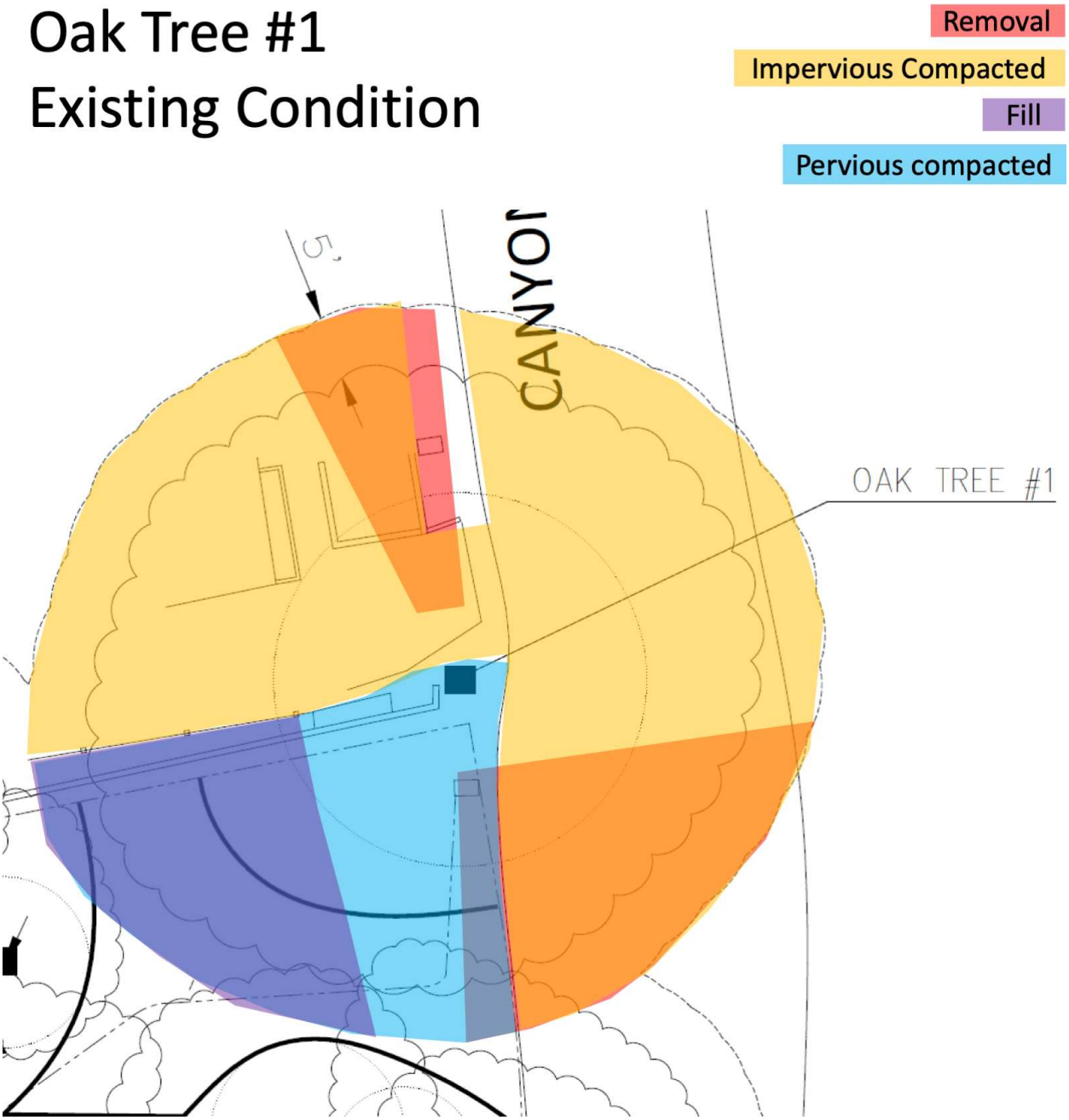


Figure 9-1: Oak Tree #1 Existing Condition

Oak tree #1 has sustained one or more impacts across nearly the entirety of its protected zone, including root removal associated with construction of a 5'x35' seepage pit approximately 6' from its trunk and associated laterals by the neighbors at 3589 Canyon Crest Road and water lateral using a backhoe in the opposite quadrant of the protected zone; impervious pavement over

most of the protected zone from Canyon Crest Road and paved driveway, patio and slab-on-grade foundation at 3589 Canyon Crest Road; the dumping of fill on the project site; and compaction from parking usage. Nevertheless, I rated this tree an “A” for health because it has thrived despite these impacts. In less favorable soil conditions and/or in a less robust specimen, this level of existing impact could have precipitated decline. However, this established tolerance is important to the consideration of the severity of marginal project impacts.

Project Non-feeder Root Removal: 0%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: <10%
Project Remediated Compaction: <20%
Project Canopy Removal: 0%
Project Total Spatial Extent of Impacts of Any Kind: <20%

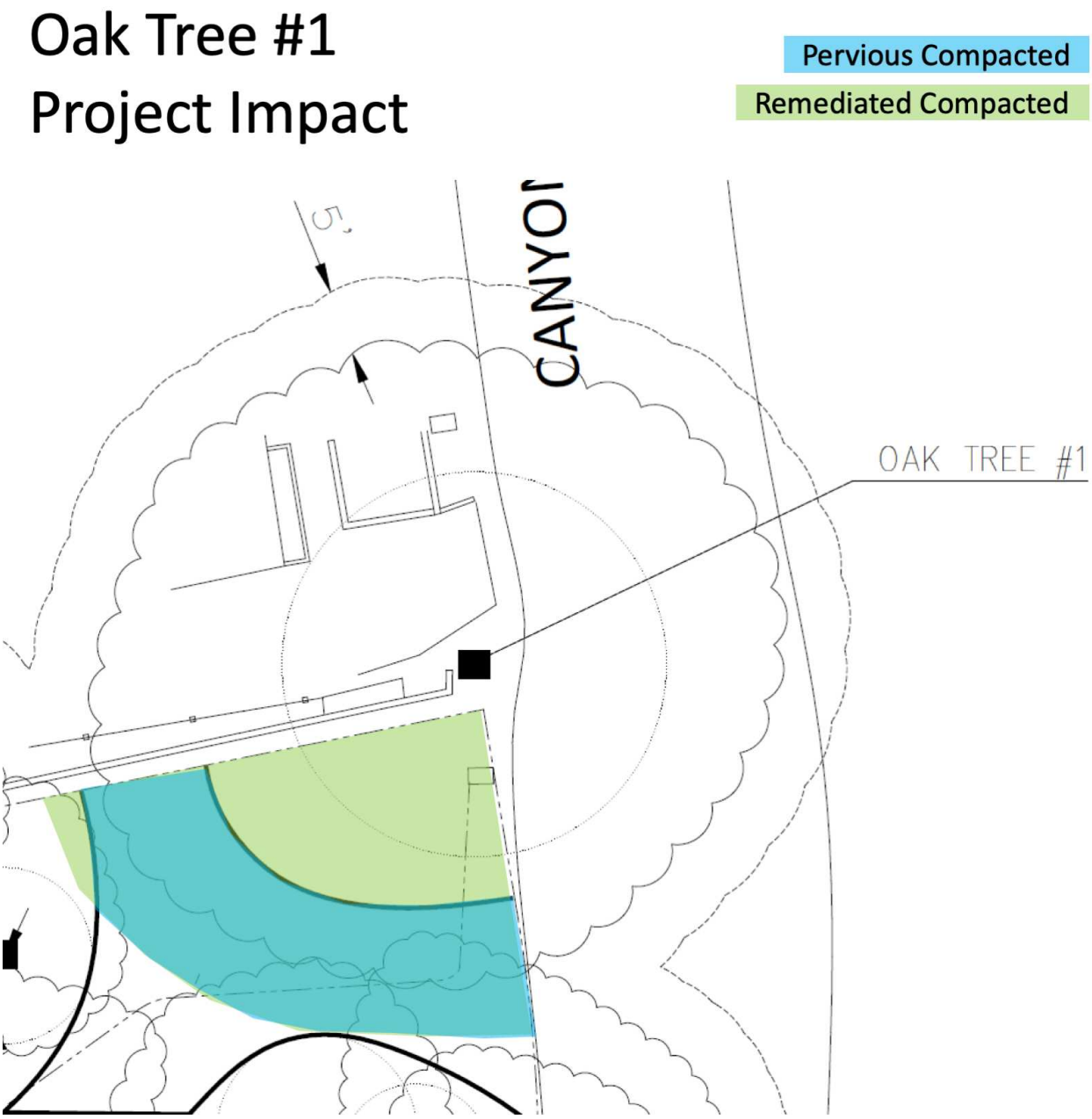


Figure 9-2: Oak Tree #1 Project Marginal Impact

The 3”x12” trenching for the utility lateral is expected to result in no non-feeder root removal, given the manner of excavation and the requirement to thread the lateral under any larger roots encountered, approximating a technique of compaction mitigation called radial trenching. As such, no negative root removal impacts are expected. No pruning of canopy is expected. The project would not introduce any impervious load-bearing surfaces or fill in the protected zone. The existing fill in the protected zone of oak tree #1 transitions from nil to perhaps as deep as 6-

12". This may be incrementally interrogated and removed if roots are not encountered. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be managed by Best Management Practices and design features and remediated with vertical aeration. Compaction rehabilitation should benefit this tree.

Project Marginal Root Removal: 0%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Canopy Removal: 0%
Project Marginal Total Spatial Extent of Negative Impacts: 0%

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration, mulching, fill interrogation, and the compaction mitigating design of the driveway are expected to have a net positive effect on the compaction of the underlying soil compared to the existing condition, the project's load-bearing pervious surface and compaction impacts are not considered to be marginal negative impacts. No marginal canopy pruning and no non-feeder root removal are expected.

Given its excellent existing health, demonstrated robustness, no negative marginal impacts of the project, and the BMPs and remediation required, oak tree #1 is not reasonably expected to decline from project-related impacts.

Oak Tree #2

Existing Known Root Removal: 0%
Existing Impervious Load-bearing Surface Encroachment: 40+%
Existing Fill Encroachment: 10+%
Existing Pervious Load-bearing Surface and Compaction Encroachment: 35+%
Existing Canopy Removal: Unknown, but substantial, for roadway, parking and power line clearance
Existing Total Spatial Extent of Impacts of Any Kind: 80+%

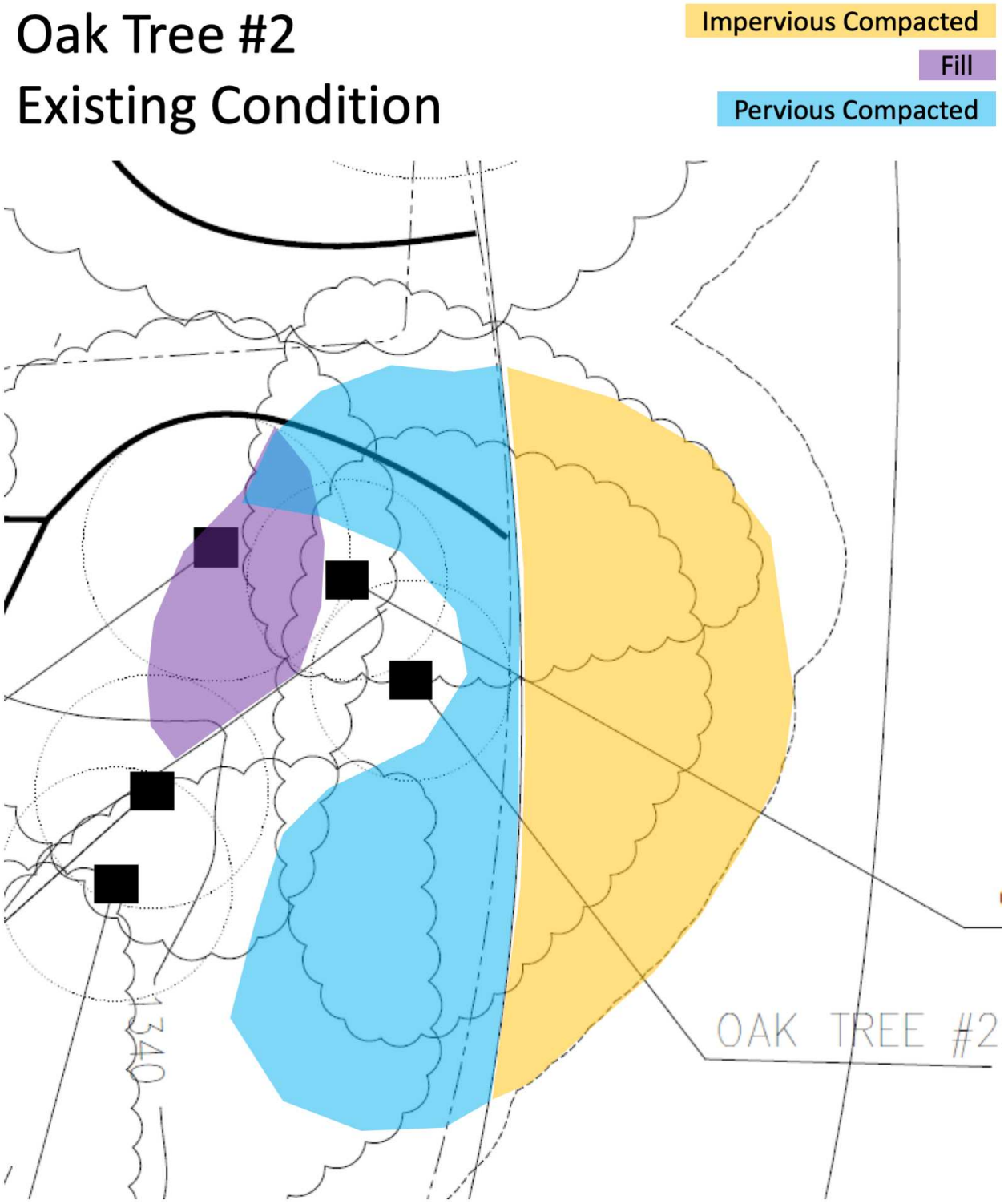


Figure 9-3: Oak Tree #2 Existing Conditions

Oak tree #2 has sustained one or more impacts across most of its protected zone, including impervious pavement over much of the protected zone from Canyon Crest Road; the dumping of fill on the project site; and compaction from parking usage; multiple pruning events for parking and roadway clearance; and impingement of a concrete drainage device on the root collar. Nevertheless, I rated this tree a "B-" for health because it has sustained these impacts in good health. In less favorable soil conditions and/or in a less robust specimen, this level of existing impact might be expected to precipitate decline. However, this established tolerance is important to the consideration of the severity of marginal project impacts.

Project Non-Feeder Root Removal: 0%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: <5%
Project Remediated Compaction: <20%
Project Canopy Removal: 0%
Project Total Spatial Extent of Impacts of Any Kind: <25%

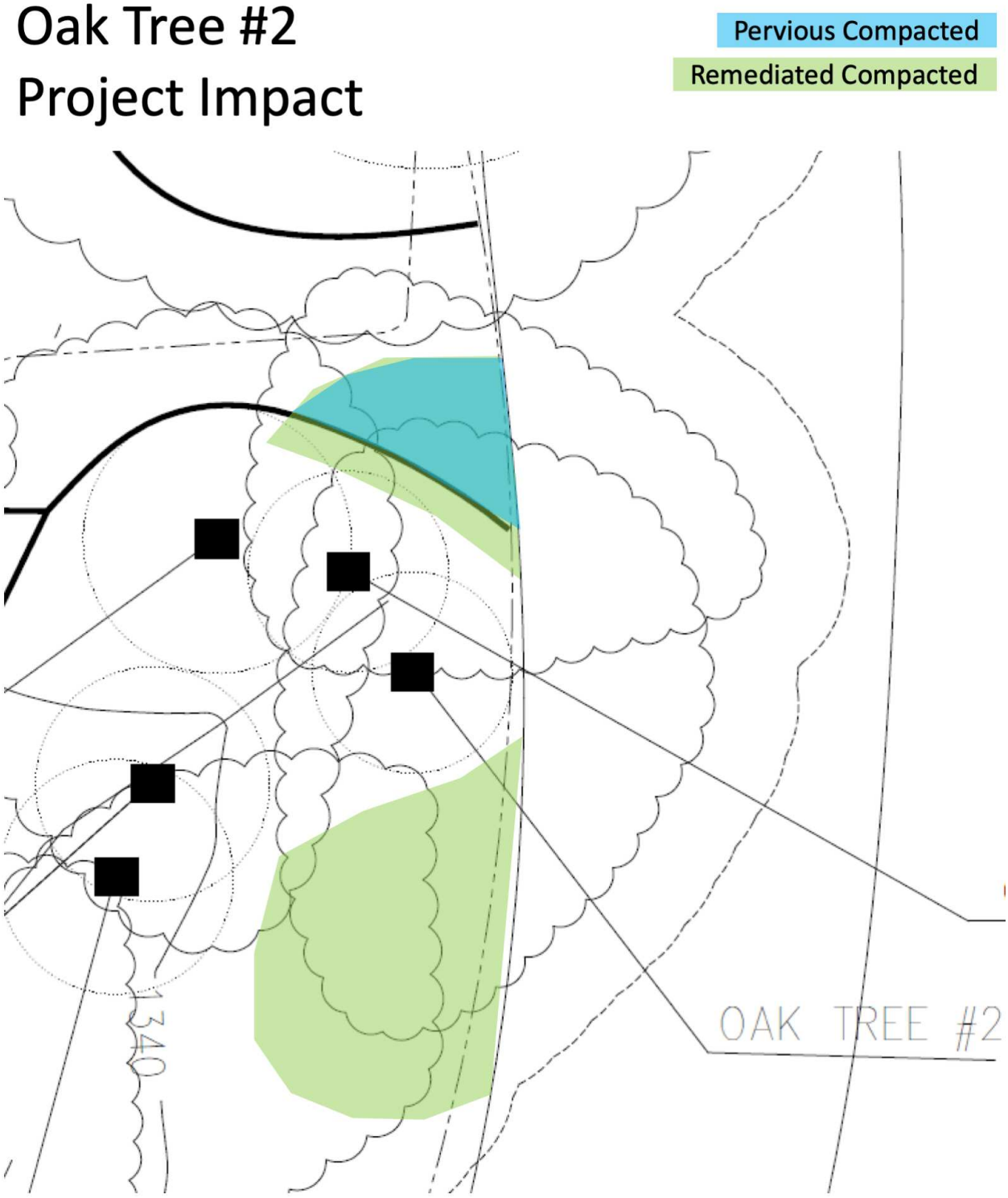


Figure 9-4: Oak Tree #2 Project Impacts

The project would not require any root removal or introduce any impervious load-bearing surfaces, and neither would fill be deposited in the protected zone. No pruning of canopy is expected. The existing fill in the protected zone transitions from nil to perhaps as deep as 18". This may be incrementally interrogated and removed if roots are not encountered but is not expected to result in appreciable changes to the health of the tree. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

Project Marginal Root Removal: 0%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Total Spatial Extent of Negative Impacts: 0%

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration, mulching, permanent protection of much of the aerated area, and the compaction mitigating design of the driveway are expected to have a net positive effect on the compaction of the underlying soil compared to the existing condition, the project's load-bearing pervious surface and compaction impacts are not considered to be marginal negative impacts. No marginal canopy pruning and minimal marginal root removal are required.

Given its good existing health, demonstrated robustness, no marginal negative impacts of the project, and the BMPs and remediation required, oak tree #2 is not reasonably expected to decline from project-related impacts.

Oak Tree #3

Existing Known Root Removal: 0%
Existing Impervious Load-bearing Surface Encroachment: 35+%
Existing Fill Encroachment: 15+%
Existing Pervious Load-bearing Surface and Compaction Encroachment: 40+%

Existing Canopy Removal: Unknown, but substantial, for roadway, parking and power line clearance

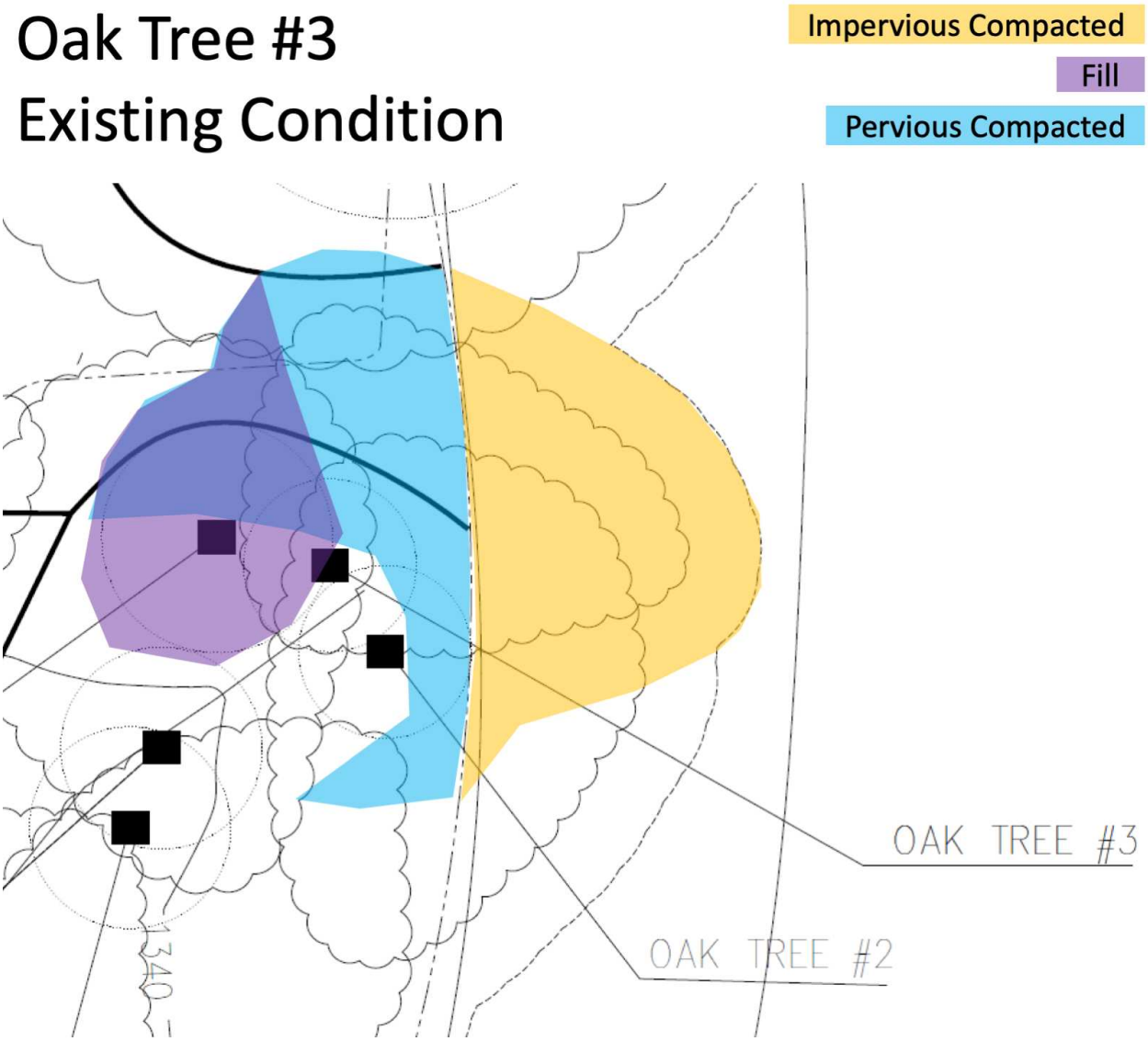


Figure 9-5: Oak Tree #3 Existing Conditions

Oak tree #3 has sustained one or more impacts across nearly the entirety of its protected zone, including impervious pavement over much of the protected zone from Canyon Crest Road; the dumping of fill on the project site; and compaction from parking usage; multiple pruning events for parking and roadway clearance; and impingement of a concrete drainage device on the root collar. I rated this tree a "C" for health because it has sustained these impacts in average health.

Project Non-Feeder Root Removal: 0%

Project Impervious Load-bearing Surface Encroachment: 0%

Project Pervious Load-bearing Surface and Compaction Encroachment: <20%

Project Remediated Compaction: <30%

Project Canopy Removal: 0%

Project Total Spatial Extent of Impacts of Any Kind: <30%

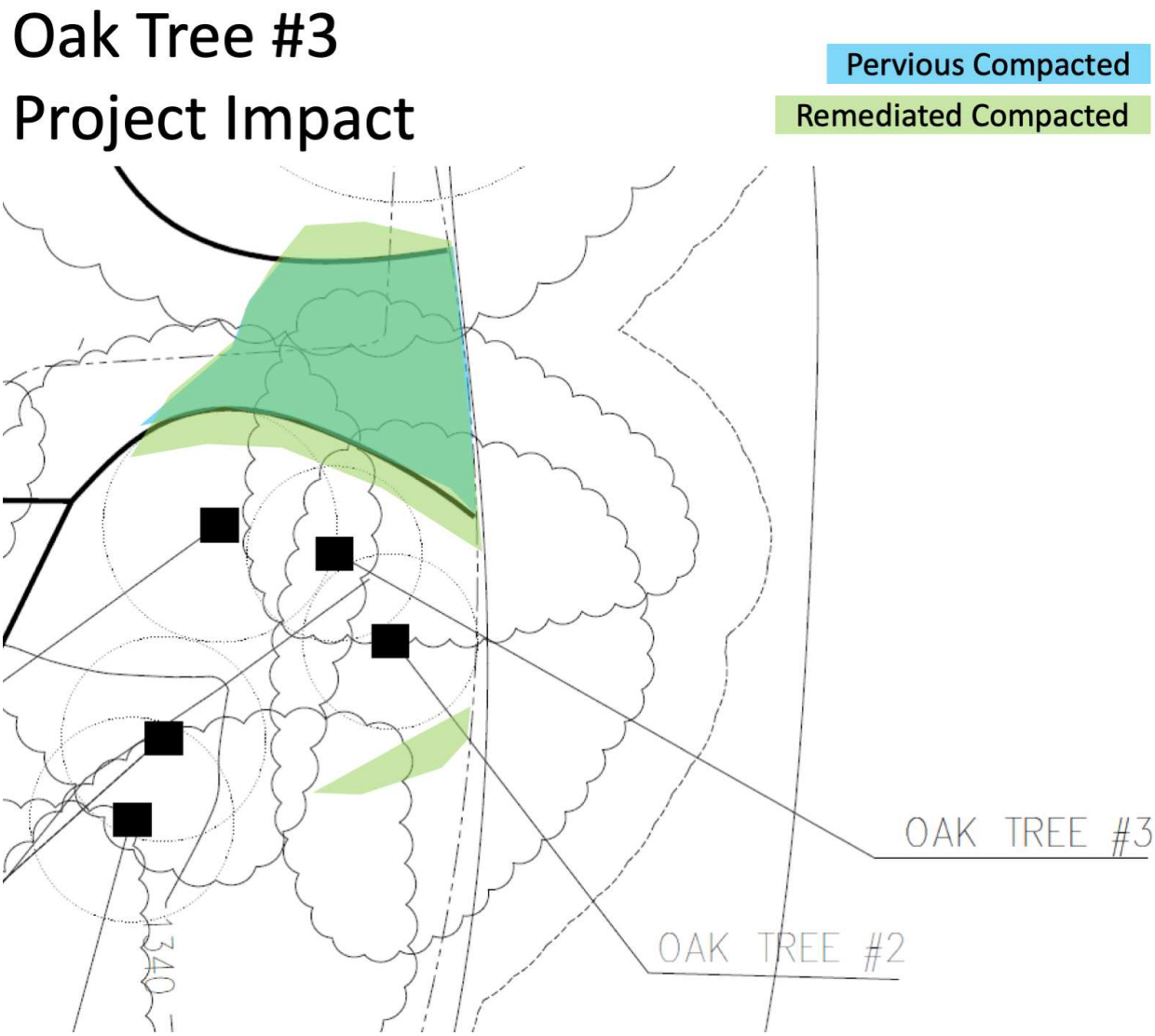


Figure 9-6: Oak Tree #3 Project Impacts

The 3”x12” trenching for the utility lateral is expected to result in no non-feeder root removal, given the manner of excavation and the requirement to thread the lateral under any larger roots encountered, approximating a technique of compaction mitigation called radial trenching. As such, no negative root removal impacts are expected. No pruning of canopy is expected. The project does not introduce any impervious load-bearing surfaces or fill in the protected zone. The existing fill in the protected zone transitions from nil to perhaps as deep as 18”. This may be incrementally interrogated and removed if roots are not encountered but is not expected to result in appreciable changes to the health of the tree. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

Project Marginal Root Removal: 0%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Fill Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Total Spatial Extent of Negative Impacts: 0%
Project Marginal Total Spatial Extent of Negative Impacts: 0%

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration, mulching, permanent protection of much of the aerated area, and the compaction mitigating design of the driveway are expected to have a net positive effect on the compaction of the underlying soil compared to the existing condition, the project’s load-bearing pervious surface and compaction impacts are not considered to be marginal negative impacts. No marginal pruning and minimal marginal root removal would occur.

Given no negative marginal impacts of the project and the BMPs and remediation required, oak tree #3 is not reasonably expected to decline from project-related impacts.

Oak Tree #4

Existing Known Root Removal: 0%

Existing Impervious Load-bearing Surface Encroachment: 0%

Existing Fill Encroachment: 50+%

Existing Pervious Load-bearing Surface and Compaction Encroachment: 40+%

Existing Canopy Removal: Unknown

Existing Total Spatial Extent of Impacts of Any Kind: 65+%

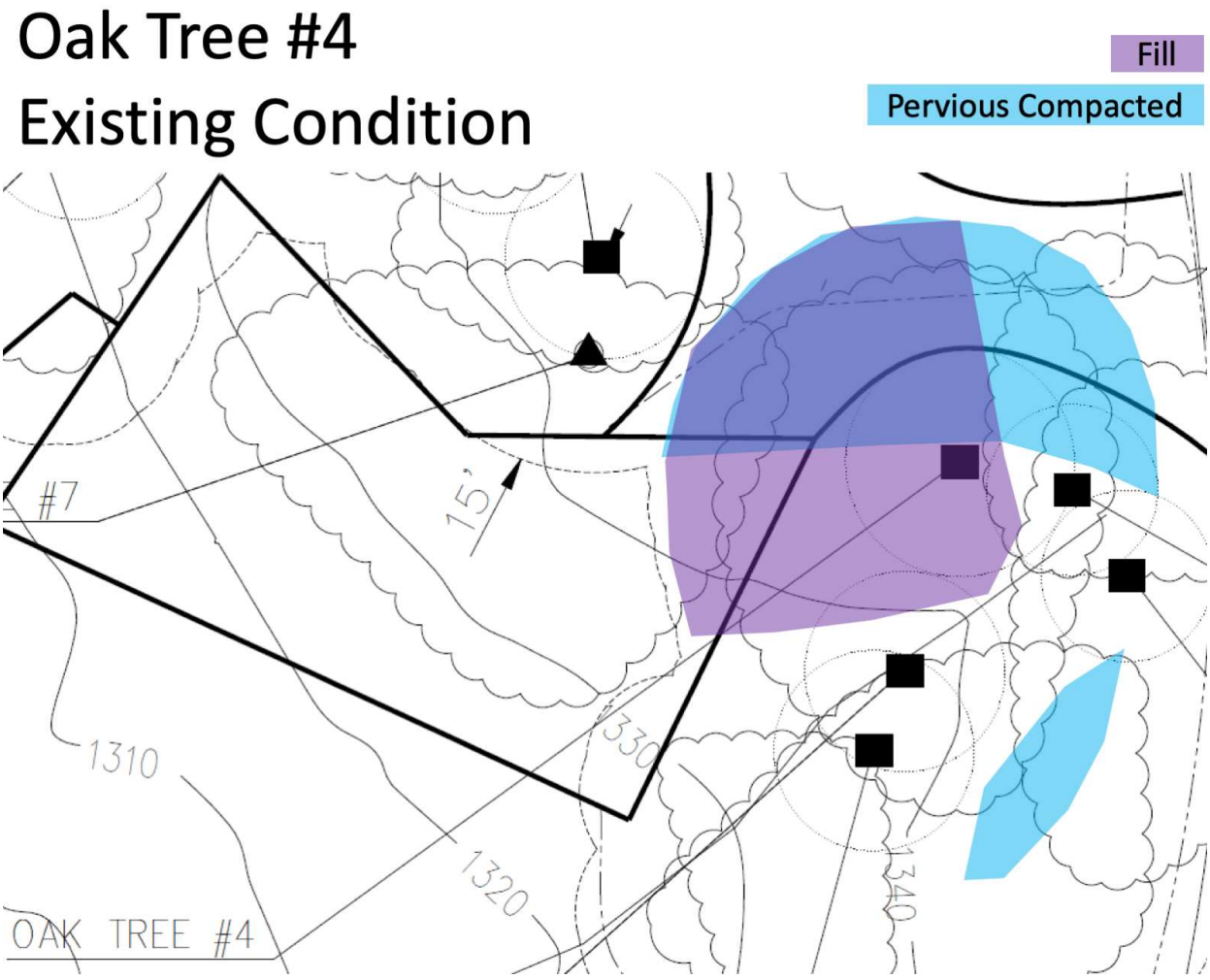


Figure 9-7: Oak Tree #4 Existing Conditions

Oak tree #4 has sustained one or more impacts across most of its protected zone, including the dumping of fill on the project site; compaction from parking usage; and pruning events for parking and power line clearance. Nevertheless, I rated this tree a "B+" for health because it has sustained these impacts in very good health. In less favorable soil conditions and/or in a less

robust specimen, this level of existing impact might be expected to precipitate decline. However, this established tolerance is important to the consideration of the severity of marginal project impacts.

Project Non-Feeder Root Removal: <15%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: <25%
Project Remediated Compaction: <35%
Project Canopy Removal: <25%
Project Total Spatial Extent of Impacts of Any Kind: <50%

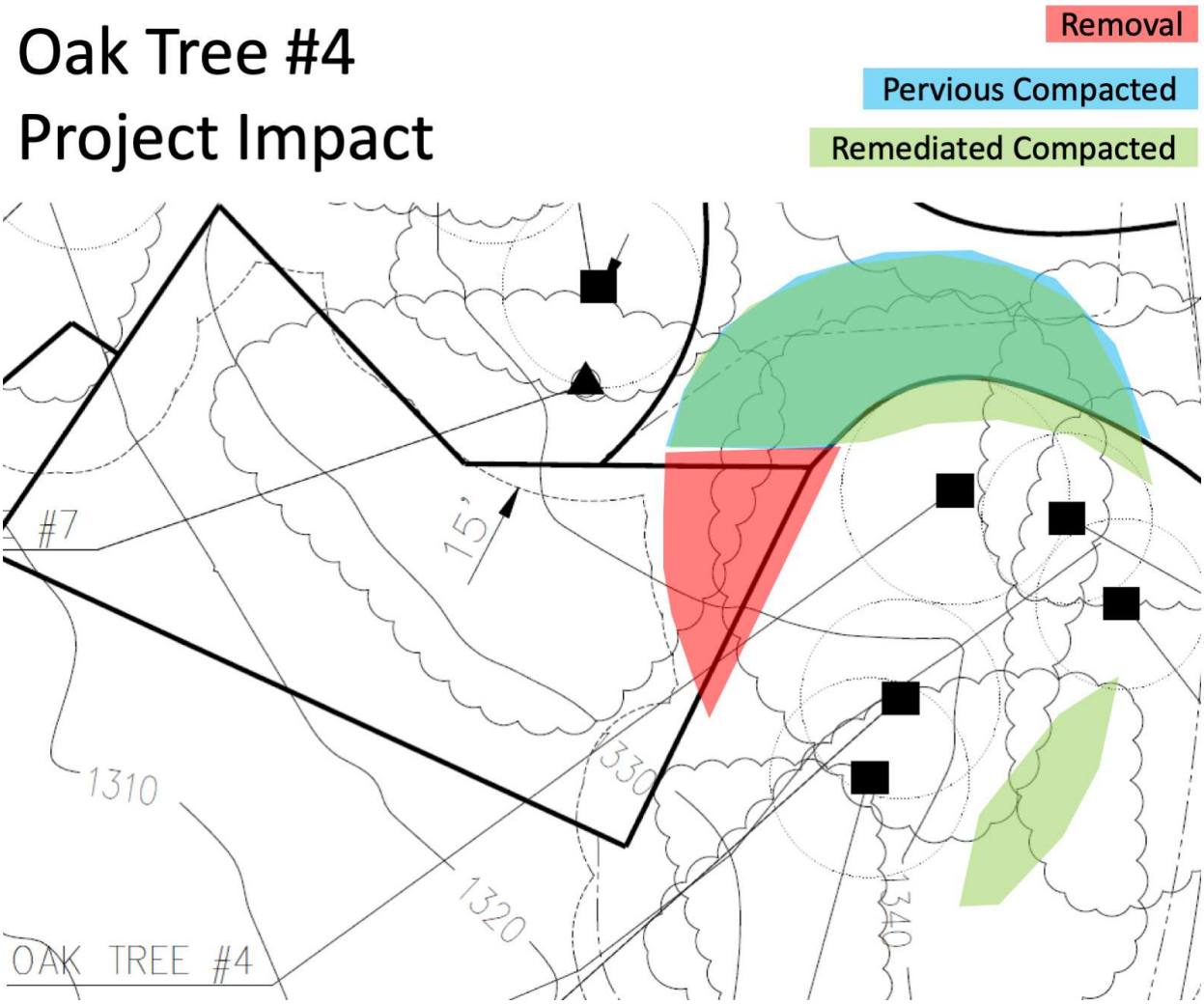


Figure 9-8: Oak Tree #4 Project Impacts

The amount of root removal required to place the structure of the home is less than 15% and would occur in a single quadrant of the protected zone beyond the critical root zone. The 3”x12” trenching for the utility lateral is expected to result in no non-feeder root removal, given the manner of excavation and the requirement to thread the lateral under any larger roots encountered, approximating a technique of compaction mitigation called radial trenching. As such, no negative root removal impacts are expected. The project does not introduce any impervious load-bearing surfaces in the protected zone. The existing fill in the protected zone transitions from nil to perhaps as deep as 24”. This should be interrogated and removed if roots are not encountered, prior to installing the Tree Root Protection System that will comprise the driveway. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

A 9.5” co-trunk of oak tree #4 must be removed to implement the project, along with one or two lateral branches of 2-3” in diameter. As portrayed in the orthographic projections of LiDAR scans below, this corresponds to less than 25% of the live canopy of the tree. In my professional opinion, the amount of pruning required adheres to the ANSI 300 pruning standard.

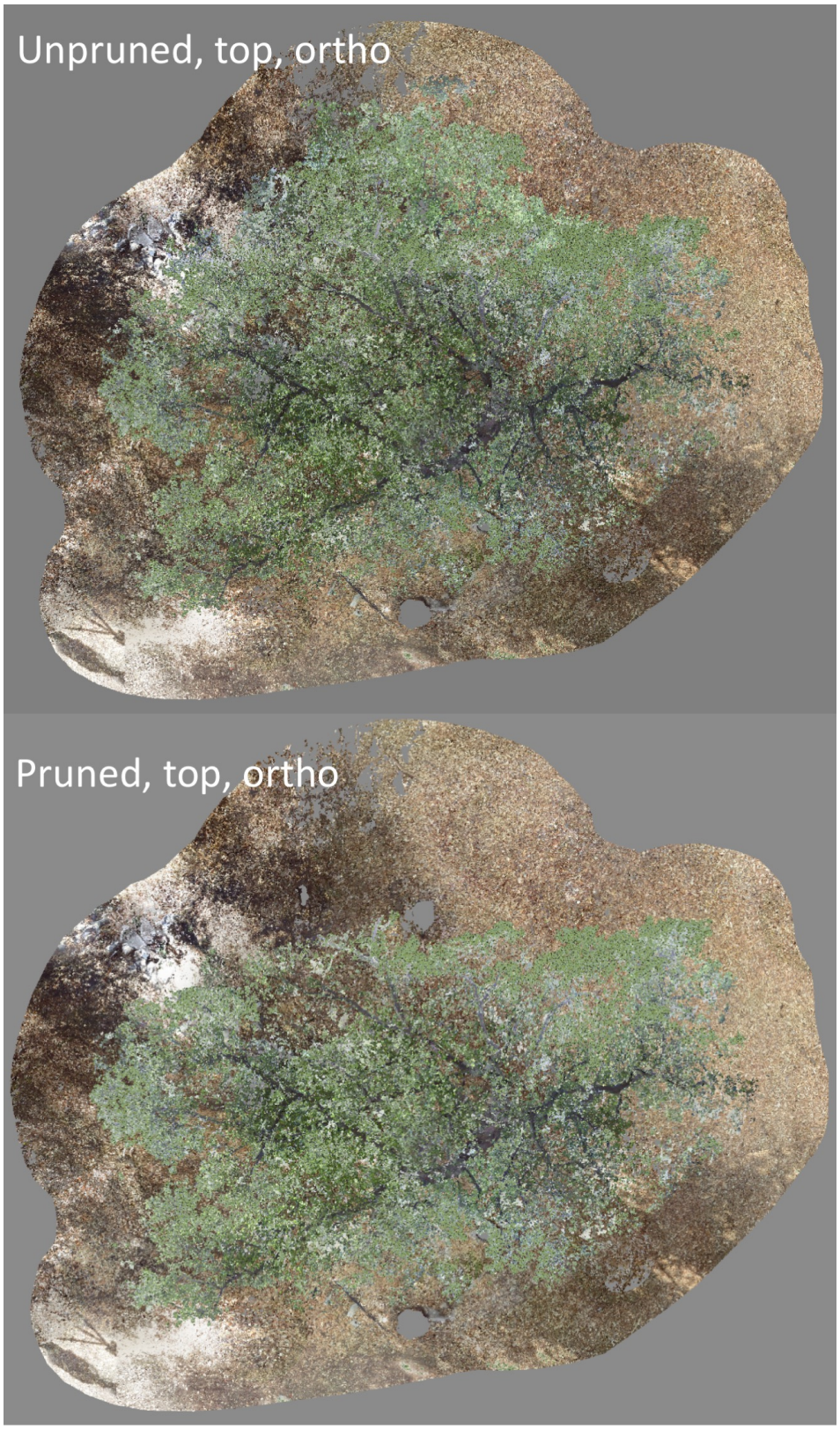


Figure 9-9: Oak Tree #4 Comparison of Canopy Extent Before and After Pruning, Orthographic Top Projection of LiDAR Scan

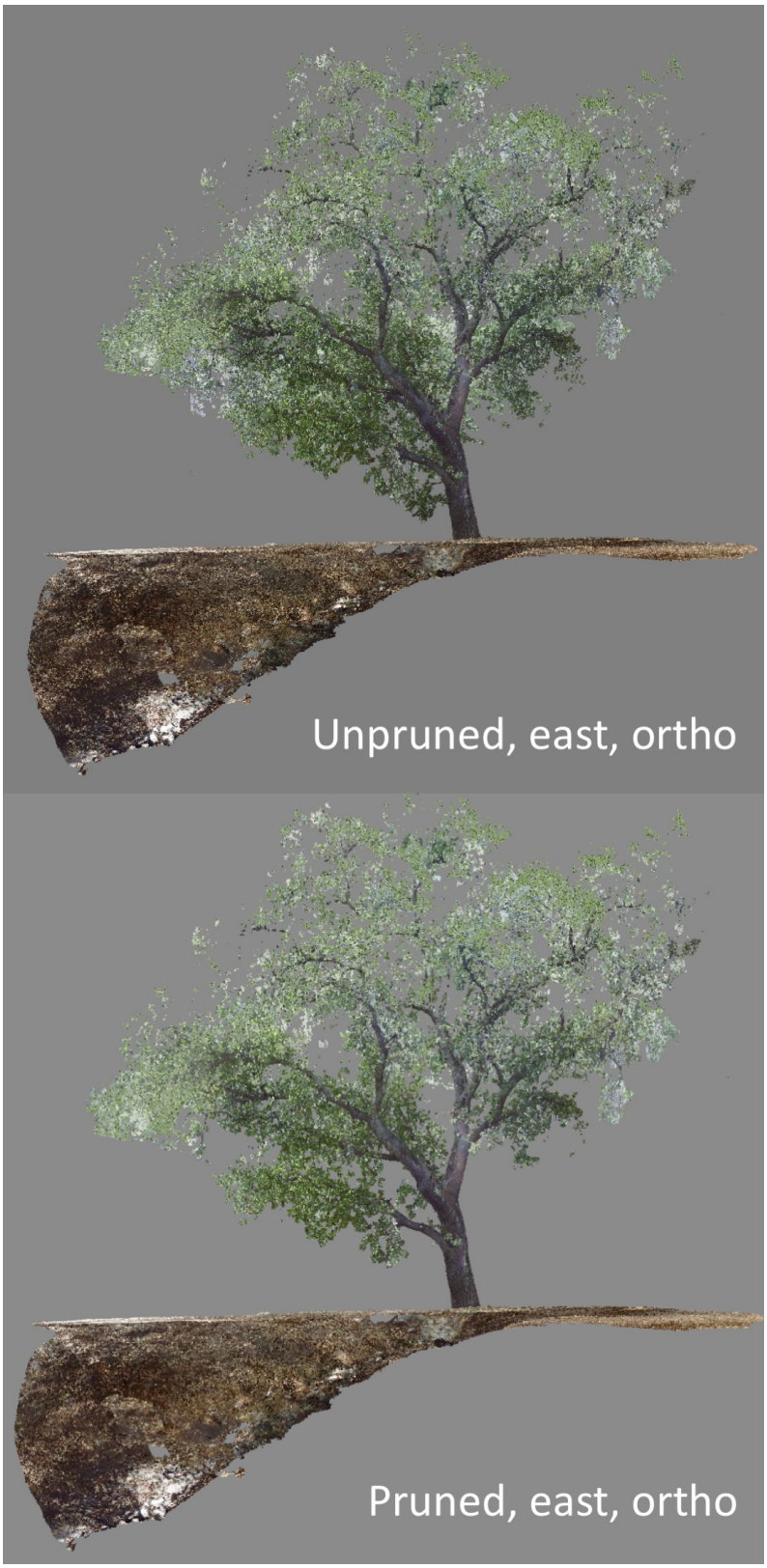


Figure 9-10: Oak Tree #4 Comparison of Canopy Extent Before and After Pruning, Orthographic East Projection of LiDAR Scan

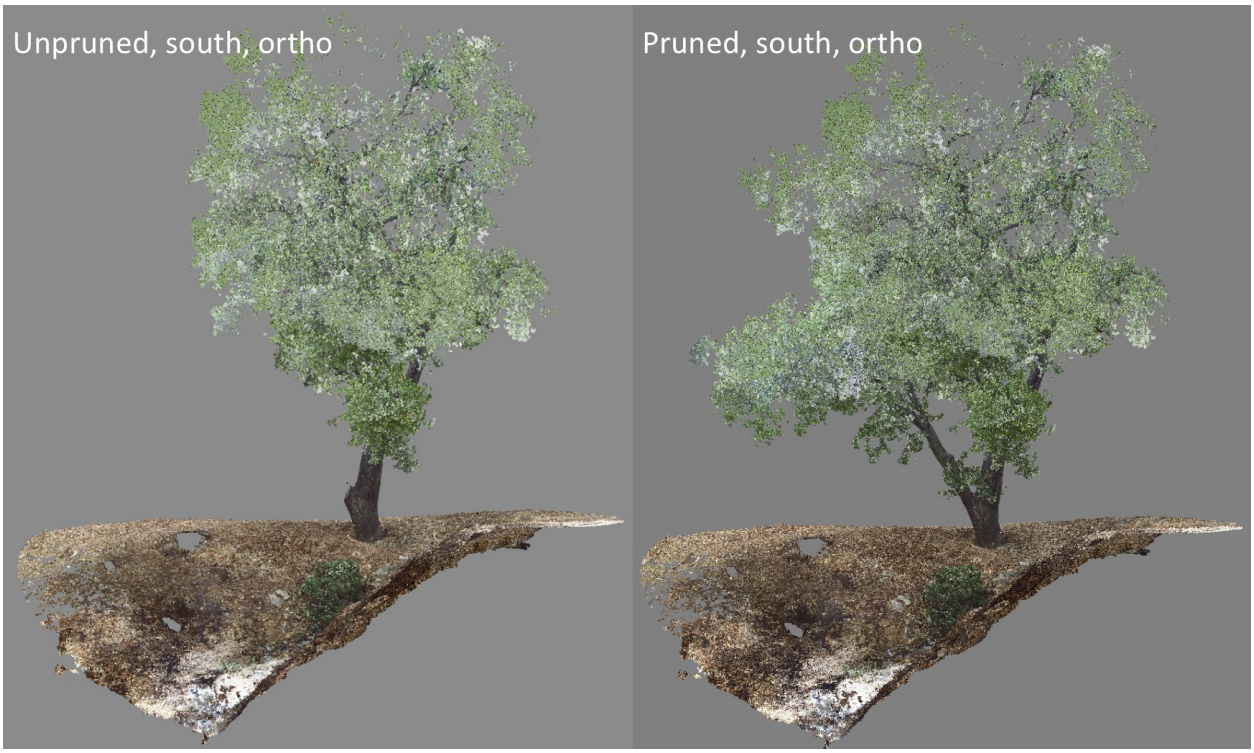


Figure 9-11: Oak Tree #4 Comparison of Canopy Extent Before and After Pruning, Orthographic South Projection of LiDAR Scan

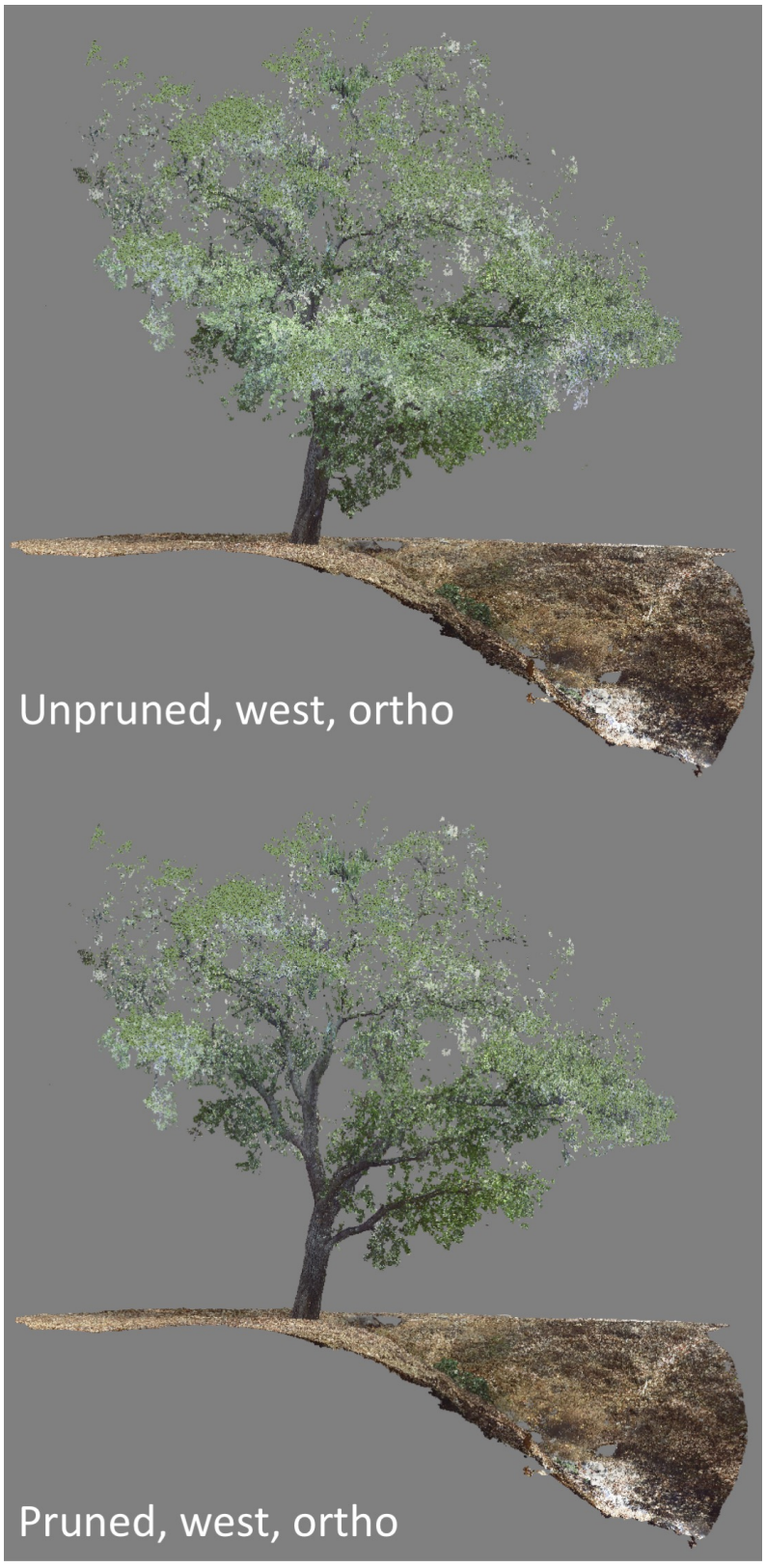
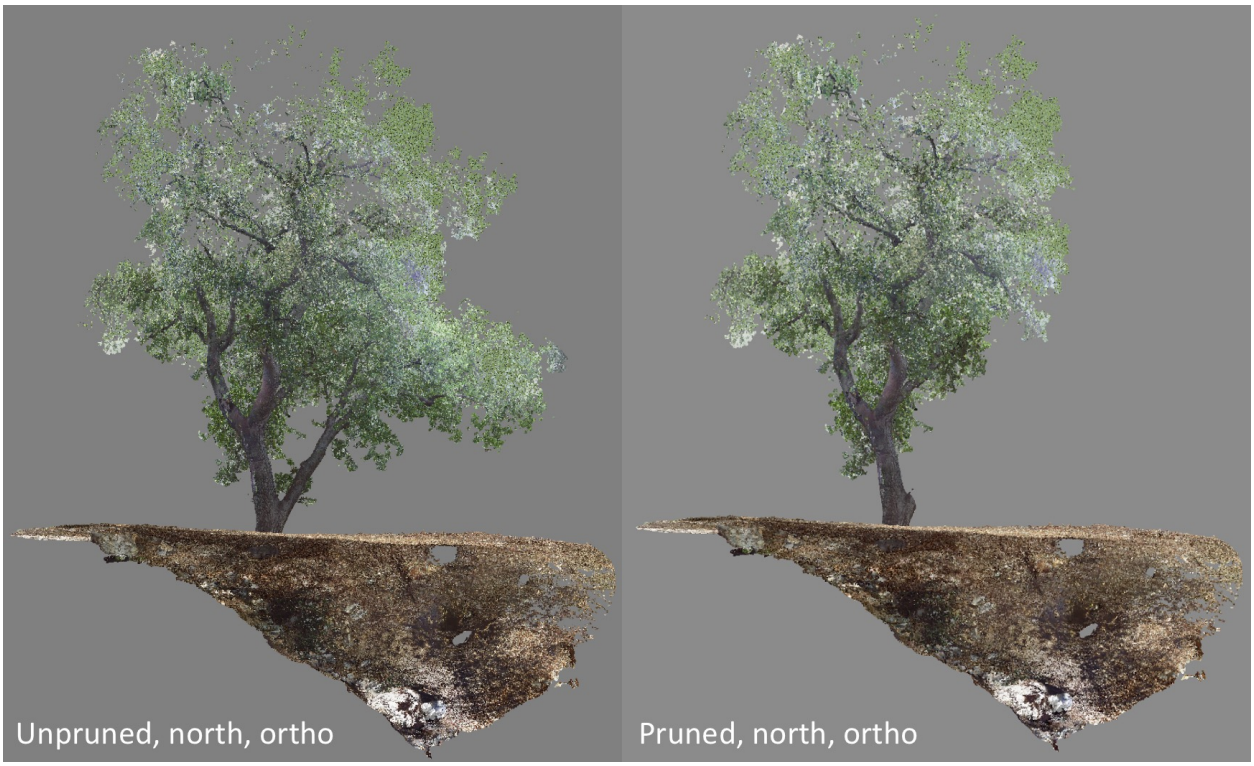


Figure 9-12: Oak Tree #4 Comparison of Canopy Extent Before and After Pruning, Orthographic West Projection of LiDAR Scan



Project Marginal Root Removal: <15%

Project Marginal Impervious Load-bearing Surface Encroachment: 0%

Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%

Project Marginal Total Spatial Extent of Negative Impacts: <15%

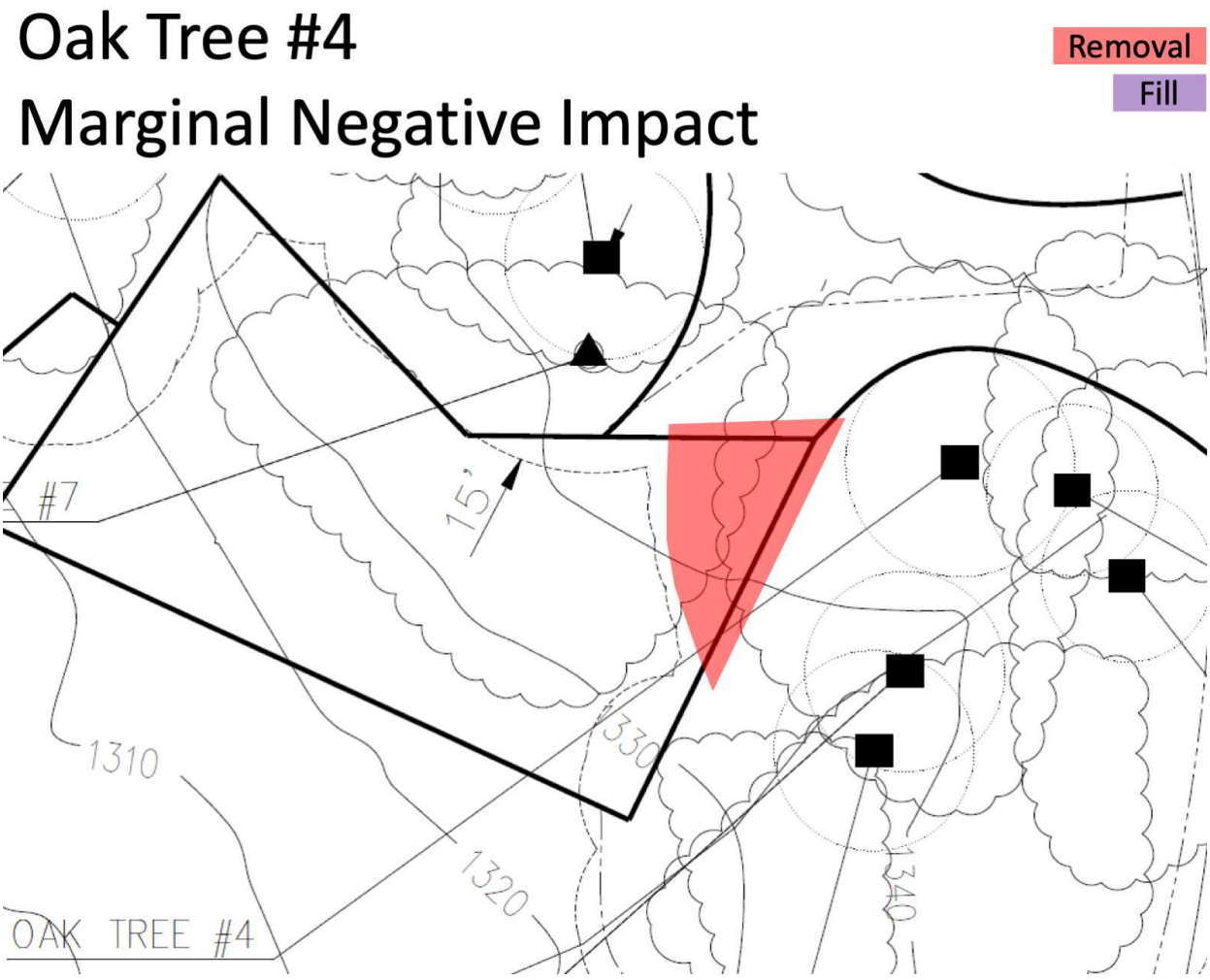


Figure 9-13: Oak Tree #4 Project Marginal Negative Impact

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration, mulching, permanent protection of much of the aerated area, and the compaction mitigating design of the driveway are expected to have a net positive effect on the compaction of the underlying soil compared to the existing condition, the project's load-bearing pervious surface and compaction impacts are not considered to be marginal negative impacts. The project would not permanently compact any area within the critical root zone. Marginal canopy pruning is less than 25% of the canopy and would not result in any canopy imbalance. Appreciable marginal root removal occurs in a single quadrant of the protected zone and would not occur in the critical root zone.

Given its very good existing health, demonstrated robustness, compliance of the project with industry guideposts for canopy removal and encroachment distances, and the BMPs and remediation required, oak tree #4 is not reasonably expected to decline from project-related impacts.

Oak Tree #5

Existing Known Root Removal: 0%

Existing Impervious Load-bearing Surface Encroachment: <5%

Existing Fill Encroachment: 10+%

Existing Pervious Load-bearing Surface and Compaction Encroachment: 30+%

Existing Canopy Removal: Unknown

Existing Total Spatial Extent of Impacts of Any Kind: 35+%

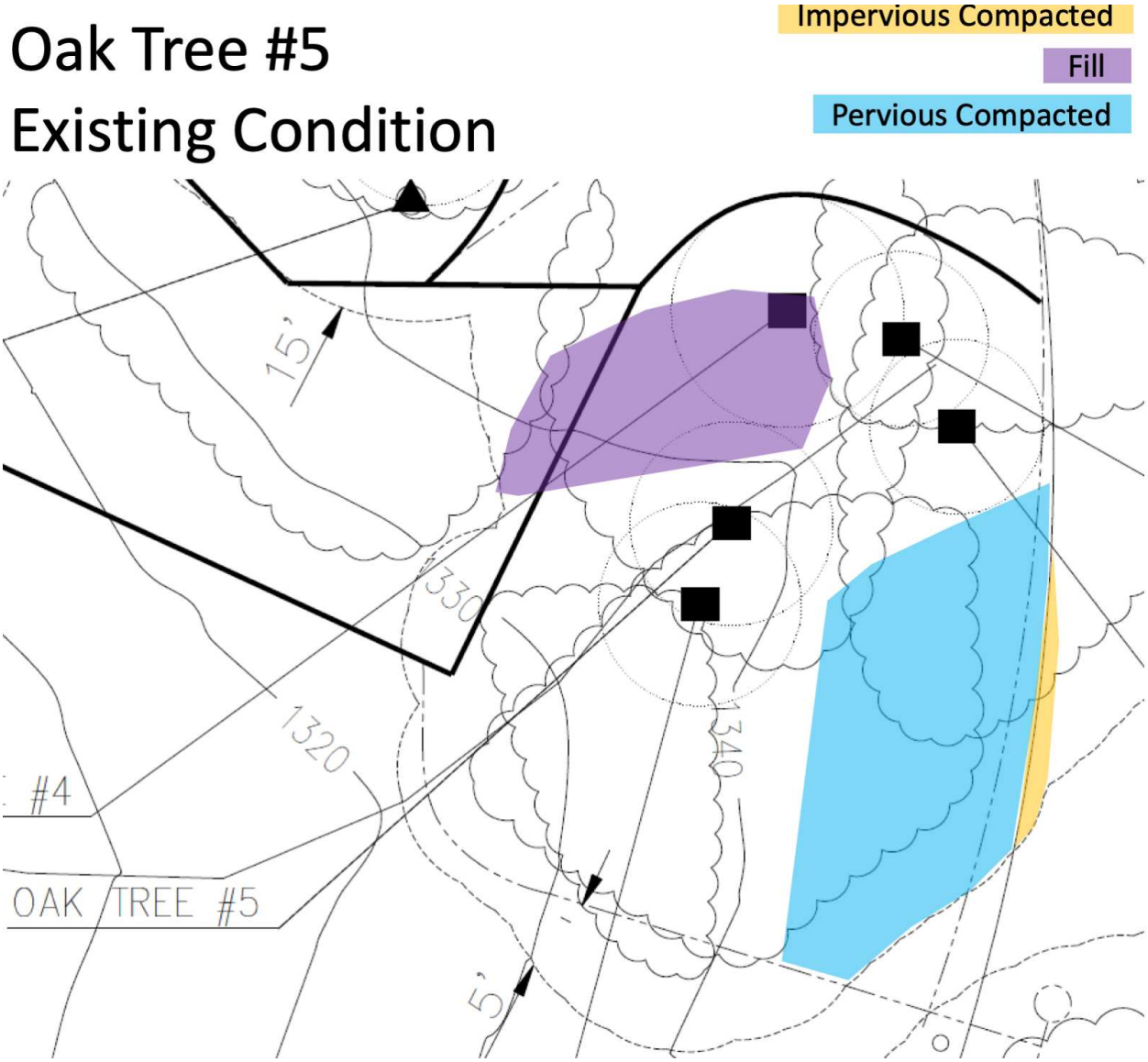


Figure 9-14: Oak Tree #5 Existing Conditions

Oak tree #5 has sustained one or more impacts across some of its protected zone, including the dumping of fill on the project site and compaction from parking usage. I rated this tree a "B" for health because it has sustained these impacts in good health.

Project Non-Feeder Root Removal: <5%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Remediated Compaction: <25%

Project Canopy Removal: 0%

Project Total Spatial Extent of Impacts of Any Kind: <30%

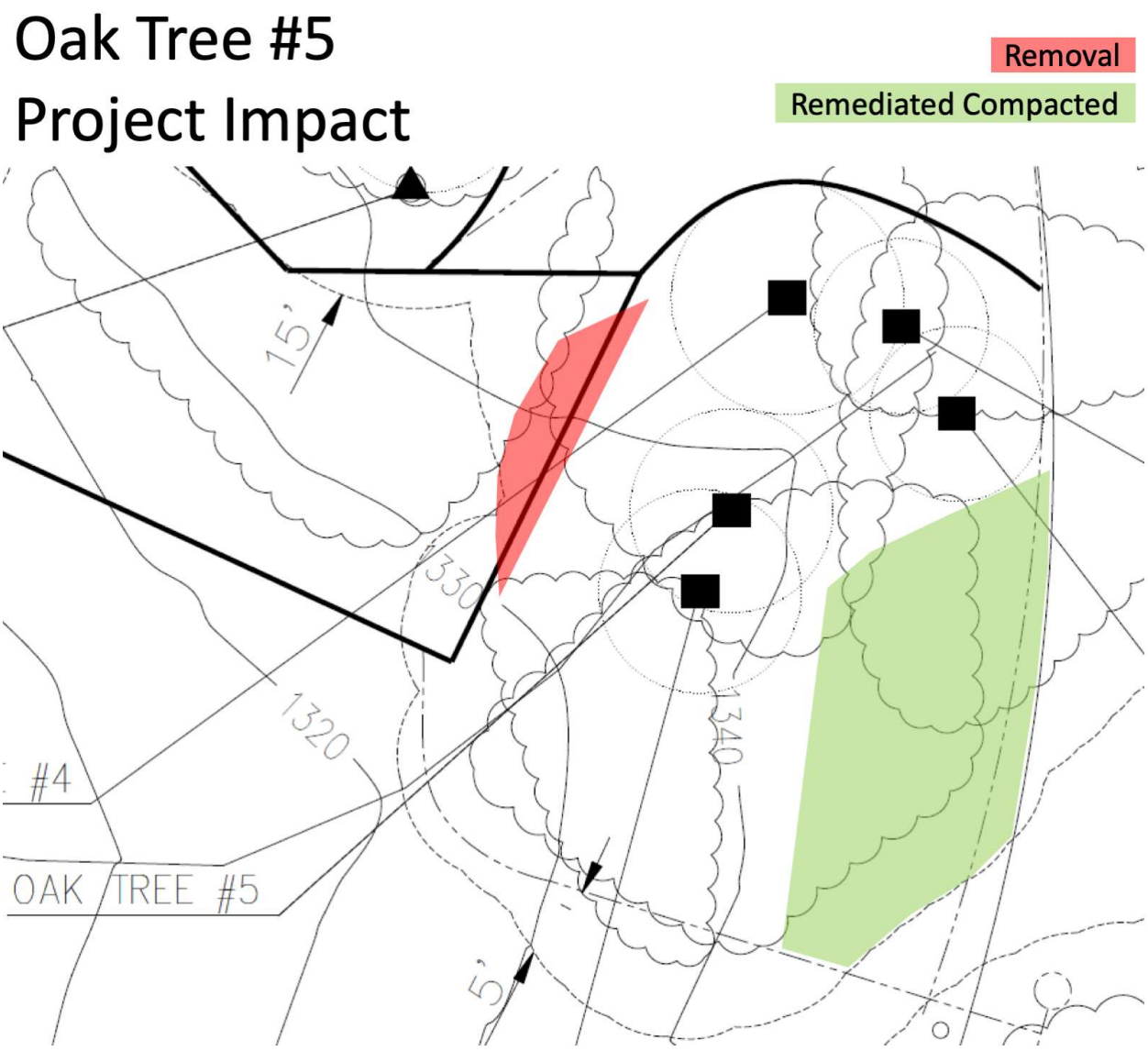


Figure 9-15: Oak Tree #5 Project Impacts

The amount of root removal required to place the structure of the home is less than 5% and occurs in a single quadrant of the protected zone, beyond the dripline. The 3"x12" trenching for the utility lateral is expected to result in no non-feeder root removal, given the manner of excavation and the requirement to thread the lateral under any larger roots encountered, approximating a technique of compaction mitigation called radial trenching. As such, negative

root removal impacts are expected to be sustainable. No pruning of canopy is expected. The project does not introduce any impervious load-bearing surfaces or fill in the protected zone. The existing fill in the protected zone transitions from nil to perhaps as deep as 18". This should be interrogated and removed if roots are not encountered, prior to construction of the driveway. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

Project Marginal Root Removal: <5%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Fill Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Total Spatial Extent of Negative Impacts: <5%

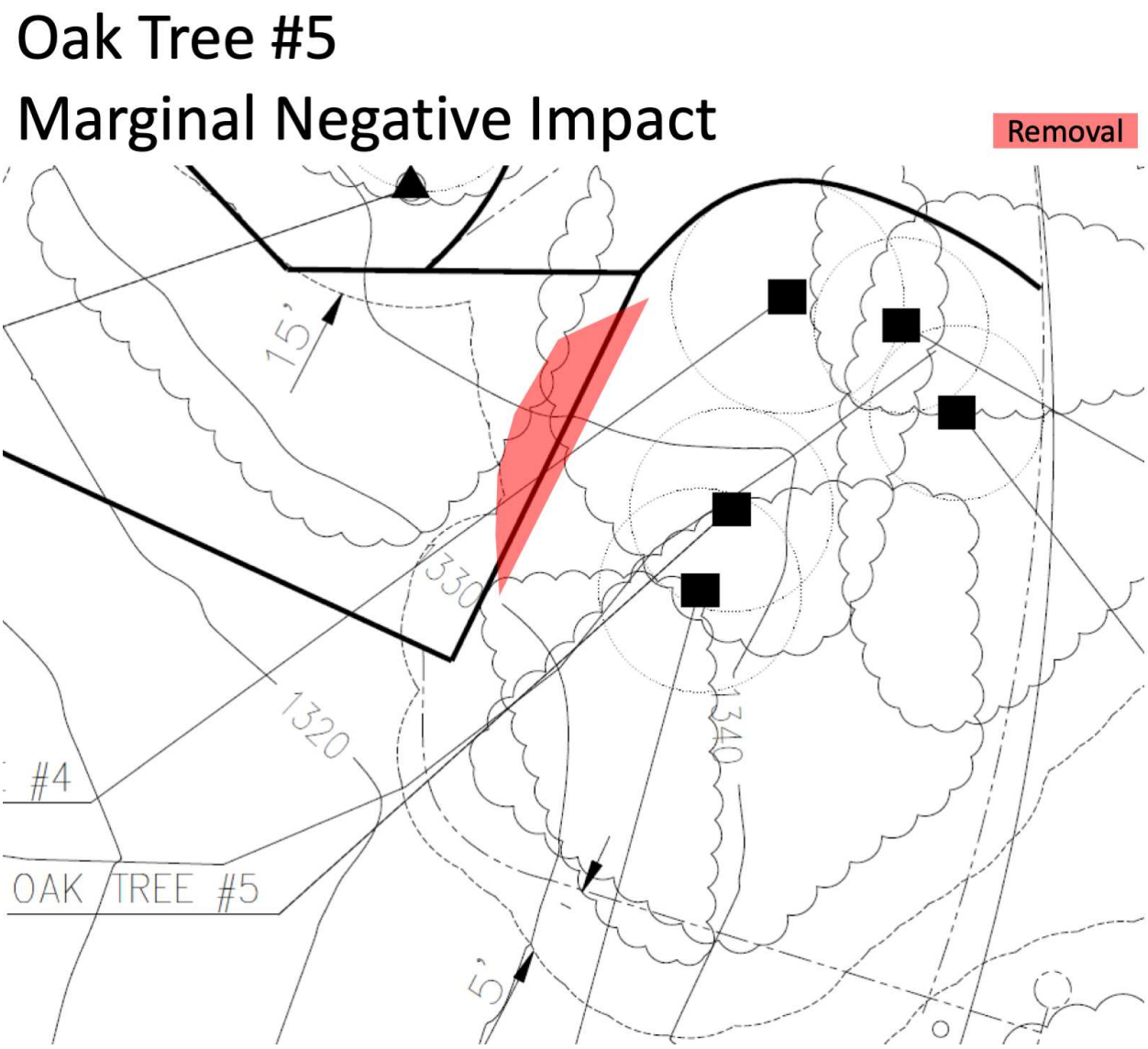


Figure 9-16: Oak Tree #5 Project Marginal Negative Impacts

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration and mulching are expected to have a net positive effect on the compaction of the underlying soil compared to the existing condition, the project's compaction impacts are not considered to be marginal negative impacts. The project would not permanently compact any area within the critical root zone. No marginal canopy pruning would occur. Appreciable marginal root removal occurs in a single quadrant of the protected zone and would not occur in the critical root zone.

Given its very good existing health, demonstrated robustness, compliance of the project with industry guideposts for canopy removal and encroachment distances, and the BMPs and remediation required, oak tree #5 is not reasonably expected to decline from project-related impacts.

Oak Tree #6

Existing Known Root Removal: 0%

Existing Impervious Load-bearing Surface Encroachment: <5%

Existing Fill Encroachment: 5+%

Existing Pervious Load-bearing Surface and Compaction Encroachment: 20+%

Existing Canopy Removal: Unknown

Existing Total Spatial Extent of Impacts of Any Kind: 35+%

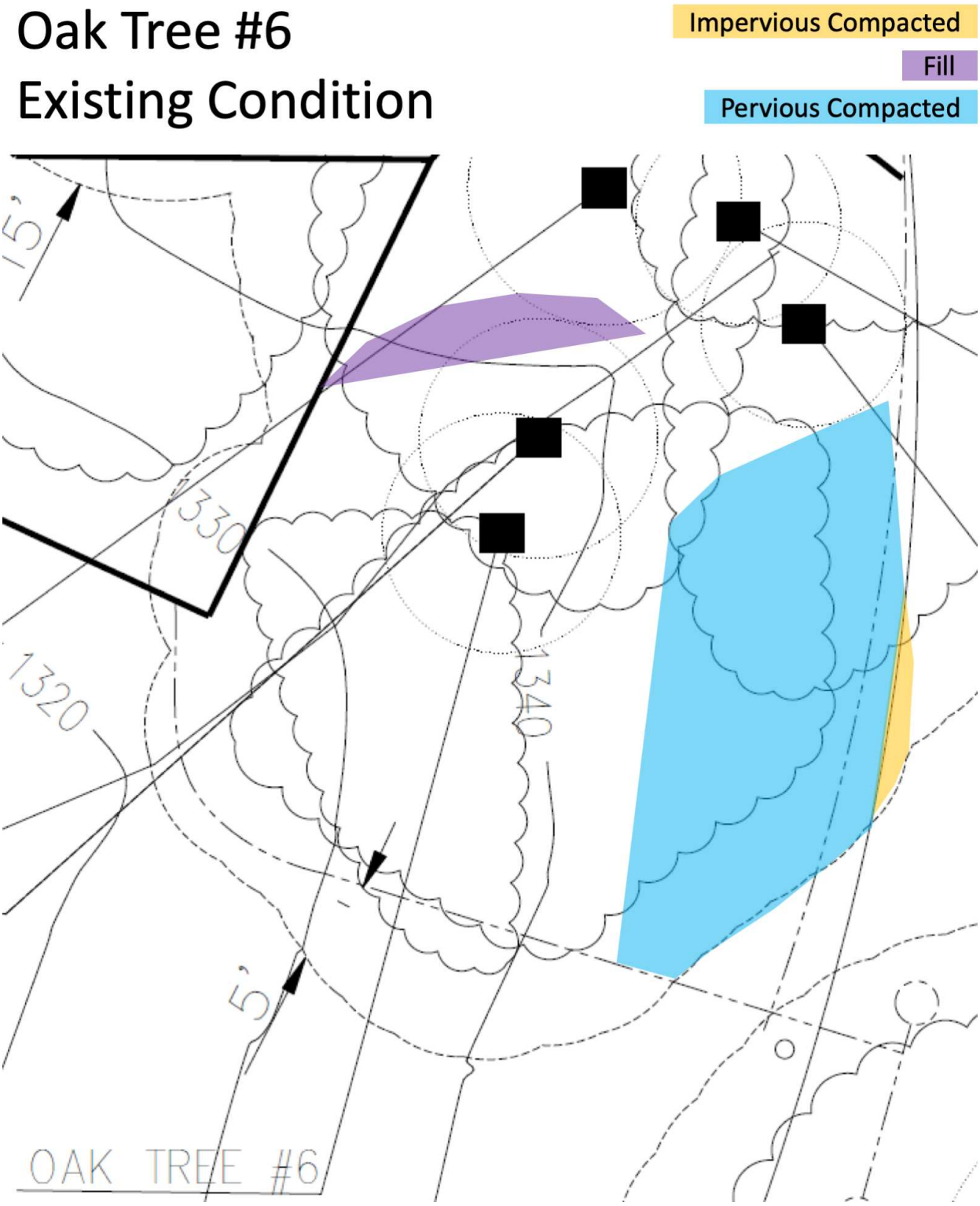


Figure 9-17: Oak Tree #6 Existing Conditions

Oak tree #6 has sustained one or more impacts across some of its protected zone, including the dumping of fill on the project site and compaction from parking usage. I rated this tree a “B” for health because it has sustained these impacts in good health.

Project Non-Feeder Root Removal: <10%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Remediated Compaction: <20%
Project Canopy Removal: 0%
Project Total Spatial Extent of Impacts of Any Kind: <30%

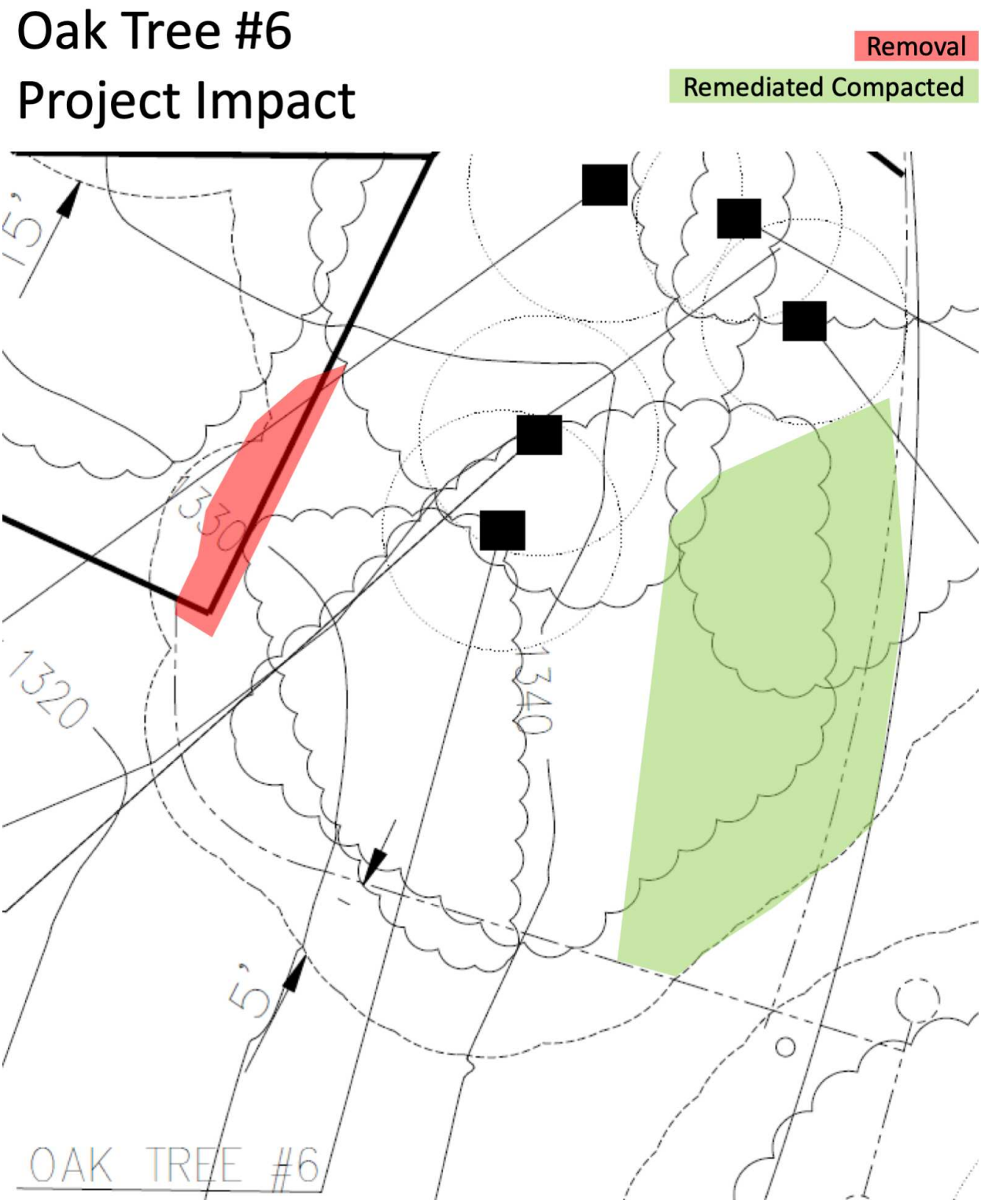


Figure 9-18: Oak Tree #6 Project Impacts

The amount of root removal required to place the structure of the home is less than 10% and occurs in a single quadrant of the protected zone. The 3”x12” trenching for the utility lateral is expected to result in no non-feeder root removal, given the manner of excavation and the requirement to thread the lateral under any larger roots encountered, approximating a technique of compaction mitigation called radial trenching. As such, root removal impacts are expected to be sustainable. The project does not introduce any impervious load-bearing surfaces or fill in the protected zone. No, or very minimal, pruning of canopy is expected. The existing fill in the protected zone transitions from nil to perhaps as deep as 12”. This should be interrogated and removed if roots are not encountered, prior to construction of the driveway. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

Project Marginal Root Removal: <10%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Fill Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Total Spatial Extent of Negative Impacts: <10%

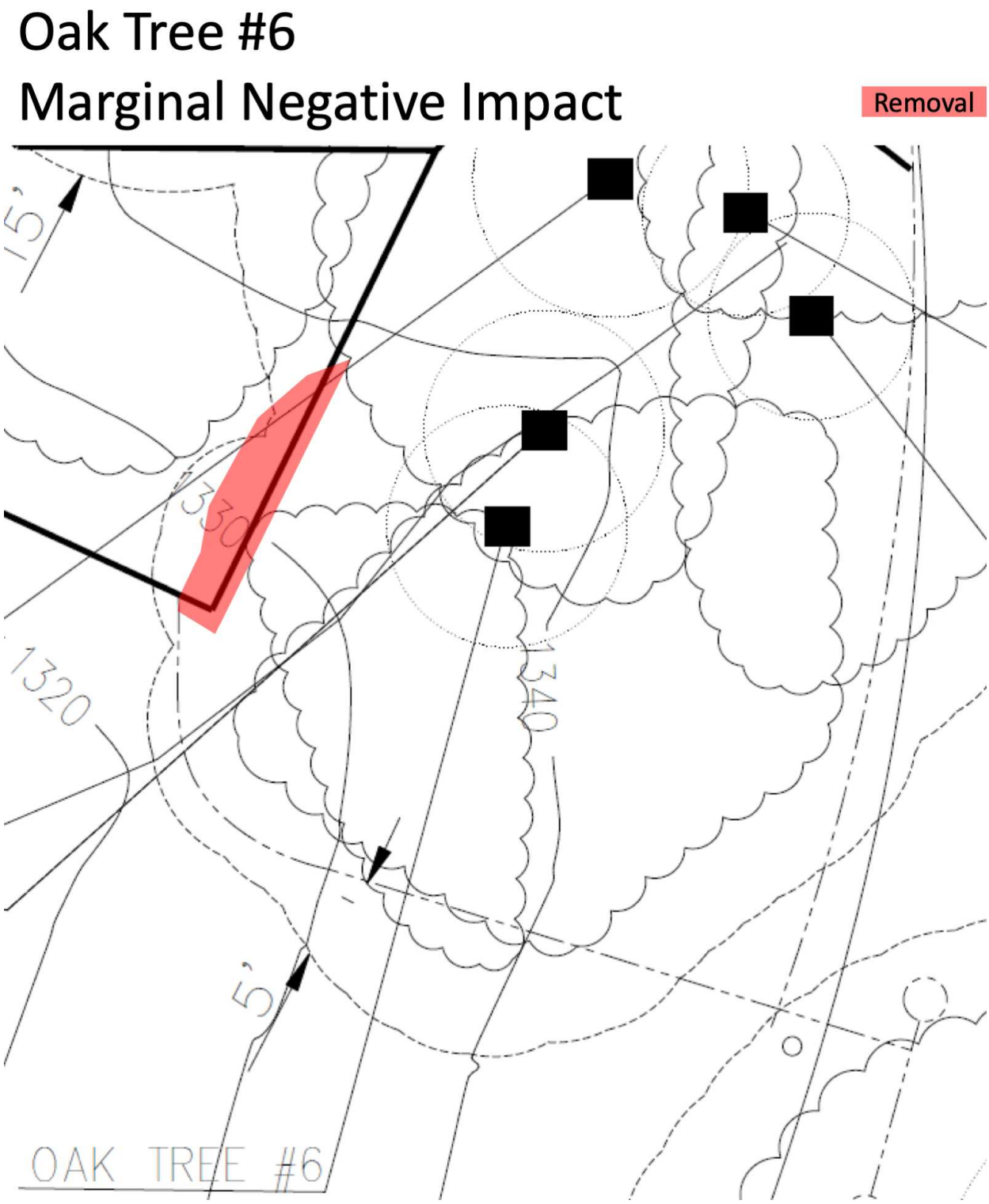


Figure 9-19: Oak Tree #6 Project Marginal Negative Impacts

The project would not permanently compact any area within the critical root zone. No marginal canopy pruning would occur. Appreciable marginal root removal occurs in a single quadrant of the protected zone and would not occur in the critical root zone.

Given its good existing health, compliance of the project with industry guideposts for canopy removal and encroachment distances, and the BMPs and remediation required, oak tree #6 is not reasonably expected to decline from project-related impacts.

Oak Tree #8

Existing Known Root Removal: 0%
Existing Impervious Load-bearing Surface Encroachment: 5+%
Existing Fill Encroachment: 70+%
Existing Pervious Load-bearing Surface and Compaction Encroachment: 40+%
Existing Canopy Removal: Unknown
Existing Total Spatial Extent of Impacts of Any Kind: 75+%

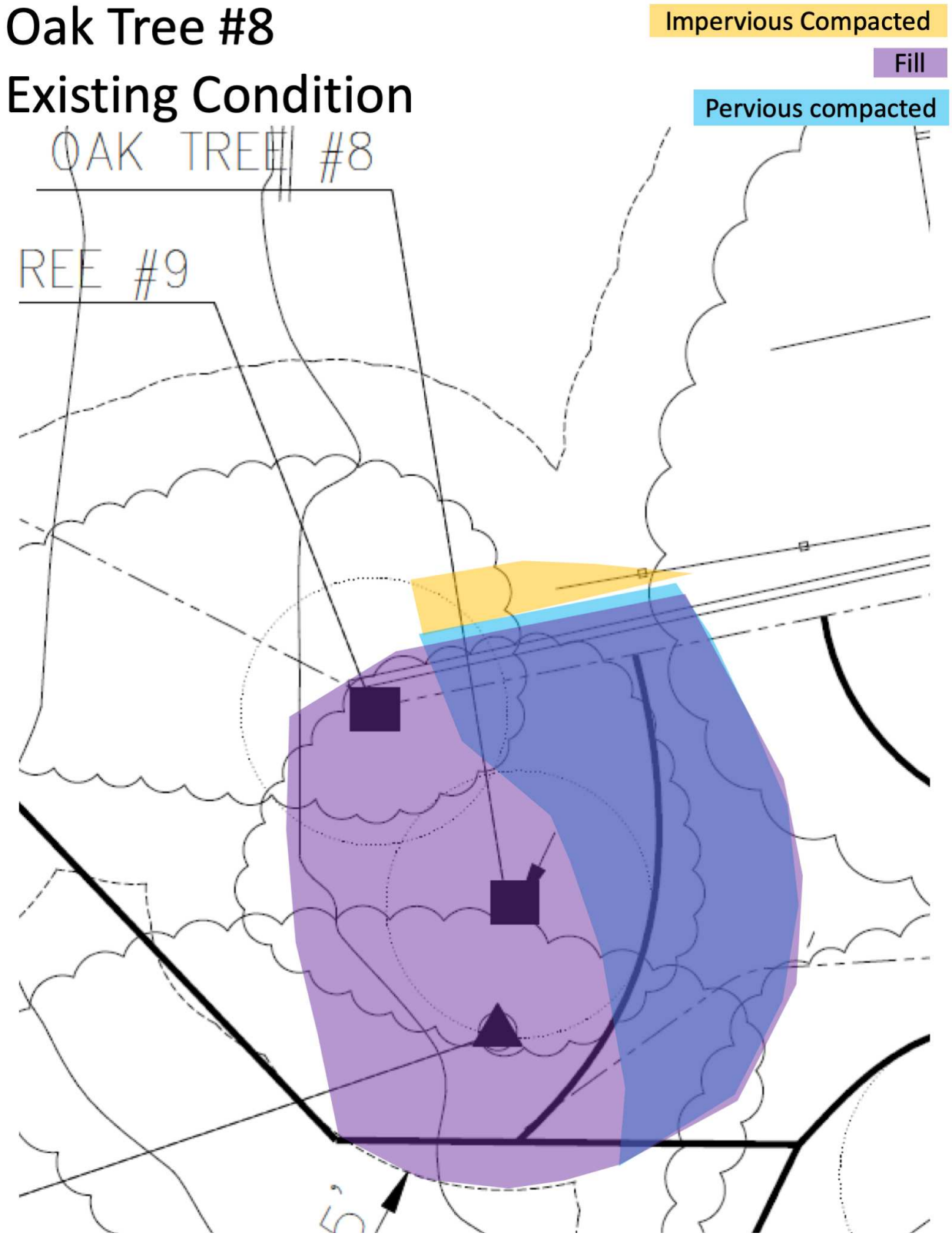


Figure 9-20: Oak Tree #8 Existing Conditions

Oak tree #8 has sustained one or more impacts across most of its protected zone, including the dumping of fill on the project site; compaction from parking usage; paving by the driveway and/or patio of the neighboring residence at 3589 Canyon Crest Road, and pruning events for parking clearance. Nevertheless, I rated this tree a "B-" for health because it has sustained these impacts in good health. In less favorable soil conditions and/or in a less robust specimen, this level of existing impact might be expected to precipitate decline. However, this established tolerance is important to the consideration of the severity of marginal project impacts.

Project Non-Feeder Root Removal: <10%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: <20%
Project Remediated Compaction: <20%
Project Canopy Removal: 0%
Project Total Spatial Extent of Impacts of Any Kind: <35%

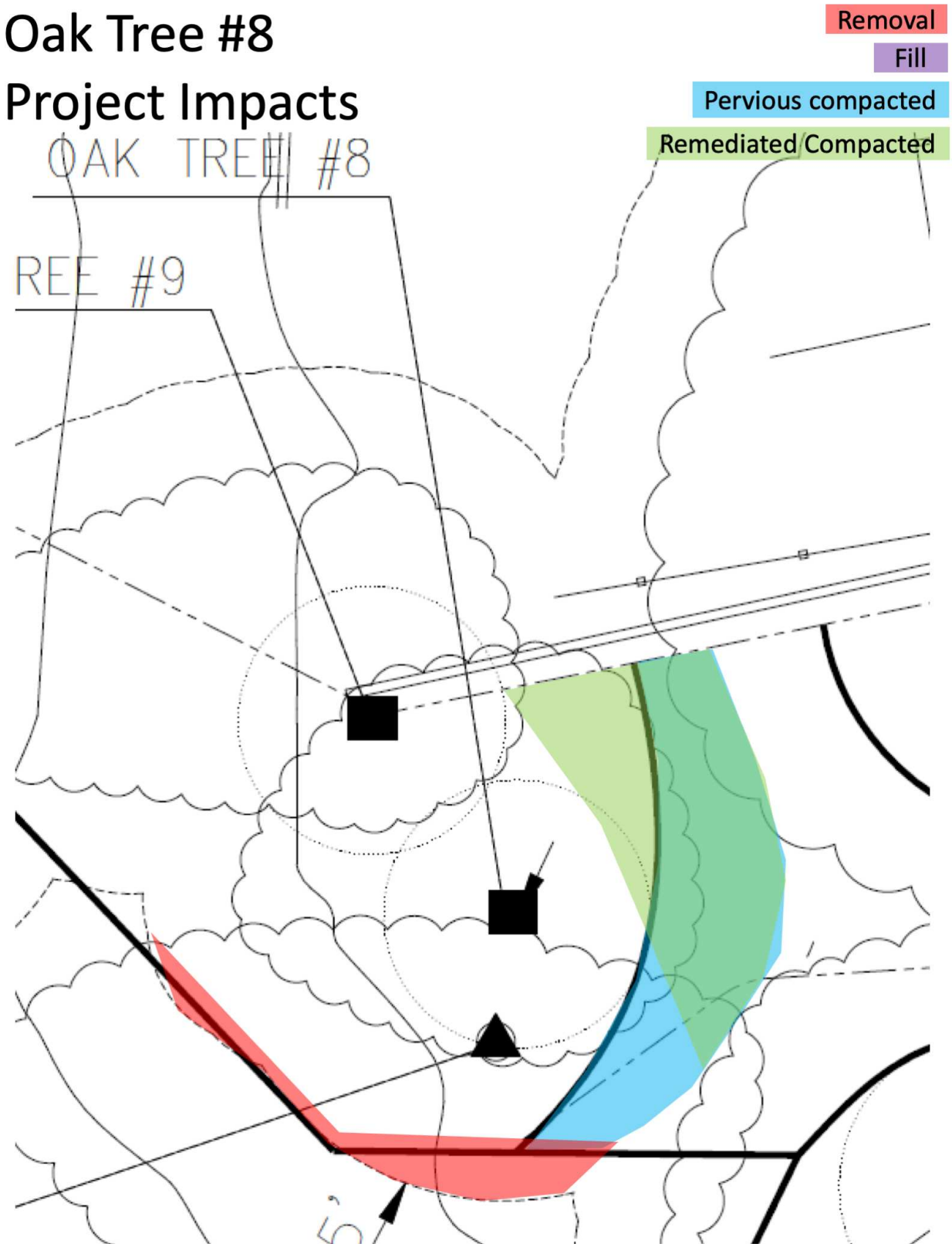


Figure 9-21: Oak Tree #8 Project Impacts

The amount of root removal required to place the structure of the home is less than 10%, and while it could occur in two adjacent quadrants of the protected zone, it occurs at the periphery of the protected zone, beyond the dripline. It is also likely that the estimate of removal in the south-western quadrant is conservative, as the grade beams for the project are expected to require little to no depth above the existing grade in this region. The 3”x12” trenching for the utility lateral is expected to result in no non-feeder root removal, given the manner of excavation and the requirement to thread the lateral under any larger roots encountered, approximating a technique of compaction mitigation called radial trenching. As such, no negative root removal impacts are expected. The project does not introduce any impervious load-bearing surfaces or fill in the protected zone. No, or very minimal, pruning of canopy is expected. The amount of fill deposited in the protected zone to smoothly transition the eastern portion of the driveway to the garage is negligible. The existing fill in the protected zone transitions from nil to perhaps as deep as 36”. This should be interrogated and removed if roots are not encountered, prior to construction of the driveway. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

Project Marginal Root Removal: <10%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: <5%
Project Marginal Total Spatial Extent of Negative Impacts: <15%

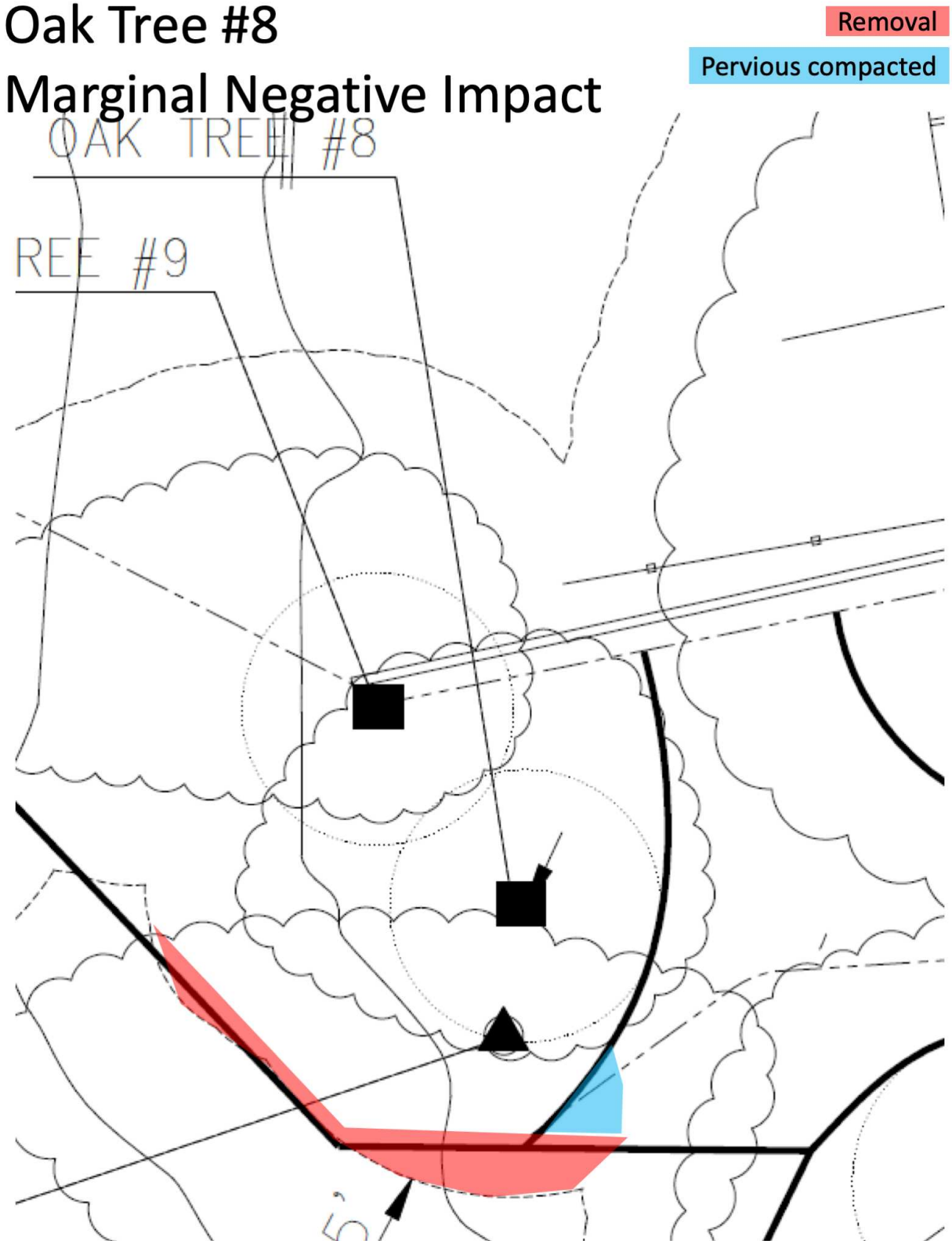


Figure 9-22: Oak Tree #8 Project Marginal Negative Impacts

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration and mulching are expected to have a net positive effect on the compaction of the underlying soil compared to the existing condition, the project's load-bearing pervious surface and compaction impacts are not considered to be marginal negative impacts. The project would not permanently compact any area within the critical root zone. No marginal canopy pruning would occur. Appreciable marginal root removal occurs in one or two adjacent quadrants of the protected zone and would not occur in the critical root zone or within the dripline.

Given its good existing health, demonstrated robustness, compliance of the project with industry guideposts for canopy removal and encroachment distances, and the BMPs and remediation required, oak tree #8 is not reasonably expected to decline from project-related impacts.

Oak Tree #9

Existing Known Root Removal: 0%
Existing Impervious Load-bearing Surface Encroachment: 10+%
Existing Fill Encroachment: 35+%
Existing Pervious Load-bearing Surface and Compaction Encroachment: 10+%
Existing Canopy Removal: Unknown
Existing Total Spatial Extent of Impacts of Any Kind: 50+%

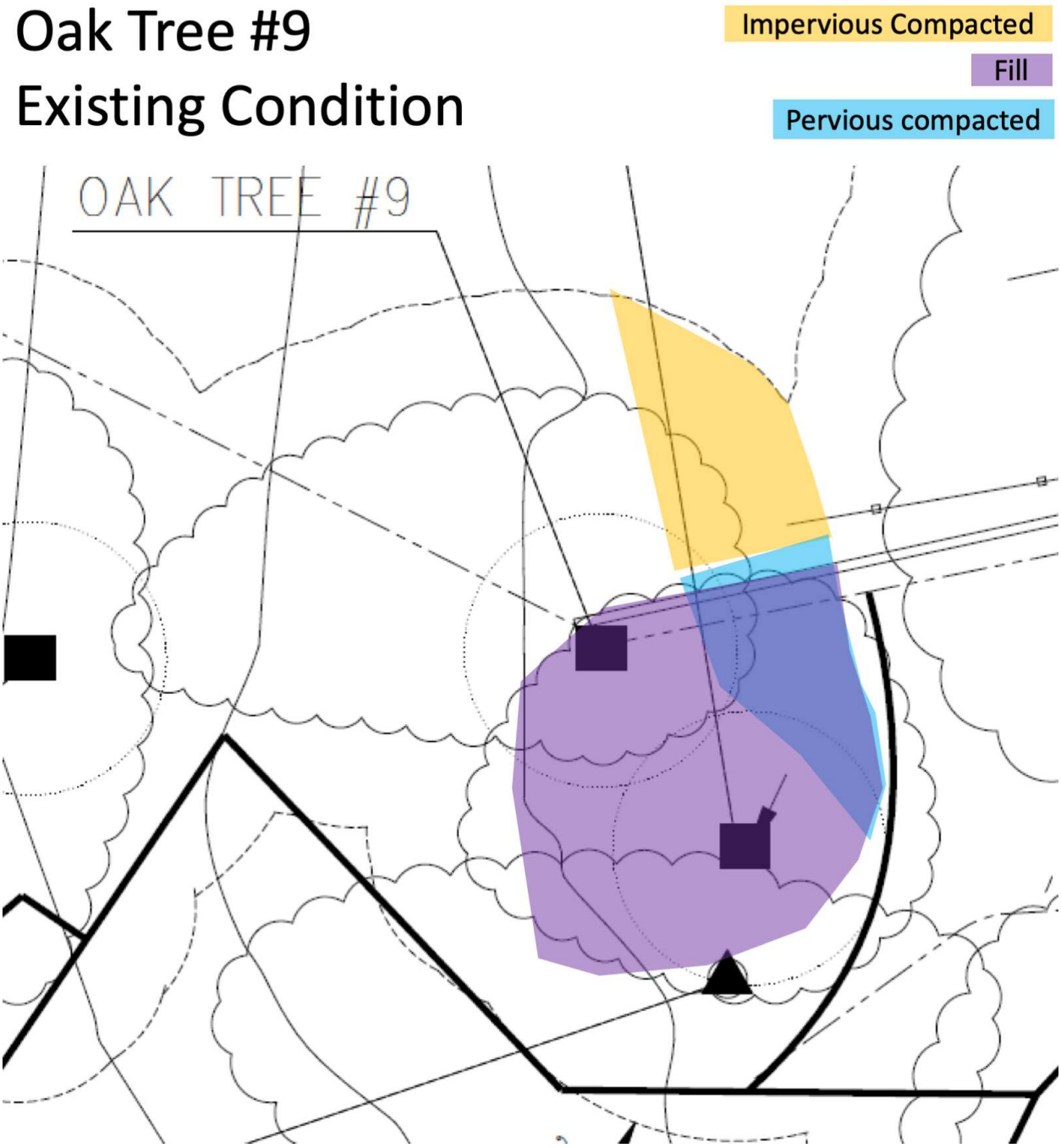


Figure 9-23: Oak Tree #9 Existing Conditions

Oak tree #9 has sustained one or more impacts across some of its protected zone, including the dumping of fill on the project site; compaction from parking usage; installation of a block wall in its critical root zone approximately 2' from the trunk, paving by the driveway and/or patio of the neighboring residence at 3589 Canyon Crest Road, and pruning events for parking clearance.

Nevertheless, I rated this tree a “B-” for health because it has sustained these impacts in good health. In less favorable soil conditions and/or in a less robust specimen, this level of existing impact might be expected to precipitate decline. However, this established tolerance is important to the consideration of the severity of marginal project impacts.

Project Non-Feeder Root Removal: <5%
Project Impervious Load-bearing Surface Encroachment: 0%
Project Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Remediated Compaction: <5%
Project Canopy Removal: 0%
Project Total Spatial Extent of Impacts of Any Kind: <10%

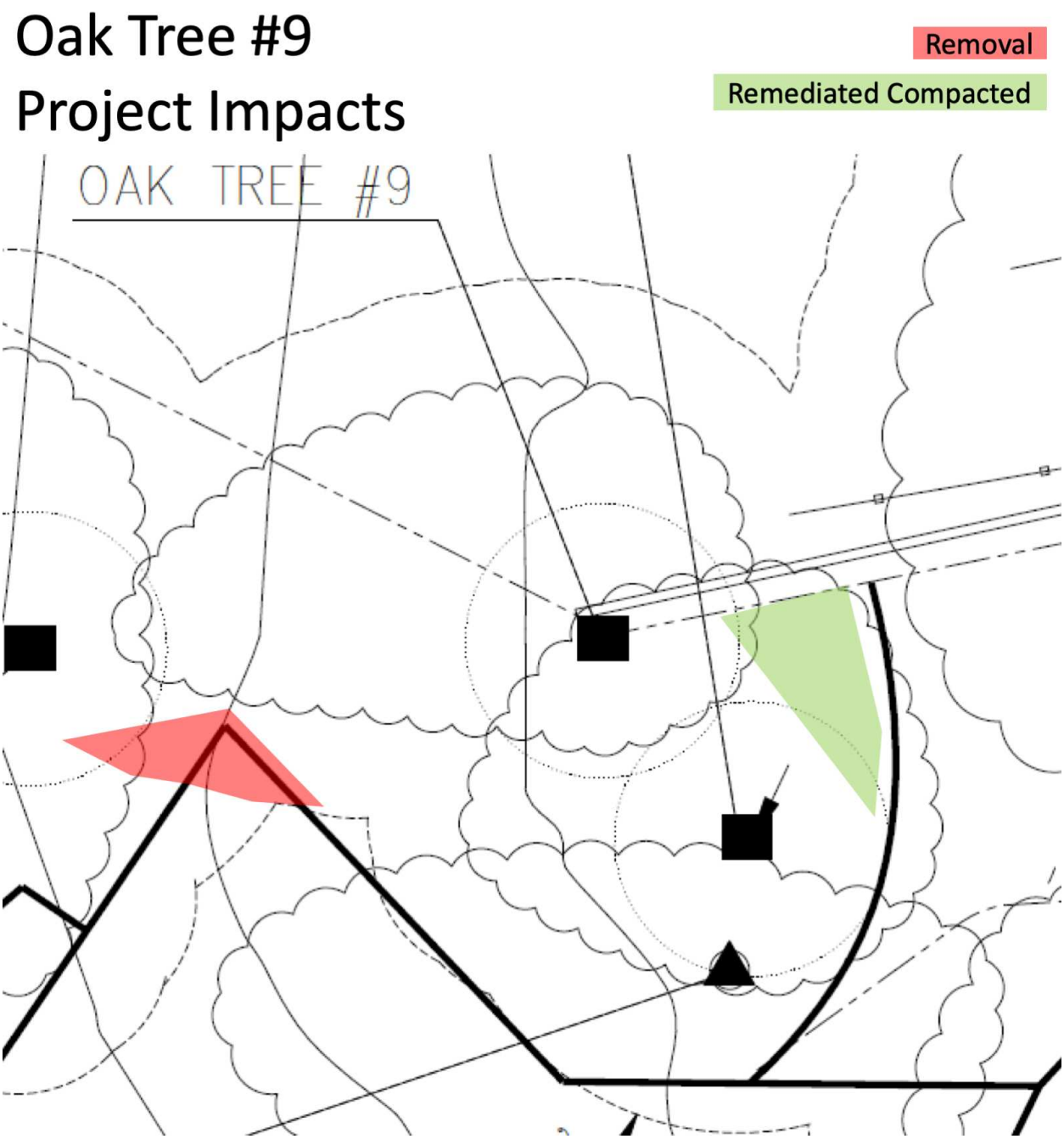


Figure 9-24: Oak Tree #9 Project Impacts

The amount of root removal required to place the structure of the home is less than 10%, occurs in a single quadrant of the protected zone, and occurs at the periphery of the protected zone, beyond the dripline. It is also likely that the estimate of removal is conservative, as the grade beams for the project are expected to require little to no depth above the existing grade in this region. As such, negative root removal impacts are expected to be sustainable. The project does

not introduce any impervious load-bearing surfaces or fill in the protected zone. No, or very minimal, pruning of canopy is expected. The project does not introduce any impervious load-bearing surfaces in the protected zone. The existing fill in the protected zone transitions from nil to perhaps as deep as 36". This should be interrogated and removed if roots are not encountered, prior to construction of the driveway. The project would use portions of the protected zone for parking and construction staging. However, these impacts would be reduced by Best Management Practices and design features and remediated with vertical aeration.

Project Marginal Root Removal: <5%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Fill Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Total Spatial Extent of Negative Impacts: <5%

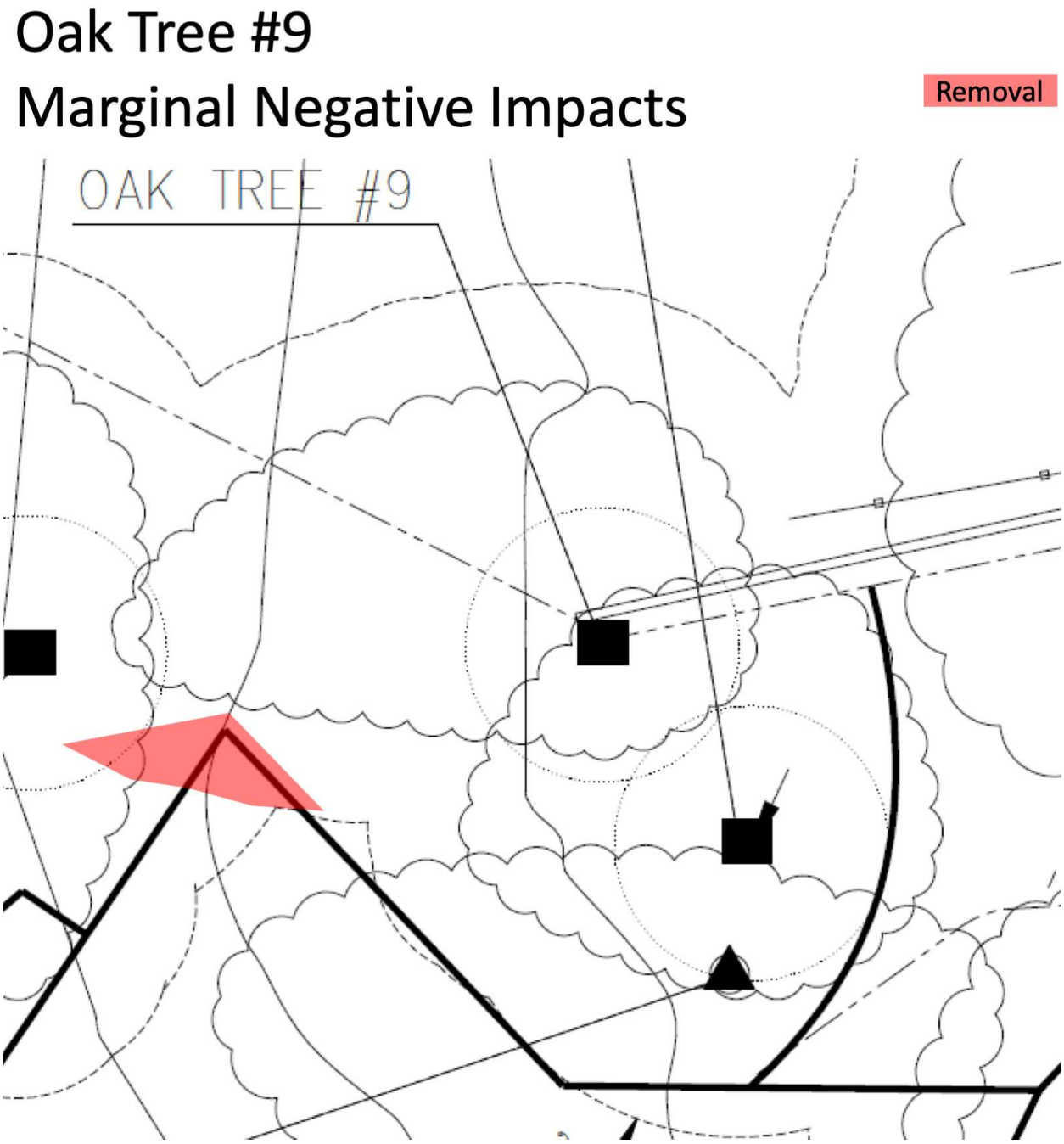


Figure 9-25: Oak Tree #9 Project Marginal Negative Impacts

Because the area of construction compaction that is rehabilitated with vertical aeration overlaps entirely with the existing compaction of the project site, and because vertical aeration, mulching, permanent protection of much of the aerated area, and the compaction mitigating design of the driveway are expected to have a net positive effect on the compaction of the underlying soil

compared to the existing condition, the project's load-bearing pervious surface and compaction impacts are not considered to be marginal negative impacts. The project would not permanently compact any area within the critical root zone. No marginal canopy pruning would be expected. Marginal root removal occurs in a single quadrant of the protected zone beyond its dripline and would not occur in the critical root zone.

Given its good existing health, demonstrated robustness, compliance of the project with industry guideposts for canopy removal and encroachment distances, and the BMPs and remediation required, oak tree #9 is not reasonably expected to decline from project-related impacts.

Oak Tree #10

Existing Known Root Removal: 0%
Existing Impervious Load-bearing Surface Encroachment: 0%
Existing Fill Encroachment: 0%
Existing Pervious Load-bearing Surface and Compaction Encroachment: 0%
Existing Canopy Removal: Unknown
Existing Total Spatial Extent of Impacts of Any Kind: 0%

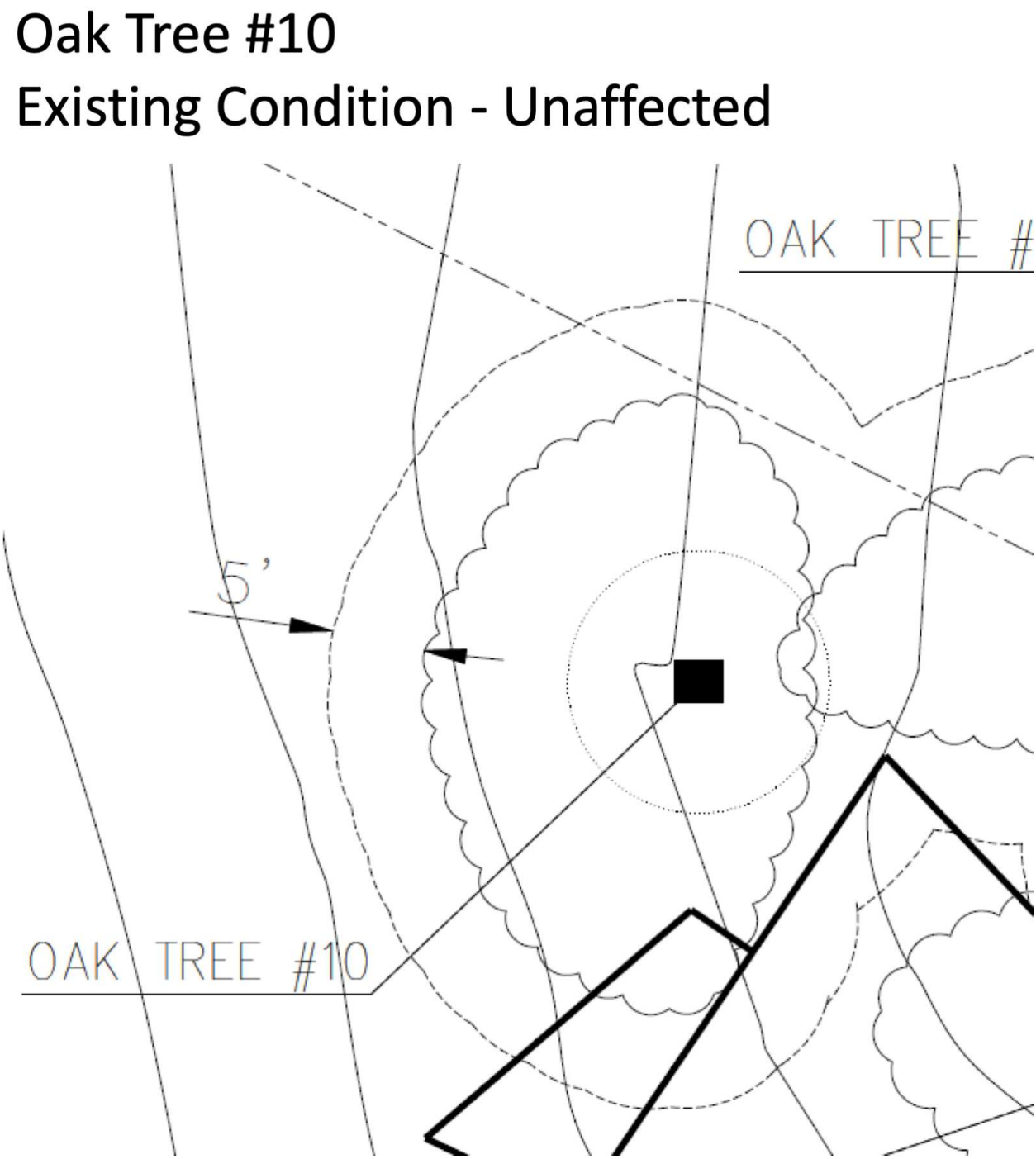


Figure 9-26: Oak Tree #10 Existing Conditions

Alone among those analyzed, oak tree #10 has not been impacted with any identified type of existing encroachment. I rated this tree a "B" for health.

Project Non-Feeder Root Removal: <15%

Project Impervious Load-bearing Surface Encroachment: 0%

Project Pervious Load-bearing Surface and Compaction Encroachment: 0%

Project Remediated Compaction: 0%

Project Canopy Removal: <5%

Project Total Spatial Extent of Impacts of Any Kind: <15%

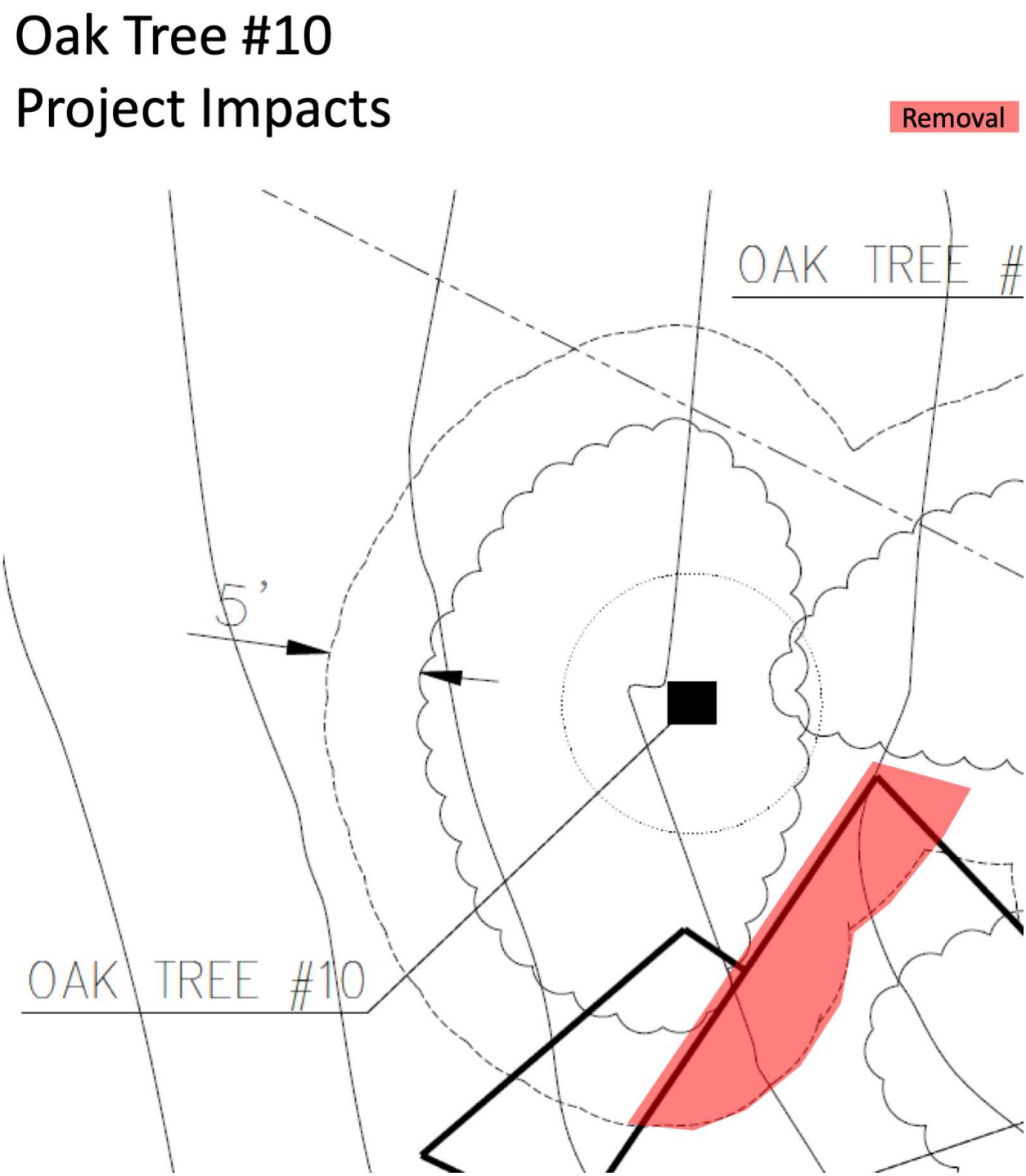


Figure 9-27: Oak Tree #10 Project Impacts

The amount of root removal required to place the structure of the home is less than 15%, occurs in a single quadrant of the protected zone, beyond the dripline. It is also likely that the estimate of removal is conservative, as the grade beams for the project are expected to require little to no

depth above the existing grade in this region. As such, negative root removal impacts are expected to be sustainable. The project does not introduce any impervious load-bearing surfaces or fill in the protected zone. Minimal marginal canopy pruning would be expected, comprising less than 5% of the live canopy, and no pruning of any branch greater than 2" in diameter would be expected. In my professional opinion, the amount of pruning required adheres to the ANSI 300 pruning standard. The project does not introduce any impervious load-bearing surfaces in the protected zone.

Project Marginal Root Removal: <15%
Project Marginal Impervious Load-bearing Surface Encroachment: 0%
Project Marginal Fill Encroachment: 0%
Project Marginal Pervious Load-bearing Surface and Compaction Encroachment: 0%
Project Marginal Total Spatial Extent of Negative Impacts: <15%

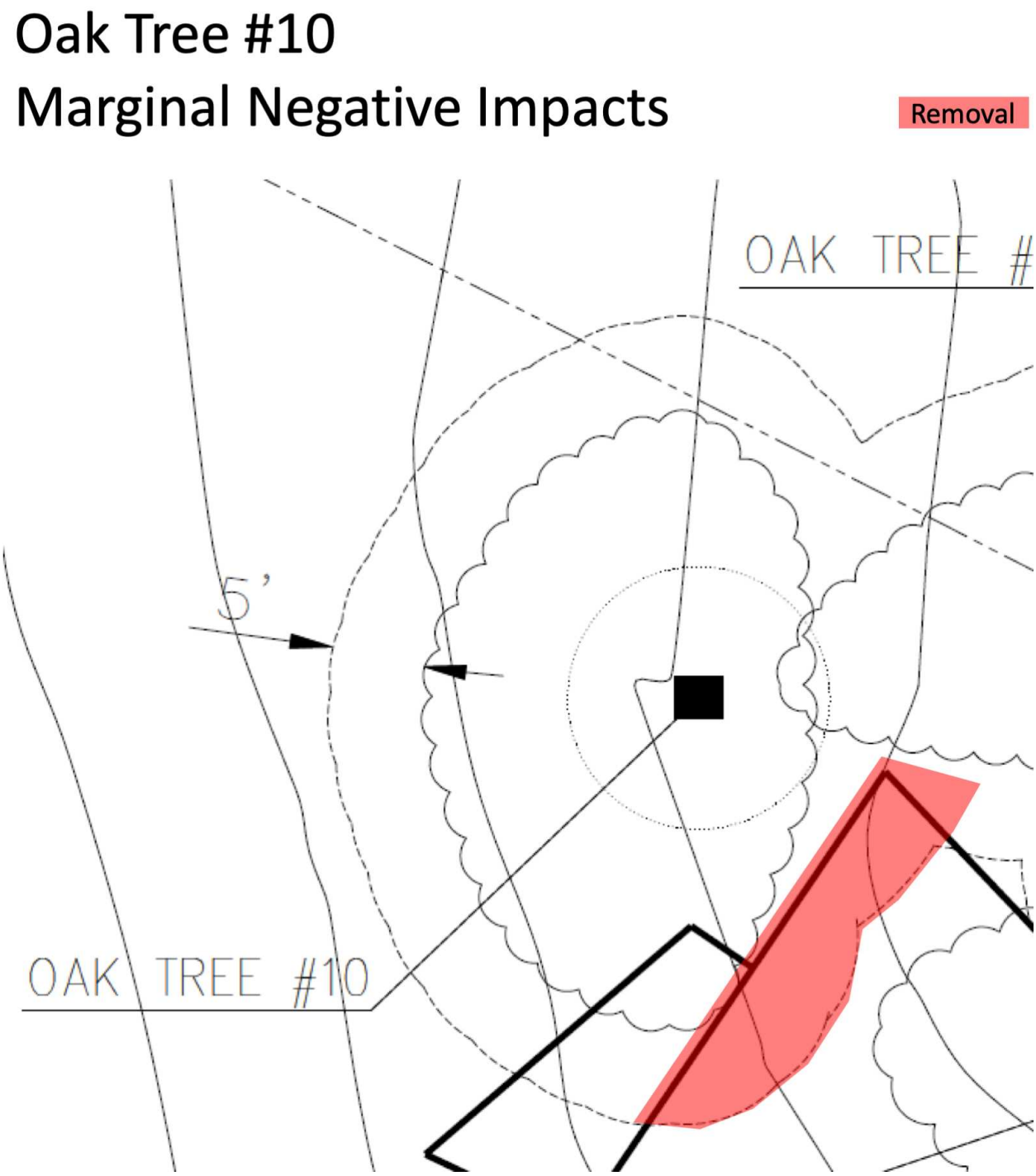


Figure 9-28: Oak Tree #10 Project Marginal Negative Impacts

The project would not permanently compact any area within the critical root zone. Minimal marginal canopy pruning would occur. Appreciable marginal root removal occurs in a single quadrant of the protected zone beyond its dripline and would not occur in the critical root zone.

Given its good existing health, compliance of the project with industry guideposts for canopy removal and encroachment distances, and the BMPs and remediation required, oak tree #10 is not reasonably expected to decline from project-related impacts.

Oak Trees #13, 14 and 15

Oak trees #13, 14 and #15 have protected zones that are entirely outside the development footprint on the subject property and are therefore not annotated as oak trees #1-10 have been.

The nearest edge of the protected zones of oak trees #13 and 14 is more than 150 feet distant from the footprint of development of the project, and the protected zones of these trees do not even possess a tributary drainage that includes any part of the footprint of development. As such, there is no credible vector of arboricultural impact to these trees in connection with the project.

Oak tree #15 has a protected zone that does not overlap with the "subject property." It will sustain modest impacts in its protected zone under Canyon Crest Road from the short extension of the sewer main to the project parcel frontage. 5-10% of the protected root zone will require removal, in a single quadrant located beyond the critical root zone, under what is presently the pavement of Canyon Crest Road. No marginal canopy pruning is required. Given its good existing health and compliance of the project with industry guideposts for encroachment distances, oak tree #10 is not reasonably expected to decline from project-related impacts.

In addition to the types of encroachment described for each tree, impacts to oak trees may also propagate along the following vectors, which I address below for all encroached trees collectively:

a.) changes to hydrology
b.) physical damage to the tissue of the tree from impact, such as from debris or vehicles
c.) exposure to high heat, such as hot combustion exhaust
d.) deposition of chemical substances in the root zone, such as cleanout runoff
e.) introduction of pests

Hydrology

Hydrology in the context of coast live oak tree impact assessment typically considers drainage, and particularly effects that would reduce effectiveness of drainage. Coast live oak trees are best-suited to and most often thrive in the County on well-draining hillsides at distances from stream bottoms that allow feeder roots beyond the dripline to take up water from that stream, without endangering the protected zone with saturated conditions promoting rot or fungus. Landscape retaining walls without a sufficiently effective drainage plane are common culprits adversely impacting oak trees in poorly draining soils, as they can lead to extended periods of saturation where they combine with a poorly draining substrate to create a "bathtub" effect. However, the project does not propose such retaining walls. The below-grade walls of the home itself incorporate a drainage plane and sub-drain appropriately sloped to daylight in accordance with standard specifications for below-grade residential walls. Furthermore, the soils in the area are well-draining, and topology also facilitates adequate drainage. Neither the existing grade nor any interaction of the grade with the project would be expected to result in pooling of water in any part of the protected zone of any encroached oak tree.

The volume of the structure would intercept rainfall that would be routed into the open drainage swale cutting across the southeast corner of the project site from the project's downspouts. Downslope trees on the lot to the south are separated by this swale, such that any sheet runoff of rainfall in the project footprint would already have been intercepted by the swale. Even if this were not so, the home is not expected to appreciably change flow in this swale since the downspouts also outlet into it, through rain gardens that are outside the protected zone of any oak tree. The drainage swale is stone-lined and conducts surface runoff from a small residential area upgrade and only during and immediately after stormwater events. It is therefore not expected to provide water in quantities that are impactful to the health of any tree with a protected zone that

overlaps with the swale. Even were this not so, the up-grade collection area is at least two orders of magnitude larger than the impervious surface area introduced by the project, and the project therefore could only negligibly affect the flow of water in the swale, even if the downspouts were routed elsewhere.

Oak trees #12 and 13 are more than 150 feet distant from the project and are not encroached in any way. Neither are they expected to be affected by any change to hydrology however tenuous, as they are not even downslope of the project footprint of development.

The protected zone of oak tree #15 is up-grade of the project and therefore could not be impacted by any disturbance to the flow of water propagating down-grade of the project.

Physical Damage

Physical damage to trees from construction most often occurs when equipment is permitted to interact with the trunk or canopy of trees without adequate offset or barrier. Typically, construction fencing is placed to demarcate a boundary and provide a physical barrier that prevents mechanical damage. Where construction fencing is not feasible due to terrain or any other consideration, the use of a protective girdle of dimensional lumber around the trunk is also acceptable. I have conditioned the project to use one of these approaches. With appropriate BMPs and grading by hand, mechanical damage is not expected from falling debris.

Combustion Exhaust

Combustion exhaust can burn the live tissue of trees exposed in close and extended proximity. However, the project staging area has adequate canopy clearance to ensure at least five feet of clearance between canopy to remain and the exhaust pipe of any construction vehicle idling while parked.

Deposition of Chemicals

Toxic water-soluble solutes or fluids can severely damage trees. They may alter the pH of the soil or be biologically reactive. Washout of tools used to handle concrete or other substances is a

common culprit. I have conditioned the project to avoid depositing into the protected zone of trees any on-site washout that is not safely disposed in the sewer system. A conventional construction BMP is also to cover any solute from stormwater exposure to avoid contamination.

Introduction of Pests and Disease

While stresses may weaken the defenses of trees to pests and disease that are already present, pests and disease are most commonly introduced from the use of contaminated mulch. I have conditioned the project to use mulch that is free of pests and disease. Most purveyors would certify this condition. While any clean source of wood mulch is acceptable, large fir bark nuggets are favorable for compaction mitigation because they degrade slowly, allowing a single application to function effectively for many years. Fir bark also has natural resistance to pests and disease. Fir bark is somewhat acidic, but organic material is neutralized as it is broken down by biological processes. Furthermore, while coast live oak tolerates somewhat alkaline to neutral soils, it enjoys neutral to moderately acidic soil, and the Applicant has indicated that soil samples on the project site yielded a neutral pH of approximately 7. As such, even were it to occur, a slight reduction in soil pH is not expected to be detrimental. I recommend the use of large fir bark nuggets to supplement the existing mulch layer during construction.

10. PRESERVATION ASSESSMENT OF OAK TREE #7

Oak tree #7 is the only oak tree proposed for removal in this Oak Tree Permit. While the canopy of oak tree #7 is somewhat commingled with that of #8, an experienced tree removal professional could safely remove those parts of tree #7 that commingle with #8. Should the Applicant elect to retain #7 in the form pictured below, there would be no interaction with #8 in removing any limbs required to maintain clearance.

In my professional opinion, it is probable that oak tree #7 would sustain the canopy and root removal required to implement the project in its adjusted footprint, as portrayed below, without indefinite decline. The Oak Tree Ordinance, in permitting relocation of oak trees, acknowledges that attempts may be made to preserve trees despite significant encroachment, requiring that relocation be treated as a removal so that proper replacement is maintained, with an implicit expectation of the likelihood of long-term impairment or decline. Relocation typically entails 90-

95% root removal, often with 30-70% balancing canopy removal, and one long-term study found that no more than half of relocated oak trees survived this enormous level of impact without sustaining a decline in vigor. (Dagit, Rosie, Downer, A. James. 1997. "Status of Transplanted Coast Live Oaks (*Quercus agrifolia*) in Southern California." In: Pillsbury, Norman H.; Verner, Jared; Tietje, William D., technical coordinators. 1997. Proceedings of a symposium on oak woodlands: ecology, management, and urban interface issues; 19–22 March 1996; San Luis Obispo, CA. Gen. Tech. Rep. PSW-GTR-160. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; pp. 257-266). I estimate that less than 20% of the protected root zone of oak tree #7 would require removal, and approximately 35-40% of the canopy, though an additional 25% of the protected zone would also be marginally impacted by the introduction of an impervious surface and/or fill grading. This level of encroachment is significant enough that it should, in my professional judgment, be treated as a removal for the purposes of this permit. In comparison with the previous footprint (approximately 30% canopy removal and 15% root zone removal, all beyond the critical root zone), two additional scaffolds require removal, and the critical root zone would also be encroached.

In my professional opinion, attempting to preserve oak tree #7 even as it is replaced with new oak trees would be consistent with the guidance relating to relocations and with the spirit of the Oak Tree Ordinance. The level of impact is much smaller than would be typical of relocation, which has been studied to maintain approximately even odds of survival in at least one set of environmental conditions in the County. The level of impact is roughly balanced between root and crown capacity, which tends to better preserve a functional equilibrium. As the tree currently leans down-grade into the building footprint, the required pruning would not imbalance the canopy in a way that might precipitate structural failure from a newly imposed bending moment. The roots that provide structural support to resist the existing bending moment would be upgrade and do not require removal. This oak tree has survived substantial adverse impacts, including an apparent canker disease, compaction and a substantial change in grade, due at least in part to the favorable conditions on the project site, comprised of rich alluvial terrace for the feeder roots, along with absorptive decomposed granite to provide a reservoir for the deeper roots, on a well-draining slope. Similar conditions explain in part why so many oak trees in the developed neighborhood have thrived despite even greater encroachments. Rehabilitating impacts from fill

deposition and compaction to counteract the stresses imposed by encroachment, as well as relief from project-related and any future drought-induced stress with appropriate supplemental watering, could permit this tree to maintain its current degree of vigor or degrade only marginally. Furthermore, the canker noted in the initial Oak Tree Report appears to have receded, and in my opinion, the existing health of this tree appears to have improved since then, in spite of its impacts. The decision is left to the Applicant as to whether he wishes to attempt preservation.

I have been asked to address the question of safety should the Applicant elect to attempt to preserve this tree, principally to dispel previous speculation from project opponents alleging that such encroachment should not be permitted for safety reasons. As an oak tree dies, it typically maintains structural integrity for quite some time, deriving support from roots extending from the root collar, especially in the uphill direction. The required encroachment would not remove these roots. As the use of wood for structural building materials suggests, the death of a tree from encroachment is not associated with any immediate structural decline, and the rot that can set in as the tree's immune response disappears is typically a gradual process. A tree typically gives signs that it would die well before it actually does, and its removal would be required in this event. Mature oak trees that have died have been encountered in this residential area and safely removed, typically where they were already stressed by substantial encroachment and not provided any supplementary water during drought. While the fill soil deposited in part of the protected zone of oak tree #7 could have increased the possibility of root rot, I consider it unlikely that the tree would become structurally unstable and prone to toppling before exhibiting some signs of crown dieback. The tree is located on a well-draining slope, and the fill is more likely to have stunted growth through reduced root aeration than it is to have induced rot. In the unlikely event the tree was to fall, I would expect it to do so in the direction in which it leans, into the footprint of the home and away from the roadway, adjacent residence, or any other encroached oak tree. Given the small clearances of the home to some of the larger branches, the building envelope would be expected to intercept the tree before it gathered significant momentum, and the Applicant has indicated that this wall is to be built with mass timber that would exceed the structural capabilities of typical residential construction. These considerations are not materially different from those governing non-protected trees, which an owner is free to

prune or remove as they choose, and are best left to the discretion of the Applicant as owner of the tree.

If the Applicant should elect to remove oak tree #7 to a stump, otherwise healthy coast live oak trees are known to re-sprout from the trunk following a fire or other removal. Re-sprouted trees are much quicker to re-establish, as they leverage the existing root capacity of the tree to focus all energy on growth above ground. If and as the tree re-sprouted, as I would think highly likely, its subsequent growth would be constrained by and could be pruned to adapt to the volume of the completed home. However, oak trees #8 and #9 would be expected to mature more easily in this space without another tree occupying this volume.

As this Oak Tree Permit requests that oak tree #7 be approved for removal, it is therefore subject to no documentation requirements. Nevertheless, the extent of encroachment required to maintain oak tree #7 is portrayed below. Approximately 35-40% of the canopy of oak tree #7 would require removal, along with removal of approximately 20% of the root zone, from parts of the tree that would not be expected to increase the downhill bending moment or remove roots opposing that moment. Marginal impacts from crawlspace would be modest in severity extending over an additional approximately 25% of the protected zone.

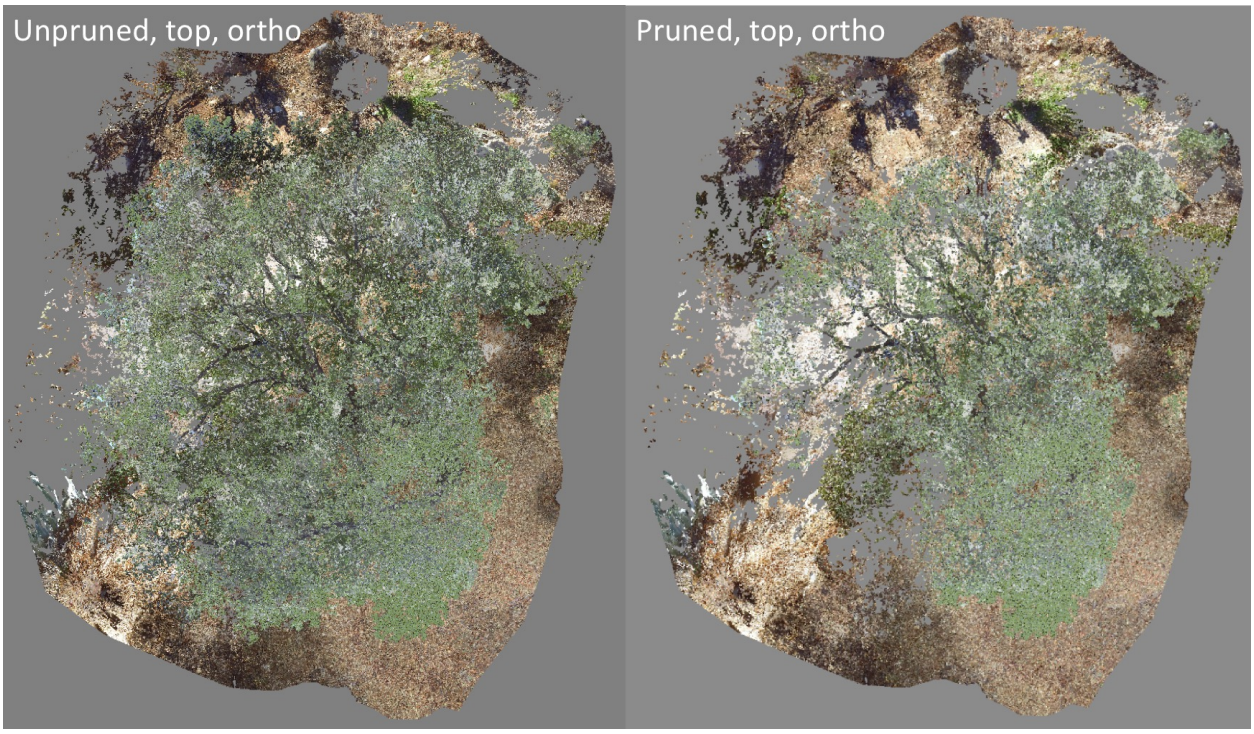


Figure 10-1: Oak Tree #7 Comparison of Canopy Extent Before and After Pruning, Orthographic Top Projection of LiDAR Scan

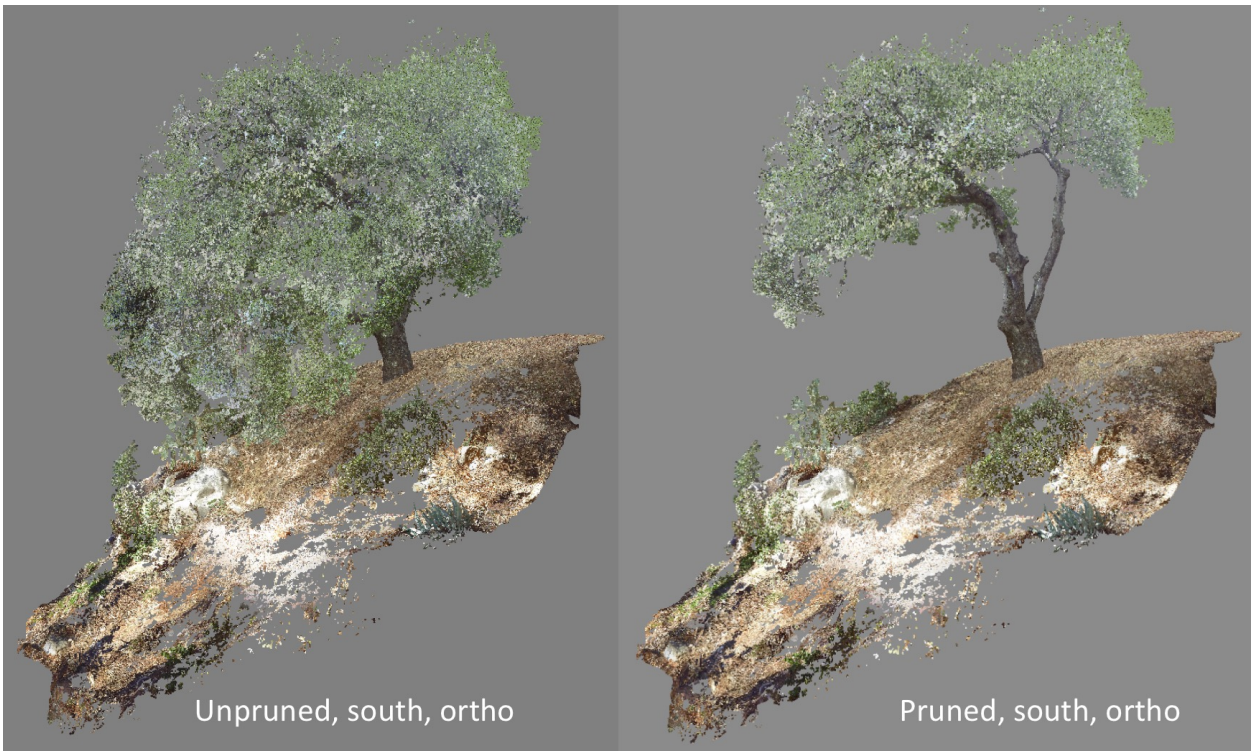


Figure 10-2: Oak Tree #7 Comparison of Canopy Extent Before and After Pruning, Orthographic South Projection of LiDAR Scan

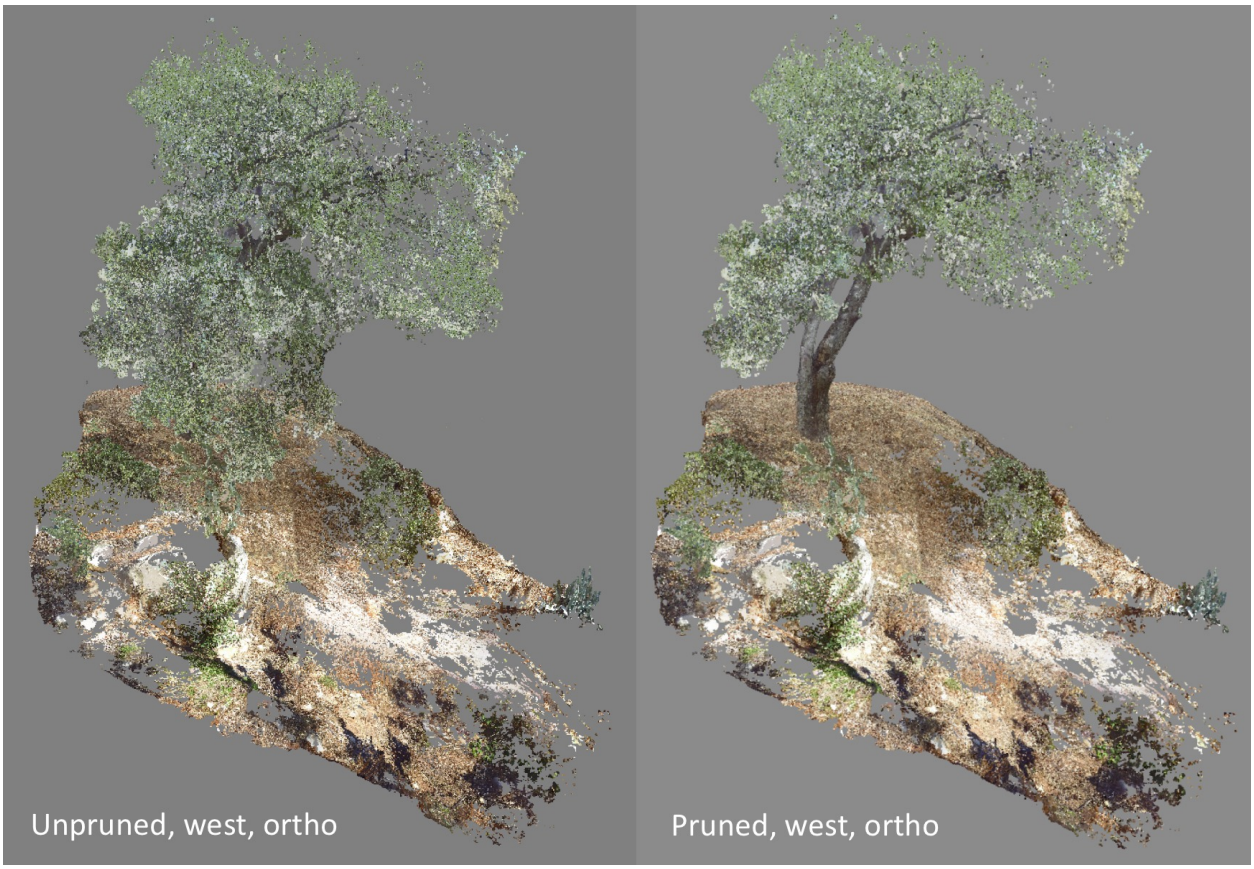


Figure 10-3: Oak Tree #7 Comparison of Canopy Extent Before and After Pruning, Orthographic West Projection of LiDAR Scan

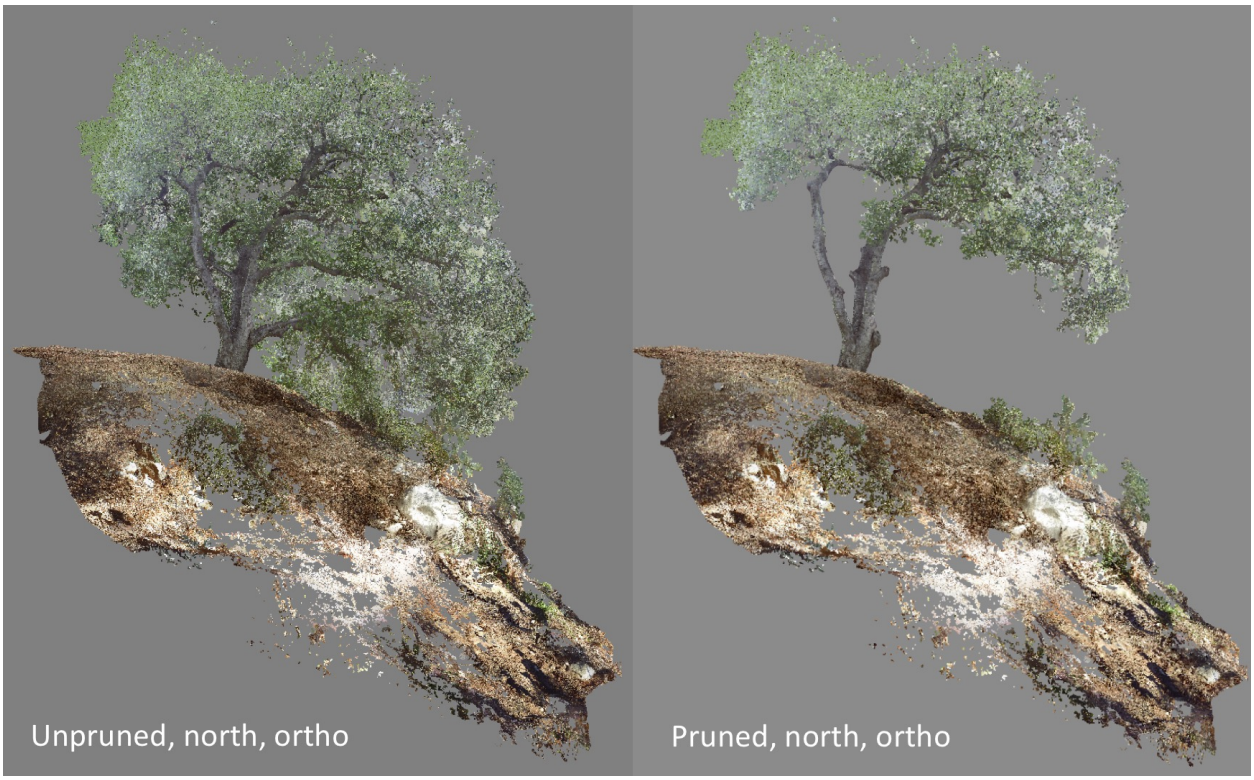


Figure 10-4: Oak Tree #7 Comparison of Canopy Extent Before and After Pruning, Orthographic North Projection of LiDAR Scan

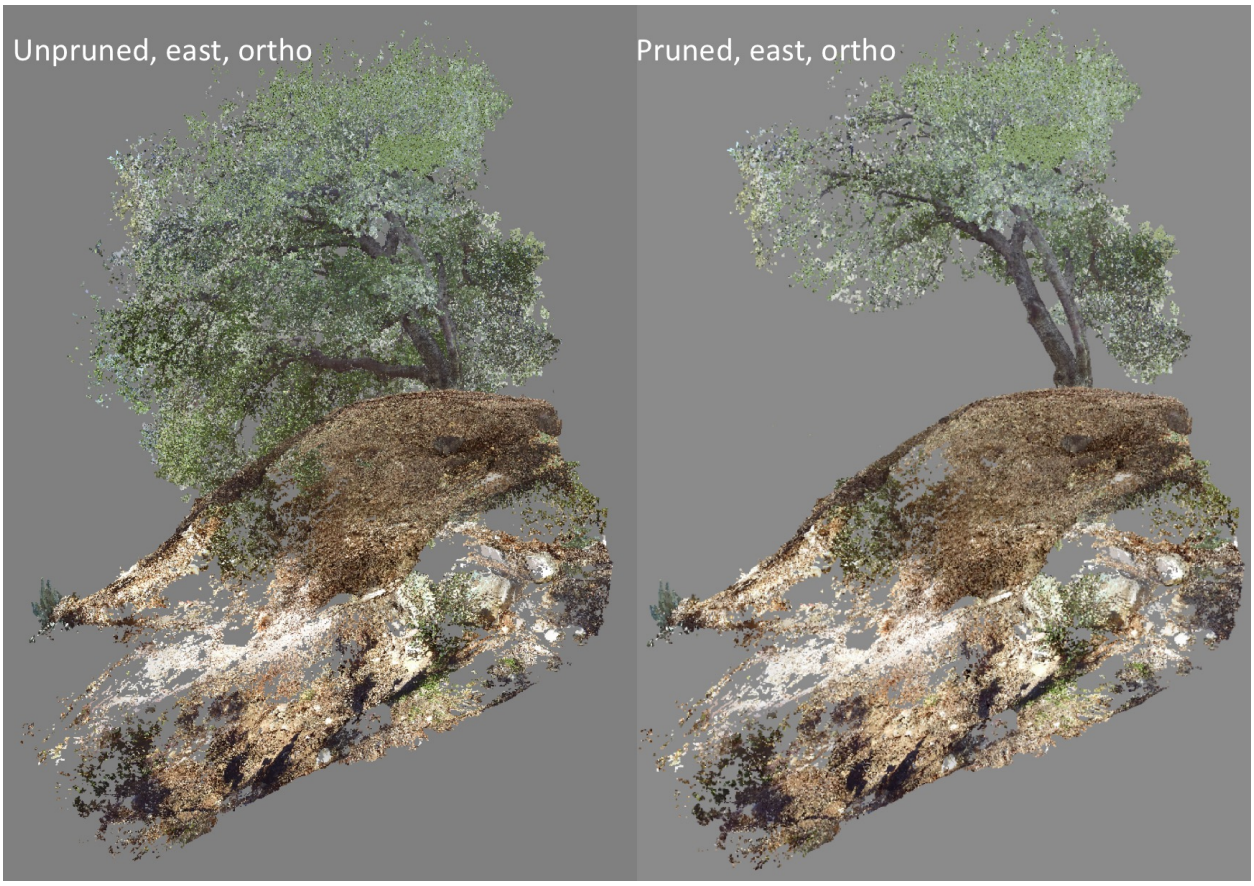


Figure 10-5: Oak Tree #7 Comparison of Canopy Extent Before and After Pruning, Orthographic East Projection of LiDAR Scan

APN: 5830-002-011
(NOT A PART)

APN: 5830-003-004
(NOT A PART)

APN: 5830-001-906
(NOT A PART)

APN: 5830-003-003
(NOT A PART)

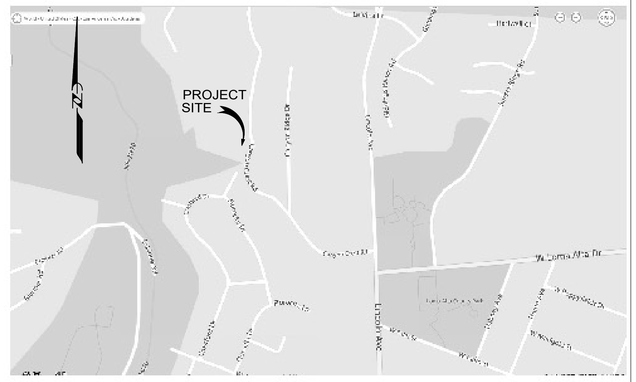
APN: 5830-003-016

APN: 5830-003-017
(NOT A PART)

CANYON CREST ROAD

OAK TREE #1
OAK TREE #2
OAK TREE #3
OAK TREE #4
OAK TREE #5
OAK TREE #6
OAK TREE #8
OAK TREE #9
OAK TREE #10
OAK TREE #13
OAK TREE #14
OAK TREE #15

WATER LATERAL



VICINITY MAP

GRAPHIC SCALE (IN FEET)
1 inch = 20 ft.

LEGEND

OAK TREE # — 5' — OAK TREE WITH DASHED PROTECTED ZONE AND DOTTED CRITICAL ROOT ZONE

● — OAK TREE TO REMAIN WITH NO IMPACT ON SUBJECT PROPERTY (3)

▲ — OAK TREE TO BE REMOVED (1)

■ — OAK TREE TO BE ENCROACHED (9)

NOTE:
1. "PROTECTED ZONE" OF AN OAK TREE EXTENDS 5' FROM THE DRIPLINE OUTWARD, OR A MINIMUM OF 15' FROM THE TRUNK WHICHEVER DISTANCE IS GREATER.
2. "CRITICAL ROOT ZONE" OF AN OAK TREE EXTENDS 3-5 TRUNK DIAMETERS FROM BASE OF TREE.

DRAWN BY:			
LDC			
CHECKED BY:			
C.G.			
DESIGNED BY:			
LDC			
	DATE CHANGED	CHANGED BY	REVISION

OWNER/APPLICANT:

STEPHEN KUHN

443 W Poppyfields Drive, ALTADENA, CA 91001
Ph.: (626) 319-2778

OAK TREE REPORT
EXHIBIT MAP
A.P.N. 5830-003-016

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

PREPARED BY:

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Land Planning, Civil Engineering, Surveying & Environmental Services
2700 Foothill Blvd., Suite 200, Pasadena, California 91107
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ROBERT R. SIMS, R.C.E. No. 21649 — DATE

LDC

Project No. 13038-001

SHEET 1 OF 1

OAK TREE REPORT

~

APN: 5830-003-016
Canyon Crest Rd.
Altadena, CA

Prepared For

Mr. Stephen Kuhn
4381 Canyon Crest Rd.
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(626) 319-2778

August 2, 2014

LDC

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Land Planning, Civil Engineering, Surveying & Environmental Services

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OAK TREE REPORT

APN: 5830-003-016
Canyon Crest Rd.
Altadena, CA

Applicant

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Altadena, CA 91001

Prepared By

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LDC Project No.: 13038-001

TABLE OF CONTENTS

SECTION **PAGE**

INTRODUCTION..... 1

DEFINITIONS & SURVEY METHOD..... 1

PROJECT IMPACTS..... 6

MITIGATION MEASURES..... 9

FIGURES & TABLES

TABLE 1 – SUMMARY OF OAK TREES..... 8

OAK TREE LOCATION AND IMPACT MAP.....Back Pocket

APPENDICES

APPENDIX I FIELD INSPECTION WORKSHEETS

INTRODUCTION

The following report describes the general condition and potential impacts to ten (10) ordinance-sized oak trees located on the subject property in the City of Altadena, in an area of unincorporated Los Angeles County. The subject property occupies approximately 1.02 acres of land that is located on a vacant hillside property on Canyon Crest Road in the City of Altadena, northwest of the intersection of Lincoln Avenue and Loma Alta Drive.

All of the ten (10) surveyed oak trees onsite are coast live oaks (*Quercus agrifolia*). The ten (10) oaks are illustrated on the attached Oak Tree Location & Impact Map. Of the ten (10) ordinance-sized oak trees surveyed for this report, one (1) tree is proposed for removal, eight (8) trees will have potential encroachments into their protected zones (PZ), and one (1) tree will remain with no impact. Two additional trees (#11 & 12) were identified in the field and are shown on the Oak Tree Location Map, but are not ordinance-sized and are therefore not included in this analysis. None of the surveyed trees qualify as a heritage oak tree based on trunk diameter. This report identifies the extent of the potential impacts and recommends management and/or mitigation measures where appropriate.

Of the 10 ordinance-size oaks surveyed, one (1) oak tree (10%) received an "A" grade, seven (7) oak trees (70%) received a "B" grade, and two (2) oaks (20%) earned a "C' grade at the time of the surveys. This report identifies the extent of the potential impacts and recommends management and/or mitigation measures where appropriate.

DEFINITIONS & SURVEY METHOD

The County of Los Angeles has established the Oak Tree Permit, in part, "...to recognize oak trees as significant historical, aesthetic and ecological resources, and as one of the most picturesque trees in Los Angeles County, lending beauty and charm to the natural and manmade landscape, enhancing the value of property, and the character of the communities in which they exist; and to create favorable conditions for the preservation

and propagation of this unique, threatened plant heritage, particularly those trees which may be classified as heritage oak trees, for the benefit of current and future residents of Los Angeles County." (Ord. 88-0157 § 1, 1988: Ord. 82-0168 § 2 (part), 1982.) An Oak Tree Permit is required prior to cutting, destroying, removing, relocating, inflicting damage, or encroaching into the protected zone of any tree of the oak genus, which is eight (8) inches or more in diameter for a single trunked-tree, or whose two largest combined trunks equal 12 inches in diameter as measured 4 ½ feet above mean natural grade (22.56.2060 (A)). The protected zone (PZ) includes the area within the dripline of an oak tree and extends therefrom to a point at least five feet outside the dripline, or 15 feet from the trunk of a tree, whichever distance is greater (22.56.2060 (C)).

In the County of Los Angeles, those trees with a diameter breast height (DBH) of 36" or more are considered to be "heritage" trees. However, trees that do not meet this criterion may be classified as heritage trees by the County of Los Angeles if the tree has been determined to have "significant historical or cultural importance to the community". None of the ten (10) surveyed oak trees for this report meet the 36"-diameter size requirement for heritage (H) trees.

This oak tree report complies with the requirements set forth in 22.56.2090 (F)(1a-f), which indicates that the report evaluate the physical structure, aesthetics, and health of each tree in the development area or within 200 feet of the proposed development. There are additional oak trees within 200 feet of the proposed development, but beyond the property boundary. These trees could not be surveyed due to access restrictions by the adjacent property owners and are not proposed to be impacted by the development. There are approximately eight (8) additional oak trees that are located on-site approximately 170 feet downslope from the proposed development. The elevation at which these trees are located is more than 80 feet below the elevation where the proposed building is located. These oaks will not be impacted by the proposed development and were therefore not included in the scope of this analysis.

The oak trees were visually surveyed and tagged by LDC in the field on May 9, 2014. The trees were numbered and tagged with a circular metal tag 1½" in diameter that, unless otherwise noted on the field data sheets, was placed on the north side of the trunk at DBH.

Each tree was evaluated for a variety of health, structural, and aesthetic qualities as indicated on the field inspection worksheets in Appendix I. The tree number, location, canopy, and protected zone of each tree is mapped on the enclosed "Oak Tree Location & Impact Map". The following discussion expands on the information summarized in the field survey worksheets attached in Appendix I.

Trunk diameter is measured at "diameter breast height" (DBH), approximately 4½ feet (54") above the natural grade. This measurement is most appropriate for trees with vertical growth forms. Oak trees often have large lateral branches diverging from the trunk at or near 4½ feet. Measuring a tree of this type at exactly 4½' above natural grade would often result in an inaccurate impression of tree size. For trees that exhibit lateral branching at DBH, the trunk diameter measurement is made at the nearest point where the measurement can be accomplished without being impeded by the branches. For multi-trunk trees, the number of trunks and the diameter (DBH) of each trunk is recorded.

Evaluation of canopy characteristics includes the dripline radius. The dripline radius is measured along a line extending from the center of the trunk outward in four magnetic compass directions. The measurement is made from the outer edge of the trunk to the outermost living part of the tree. In some cases, where a tree has several trunks growing in a ring, the dripline radius is measured from the center of the ring. Use of this measurement is noted under comments and notes when used. The canopy spread measurement is the maximum canopy diameter of the tree in question.

Tree injuries leave the tree vulnerable to many potential sources of damage and disease. Insect pests will take advantage of an injury to invade exposed wood and cambium. Some fungi, which break down wood, will also take advantage of a wound to enter the

tree. These fungi will result in the softening of the wood called heart rot. Heart rot, in combination with the activities of insects, animals and/or fire, will eventually produce cavities in the trunk or major branches of the tree.

Structural stability also affects the potential survival of a tree. Trees that are structurally unstable are assumed to have a shorter potential life span than structurally stable trees. Oaks frequently grow in loose soil on steep slopes; this soil is prone to down slope movement, resulting in trees that have been undermined and lean precariously down hill. The action of streams, as described above, also results in unstable trees. Young oaks are highly phototropic (growing toward light). In woodland environment this trait often causes young trees to grow toward an opening in the canopy that may be far from directly overhead, resulting in a poorly balanced tree. Another common cause of structural instability is severe cavitations or mechanical damage as described above.

The most common health problem affecting oak trees is some form of biological infestation. Almost all oak trees have sub-critical infestations of one type or another. Only when the tree has been severely injured are the infesting organisms able to invade the tree and become a severe problem. Termites are one of the most common pests to utilize oak trees as a food source. Termites eat only dead wood and must enter the tree through an opening in the bark or root. Most oaks have a limited (and usually harmless) number of termites in the smaller terminal twigs and branches that have died. Wood boring beetles are similar to termites in their requirements and have a similar affect on the tree. Only when the infestation becomes severe do wood eating insects pose a threat to the tree. However, beetles that eat cambium can be a serious threat to a tree even in small numbers. Cambium eaters can easily kill a small branch or trunk by girdling the structure and curtailing the flow of nutrients through the cambium.

There are a host of other insects and arthropods, which utilize oaks in a variety of ways. In natural situations these potential threats are kept in check by abundant natural enemies and the oak's natural protective features. Climbing plants, though not technically an infestation, are also included in this category.

Each tree was assigned two letter grades, one health and one aesthetic and conformity rating. The health and aesthetic rating of the trees are based on the archetype tree of the same species through a subjective evaluation of its health, aesthetic value, and ecological value. The health of the tree depends on the level of damage caused by infestation of various pests including termites, wood boring beetles, cambium eating beetles, fungus of various types, climbing plants, and parasitic plants (i.e., mistletoe), or fire.

While the aesthetic value of a tree is subjective, a tree is usually considered highly aesthetic if it has generally dense foliage, a relatively uniform or spectacular irregular shape, and large size. Ecological value is based on many factors, not all of which have a positive correlation with the health and aesthetic value of the tree. Most important is the likelihood that the tree will continue to survive.

The following criteria were used to establish each grade:

"A" = Outstanding:

> Exceptional trees, mostly of large size, of good growth form with often large spreading crown, exhibiting very good to excellent health with mostly normal necrosis and a minimum of pathological symptoms and a minimum of fire damage. Some of these trees may have some trunk cavitation and some disease symptoms, but these are not considered detrimental to the overall health of the tree. The trees are large and overall attractive.

"B" = Above Average:

> Good to very good trees but either not of large size or tending to show some necrotic or pathological symptoms or minor fire damage. Most of these trees have some dieback and may have some brooming (regrowth) and all have normal amounts of normal stem dieback. These are basically good trees with a strong potential for continued survival.

"C" = Average:

> Average, moderately good trees whose growth habit and pathological or fire-

induced symptoms indicate an equal chance to either decline or continue in the future. Most of these trees would have moderate stem and branch dieback, some bark exfoliation, or stem cavitation with rot, and relatively moderate fire damage. They may also show various amounts of insect damage to leaves etc. or are impacted and shaded or crowded by adjacent trees in such a way that it is expected to negatively effect the tree.

"D" = Below Average/Poor

Declining trees with a reduced chance of survival due to excessive fire damage, or strong-stem or branch dieback caused by crowding, shading or various pathological conditions. These would not be expected to survive over the long term and generally show partial foliage. However, some may show sucker shoots or crown-sprouting that have developed after the fire and are expected to survive over the long term.

"F" = Dead:

This tree exhibits no signs of life whatsoever.

PROJECT IMPACTS

The applicant is proposing to construct a new single-family residence of approximately 1,500 square feet with an attached integral garage on the 1.02-acre hillside site. The residence will consist of a garage at street level, with the main floor below the garage descending the hillside. The lowest level further descends the hillside under a subset of the main floor footprint. The only excavation proposed for the proposed structure will be for a proposed five-foot retaining wall and six 24-inch CIDH friction piles that will support the structure. Illustrated on the Oak Tree Location & Impact Map are the location and canopies of the ordinance-sized oak trees located on the subject property and within the immediate vicinity of the subject property. Ten (10) surveyed and tagged ordinance-sized oak trees fell within this limit. **One (1) oak tree is proposed for removal, eight (8) are proposed to have either temporary or permanent encroachments within their protected zones, and one (1) oak tree will remain with no impact.**

Trees #1, 2, 3, 4, 5 and 7 are proposed to have encroachments within their protected zones due to the placement of a vapor permeable driveway off of Canyon Crest Road. The placement of the driveway is not anticipated to result in any significant impact to the trees. The placement of the new driveway will be placed over existing grade and may require a slight notching of the hillside for placement of the driveway. No significant impacts to the trees are anticipated as a result of the driveway placement.

The placement of a five-foot retaining wall within the canopies of Trees #4, 7, and 8 will result in a potential impact to the root system of those trees. The retaining wall is approximately 4 feet from the trunk of Tree #4, 6 feet from the trunk of #7, and 1 foot into the protected zone of #8. The minimum industry recommendation for excavation on one side of a tree is five times the trunk diameter (given a healthy tree). The proposed excavation is closer than this recommended distance to Trees #4 and 7 and could result in damage to the root system of the trees. Excavation should be performed under an arborist's guidance.

The proposed residence is located on a slope and will be supported by six 24-inch CIDH friction piles on a grade beam foundation. Five out of the six piles will be located within the protected zones of Trees #4, 5, and 7. However, it does not appear that a significant portion of the root system of any of the trees would be impacted by the minimum 24-inch hole, and the overall health and stability of the trees should not be compromised. Since the location of actual roots is unknown until excavation occurs, actual impacts to specific roots cannot be determined at this time.

The proposed building encroaches into the canopies of Trees #4, 5, and 7 and may result in some canopy pruning. Any pruning that may be required should be performed under an arborist's guidance.

The following table summarizes the proposed status of each tree. The species is noted after the tree number in a code. The overall grade for each tree is also noted. The

comment column gives a brief explanation of the proposed reason for impact, be it removal or encroachment. See the notes at the bottom of the summary table for a key to the species and impact status.

Table 1 – Summary of Oak Trees for APN: 5830-003-016

Tree No.	DBH (inches)	Species	Overall Grade	Impact Status			Ordinance size?	Comment
				NI	R	E		
1	33	QA	A			✓	Yes	Driveway will encroach 9' into dripline
2	15.5	QA	B-			✓	Yes	Driveway will encroach 5' into PZ
3	6.5, 11.5	QA	C			✓	Yes	Driveway will encroach 9' into dripline
4	9.5, 19	QA	B+			✓	Yes	Driveway will encroach 12' into dripline with possible notching of hillside; Structure will encroach 12.5' into dripline; Retaining wall 4' from trunk; Pile within dripline
5	14	QA	B			✓	Yes	Driveway will encroach 5' into dripline; Structure will encroach 3' into dripline; Pile within dripline
6	14	QA	B		✓		Yes	Trunk leans into proposed location of structure
7	27.5	QA	C-			✓	Yes	Driveway will encroach 6' into dripline with possible notching of hillside; Structure will encroach 16' into dripline; Pile within dripline; Retaining wall 6' from trunk
8	12	QA	B-			✓	Yes	Driveway will encroach 2' into dripline; Structure will encroach 3' into PZ
9	9, 13	QA	B-			✓	Yes	Structure will encroach 2' into PZ; Pile within PZ
10	15.5	QA	B	✓			Yes	
11	7	QA	-		✓		No	Not Ordinance size – not surveyed - entire canopy leaning SW over slope
12	6.5	QA	-		✓		No	Not Ordinance size – not surveyed - entire canopy leaning SW over slope
TOTAL				**1**	**1**	**8**		

NI = NO IMPACT R = REMOVAL E = ENCROACHMENT

QA = Coast live oak (*Quercus agrifolia*) PZ = Protected Zone DBH = Diameter at Breast Height

MITIGATION MEASURES

Only one (1) of the 10 oak trees surveyed is proposed for removal. Eight (8) of the ten (10) oak trees surveyed will sustain temporary or permanent encroachments within its protected zones. Therefore, special care must be taken during construction activities to minimize impacts to the tree roots and canopy in the protected zone. Implementation of the following measures will insure that the roots and canopy in the protected zone will not be significantly affected.

1. The applicant shall be responsible for notifying the County Forester of any changes in the scope of the work and shall insure that all work is performed in accordance with applicable ordinances, permits and procedures. Work performed within the protected zones of the trees shall be preceded by not less than 48 hours notice to the County Forester and the project's oak tree consultant (certified arborist).
2. **The applicant shall plant a minimum of 2, 15-gallon minimum replacement oak trees within the open space areas of the property to replace the 1 removal tree (2:1 ratio for non-heritage).** The mitigation trees shall consist of indigenous coast live oaks. The applicant shall be responsible for the monitoring and maintenance of the replacement trees for a minimum of two years. If the replacement trees die during the two-year period, the applicant shall plant new replacement trees and the two-year monitoring period shall begin again from the date of that planting.
3. Should any of the encroached oak trees (Trees #1-5 and 7-9) fail as a result of the proposed project within two (2) years of completion, the tree shall be replaced at a 2:1 ratio. Impacts that could contribute to the decline of an oak from project implementation could be direct (e.g. construction activities damaging roots or branches) or indirect (e.g. improper drainage resulting in root rot).
4. All work in the protected zone of the trees approved for encroachment must be done using hand implements only; the use of mechanized tools is prohibited except where absolutely necessary AND as approved by the County Forester. All work conducted within the protected zone of the oak trees shall be performed in the presence of the

applicant's oak tree consultant. The protected zone shall commence from a point five (5) feet outside of the dripline and extend inwards to the trunk of the tree. In no case shall the protected zone be less than fifteen (15) feet from the trunk of an oak tree.

5. Preservation and encroachment trees may benefit from supplemental irrigation prior to and during construction. The monitoring arborist shall recommend an irrigation regimen if necessary.

6. Equipment, materials, and vehicles shall not be stored, parked or operated within the protected zone of an oak tree, except on the existing flat pad off of Canyon Crest Road for work that is being performed at the time in the immediate vicinity. Plywood shall be applied on top of the existing wood mulch over the entire pad during construction activities to minimize impacts from compaction.

7. Removal of the natural leaf mulch within the protected zone of the project oak trees is prohibited except where absolutely necessary AND as approved by the project's oak tree consultant.

8. All trees not approved for encroachment shall be fenced in accordance with County of Los Angeles guidelines prior to commencement of construction operations, and shall remain fenced until the County Forester approves removal of fencing.

9. Any pruning, including dead wooding, shall be performed in compliance with the latest ANSI pruning standards by a certified arborist (or certified tree worker).

10. Root-pruning within the protected zone shall be reduced to the minimum amount that is absolutely necessary. All roots pruned shall consist of clean, 90°-angle cuts utilizing sharp hand tools and shall not be sealed unless directed by the County Forester. Any major roots (2" or greater in diameter) encountered shall be preserved to the extent possible, wrapped in moist burlap, until the soil is replaced. Soil shall be replaced as soon as possible around preserved roots.

11. Upon completion of the work associated with this permit, a four to six-inch layer of certified mulch shall be placed around the protected zone of the encroachment trees. Where feasible, the native leaf litter should be retained and used as the mulching material.

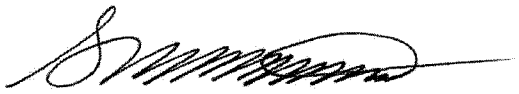
12. The applicant shall be responsible for notifying and coordinating all conditions with the County and the project's oak tree consultant.

Disclaimer:

This report represents the independent opinion of the signatory consultant (Land Design Consultants, Inc.). The trees discussed herein were generally reviewed for physical, biological function, and aesthetic conditions. This examination was conducted in accordance with presently accepted industry procedures, which are a ground-plane macro-visual observation only. No extensive micro-biological, soil-root excavations, upper crown examination, nor internal tree investigations were conducted and therefore, the reporting herein reflects the overall visual appearance of the trees on the date(s) reviewed and no warranty is implied to the potential failure, health, or demise of any part or whole of any tree described in the report. Records may not remain accurate after our inspection due to unknown causes of changeable deterioration of the reviewed site.

Respectfully submitted,

LAND DESIGN CONSULTANTS, INC.



Scott McAllaster
Project Planner
ISA Certified Arborist, WE-7011A

APPENDIX I

FIELD INSPECTION WORKSHEETS

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 1**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[1]**:** ☒A ☐B ☐C ☐D ☐F
	Form: ☒ symmetric ☐ minor asymmetry
Trunk Count: 1 **Height (ft.):** 50	☐ major asymmetry ☐ stump sprout
Trunk DBH (in.): 33	☐ stag-head
Percent Canopy Cover: 80%	**Crown Class**[2]**:** ☒ Decurrent ☐ Excurrent
Existing Terrain: ☒ Flat ☐ Slope	**Age Class:** ☐ immature ☐ semi-mature
Aesthetic Rating[3]**:** ☒A ☐B ☐C ☐D ☐F	☒ mature ☐over-mature/senescent
Overall Grade: ☒A ☐B ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	25	
NE		
E	25	
SE		
S	24	
SW		
W	27	
NW		
CANOPY SPREAD (FEET): 52		

PROPOSED ACTIONS		
Monitor for Progress:	☐ Yes	☒ No
Treat Infestations:	☐ Yes	☒ No
Remove Deadwood:	☐ Yes	☒ No
Support Structure:	☐ Yes	☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☒ Yes ☐ No	
Proposed Land Use: Residence	
Impacts: Encroachment	
Mitigations: See Oak Tree Report	

TREE HEALTH	
Wound Wood Development:	Excellent ☒ Average ☐ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☐ No ☒ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☒ No ☐ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☒ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☒ Excellent ☐ Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☐ None ☒ Minor ☐ Moderate ☐ Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐ Extensive ☒ None
Exudations:	☒ No ☐ Yes

Comments & Notes: On adjacent property to north; Minor mech. dam. to root near base; pruning for road clearance; 2 main scaffold branches are cabeled – included bark at codoms; power lines through canopy

[1] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[2] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[3] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 2**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating[4]:** ☐A ☒B- ☐C ☐D ☐F
	Form: ☐ symmetric ☒ minor asymmetry
Trunk Count: 1 **Height (ft.):** 35	☐ major asymmetry ☐ stump sprout
Trunk DBH (in.): 15.5	☐ stag-head
Percent Canopy Cover: 60%	**Crown Class[5]:** ☐ Decurrent ☒ Excurrent
Existing Terrain: ☒ Flat ☐ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[6]: ☐A ☒B ☐C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B- ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	15	
NE		
E	18	
SE		
S	19	
SW		
W	5	
NW		
CANOPY SPREAD (FEET): 34		

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☒ Yes ☐ No	
Proposed Land Use: Residence	
Impacts: Encroachment	
Mitigations: See Oak Tree Report	

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☐ No ☒ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☒ No ☐ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☒ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐Extensive ☒None
Exudations:	☒ No ☐ Yes

Comments & Notes: Growing within outlet structure – part of tree base is growing over the concrete of the structure; included bark (minor) at codom; multiple pruning events (road clearance); power line through canopy

[4] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[5] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[6] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 3**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[7]**:** ☐A ☐B ☒C ☐D ☐F
	Form: ☐ symmetric ☐ minor asymmetry
Trunk Count: 2 **Height (ft.):** 35	☒ major asymmetry ☐ stump sprout
Trunk DBH (in.): 6.5, 11	☐ stag-head
Percent Canopy Cover: 70%	**Crown Class**[8]**:** ☒ Decurrent ☐ Excurrent
Existing Terrain: ☒ Flat ☐ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[9]**:** ☐A ☒B- ☐C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☐B ☒C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	17	
NE		
E	23	
SE		
S	0	
SW		
W	0	
NW		
CANOPY SPREAD (FEET): 23		

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☒ Yes ☐ No	
Proposed Land Use: Residence	
Impacts: Encroachment	
Mitigations: See Oak Tree Report	

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☒ No ☐ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☒ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☒ Minor ☐ Moderate ☐Extensive ☐None
Exudations:	☒ No ☐ Yes

Comments & Notes: Growing within outlet structure – part of tree base is growing over the concrete of the structure; slight lean to east; multiple pruning events (road clearance); power line through canopy

[7] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[8] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[9] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 4**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[10]**:** ☐A ☒B ☐C ☐D ☐F
	Form: ☐ symmetric ☒ minor asymmetry
Trunk Count: 2 **Height (ft.):** 45	☐ major asymmetry ☐ stump sprout
Trunk DBH (in.): 9.5, 19	☐ stag-head
Percent Canopy Cover: 80%	**Crown Class**[11]**:** ☐ Decurrent ☒ Excurrent
Existing Terrain: ☒ Flat ☐ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[12]**:** ☒A ☐B ☐C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B+ ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	14	
NE		
E	11	
SE		
S	25	
SW		
W	17	
NW		
CANOPY SPREAD (FEET): 39		

PROPOSED ACTIONS		
Monitor for Progress:	☐ Yes	☒ No
Treat Infestations:	☐ Yes	☒ No
Remove Deadwood:	☐ Yes	☒ No
Support Structure:	☐ Yes	☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☒ Yes ☐ No	
Proposed Land Use: Residence	
Impacts: Encroachment	
Mitigations: See Oak Tree Report	

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☐ No ☒ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☒ No ☐ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☒ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☒ Excellent ☐ Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐ Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐ Extensive ☒ None
Exudations:	☒ No ☐ Yes

Comments & Notes: Included bark at codoms; Mutiple pruning events; power lines adjacent to eastern portion of canopy; adjacent property owner uses adjacent pad and placed mulch within protected zone of tree

[10] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[11] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[12] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 5**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[13]**:** ☐A ☒B ☐C ☐D ☐F
	Form: ☐ symmetric ☐ minor asymmetry
Trunk Count: 1 **Height (ft.):** 35	☒ major asymmetry ☐ stump sprout
Trunk DBH (in.): 14	☐ stag-head
Percent Canopy Cover: 80%	**Crown Class**[14]**:** ☒ Decurrent ☐ Excurrent
Existing Terrain: ☐ Flat ☒ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[15]**:** ☐A ☒B ☐C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	0	
NE		
E	15	
SE	21	
S	24	
SW	21	
W	0	
NW		
CANOPY SPREAD (FEET): 24		

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS
In Impacted Area: ☒ Yes ☐ No
Proposed Land Use: Residence
Impacts: Encroachment
Mitigations: See Oak Tree Report

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☒ No ☐ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☐ No ☒ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☐ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☒ Excellent ☐Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐Extensive ☒None
Exudations:	☒ No ☐ Yes

Comments & Notes: Within drainage area of outlet structure; base surrounded by rocks and debris; root collar exposed – dirt eroded away; canopy leaning south (shaded out); multiple pruning events

[13] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[14] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[15] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 6**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[16]**:** ☐A ☒B ☐C ☐D ☐F
	Form: ☐ symmetric ☐ minor asymmetry
Trunk Count: 1 **Height (ft.):** 20	☒ major asymmetry ☐ stump sprout
Trunk DBH (in.): 14	☐ stag-head
Percent Canopy Cover: 70%	**Crown Class**[17]**:** ☒ Decurrent ☐ Excurrent
Existing Terrain: ☐ Flat ☒ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[18]**:** ☐A ☐B ☒C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	0	
NE		
E	0	
SE		
S	20	
SW		
W	14	
NW		
CANOPY SPREAD (FEET): 20		

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☒ Yes ☐ No	
Proposed Land Use: Residence	
Impacts: Removal	
Mitigations: See Oak Tree Report	

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☒ No ☐ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☐ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☒ Minor ☐ Moderate ☐Extensive ☐None
Exudations:	☒ No ☐ Yes

Comments & Notes: Sycamore borer at base; canopy shaded out by #5 -- leaning south; within drainage area of outlet structure

[16] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[17] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[18] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 7**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[19]**:** ☐A ☐B ☒C- ☐D ☐F
	Form: ☐ symmetric ☒ minor asymmetry
Trunk Count: 1 **Height (ft.):** 40	☐ major asymmetry ☐ stump sprout
Trunk DBH (in.): 27.5	☐ stag-head
Percent Canopy Cover: 90%	**Crown Class**[20]**:** ☒ Decurrent ☐ Excurrent
Existing Terrain: ☐ Flat ☒ Slope	**Age Class:** ☐ immature ☐ semi-mature
Aesthetic Rating[21]**:** ☐A ☒B ☐C ☐D ☐F	☒ mature ☐over-mature/senescent
Overall Grade: ☐A ☐B ☒C- ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	5	
NE		
E	12	
SE		
S	22	
SW		
W	25	
NW		
CANOPY SPREAD (FEET): 37		

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS
In Impacted Area: ☒ Yes ☐ No
Proposed Land Use: Residence
Impacts: Encroachment
Mitigations: See Oak Tree Report

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☒ No ☐ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☐ No ☒ Yes
Mechanical Damage:	☐ Trunk ☒ Branch ☐ None
Canker/Galls:	☐ No ☒ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☐ None ☒ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☒ Minor ☐ Moderate ☐Extensive ☐None
Exudations:	☐ No ☒ Yes

Comments & Notes: Tree was buried by sediment buildup and adjacent neighbot has dug a 4-foot wide pit around trunk to uncover trunk base; multiple pruning events; large area within protected zone covered by mulch; included bark on one branch attachment; one bleeding canker present on NW side of largest of scaffold branches with foamy discharge – photos taken for record

[19] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[20] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[21] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 8**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating[22]:** ☐A ☒B- ☐C ☐D ☐F
	Form: ☐ symmetric ☒ minor asymmetry
Trunk Count: 1 **Height (ft.):** 35	☐ major asymmetry ☐ stump sprout
Trunk DBH (in.): 12	☐ stag-head
Percent Canopy Cover: 75%	**Crown Class[23]:** ☐ Decurrent ☒ Excurrent
Existing Terrain: ☒ Flat ☐ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[24]: ☐A ☒B ☐C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	14	
NE		
E	10	
SE		
S	8	
SW		
W	15	
NW		
CANOPY SPREAD (FEET): 25		

PROPOSED ACTIONS		
Monitor for Progress:	☐ Yes	☒ No
Treat Infestations:	☐ Yes	☒ No
Remove Deadwood:	☐ Yes	☒ No
Support Structure:	☐ Yes	☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☒ Yes ☐ No	
Proposed Land Use: Residence	
Impacts: Encroachment	
Mitigations: See Oak Tree Report	

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☒ No ☐ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☐ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☐ None ☒ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐Extensive ☒None
Exudations:	☒ No ☐ Yes

Comments & Notes: Tree was buried by sediment buildup and adjacent neighbot has dug a 4-foot wide pit around trunk to uncover trunk base; multiple pruning events

[22] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[23] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[24] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree -- F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 9**

GENERAL CHARACTERISTICS	
Species: ☒*Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating[25]:** ☐A ☒B- ☐C ☐D ☐F
	Form: ☐ symmetric ☐ minor asymmetry
Trunk Count: 2 **Height (ft.):** 35	☒ major asymmetry ☐ stump sprout
Trunk DBH (in.): 9, 13	☐ stag-head
Percent Canopy Cover: 70%	**Crown Class[26]:** ☒ Decurrent ☐ Excurrent
Existing Terrain: ☐ Flat ☒ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[27]: ☐A ☐B ☒C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B- ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	10	
NE		
E	5	
SE		
S	6	
SW		
W	24	
NW		
CANOPY SPREAD (FEET): 29		

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS
In Impacted Area: ☒ Yes ☐ No
Proposed Land Use: Residence
Impacts: Encroachment
Mitigations: See Oak Tree Report

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☐ No ☒ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☒ No ☐ Yes
Epicormic growth:	☐ No ☒ Yes
Shading Out:	☐ No ☒ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☐ Trunk ☒ Branch ☐ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐Extensive ☒None
Exudations:	☒ No ☐ Yes

Comments & Notes: included bark at codoms; 15' high pole erected adjacent and against trunk; rope for a hammock tied to branch from adjacent property;multiple pruning events; approx. 2' away from property wall (block wall)

[25] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[26] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[27] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

OAK TREE FIELD DATA WORKSHEET *LDC Project No. 13038-001*

Survey Date: 5/9/14 **Tree Number: 10**

GENERAL CHARACTERISTICS	
Species: ☒ *Q. agrifolia* ☐ *Q. lobata* ☐ *Other*	**Health Rating**[28]**:** ☐A ☒B ☐C ☐D ☐F
	Form: ☐ symmetric ☒ minor asymmetry
Trunk Count: 1 **Height (ft.):** 40	☐ major asymmetry ☐ stump sprout
Trunk DBH (in.): 15.5	☐ stag-head
Percent Canopy Cover: 85%	**Crown Class**[29]**:** ☐ Decurrent ☒ Excurrent
Existing Terrain: ☐ Flat ☒ Slope	**Age Class:** ☐ immature ☒ semi-mature
Aesthetic Rating[30]**:** ☐A ☒B+ ☐C ☐D ☐F	☐ mature ☐over-mature/senescent
Overall Grade: ☐A ☒B ☐C ☐D ☐F	**Heritage Tree:** ☒ No ☐ Yes

CANOPY CHARACTERISTICS		
	Dripline Radius (Feet)	Canopy to Grade (Feet)
N	14	
NE		
E	6	
SE		
S	18	
SW		
W	15	
NW		
CANOPY SPREAD (FEET): 32		

TREE HEALTH	
Wound Wood Development:	Excellent ☐ Average ☒ Poor ☐ None ☐
Foliage Density:	☒ Normal ☐ Sparse
Weak crotches:	☐ No ☒ Yes
Oak Pit Scale:	☒ No ☐ Yes
Mainstem dieback:	☒ No ☐ Yes
Exposed Roots:	☐ No ☒ Yes
Epicormic growth:	☒ No ☐ Yes
Shading Out:	☒ No ☐ Yes
Cavities: ☒None	☐ Trunk ☐ Branch
Exfoliating Bark:	☒ No ☐ Yes
Water Pocket(s):	☒ No ☐ Yes
Mechanical Damage:	☐ Trunk ☐ Branch ☒ None
Canker/Galls:	☒ No ☐ Yes
Fungus:	☒ No ☐ Yes
Vigor:	☐ Excellent ☒Average ☐ Fair ☐ Poor
Twig/ Branch Dieback:	☒ None ☐ Minor ☐ Moderate ☐Extensive
Leaf Size:	☒ Normal ☐ Small
Heart Rot:	☒ No ☐ Yes
Insects:	☐ Minor ☐ Moderate ☐Extensive ☒None
Exudations:	☒ No ☐ Yes

PROPOSED ACTIONS	
Monitor for Progress:	☐ Yes ☒ No
Treat Infestations:	☐ Yes ☒ No
Remove Deadwood:	☐ Yes ☒ No
Support Structure:	☐ Yes ☒ No

IMPACTS & MITIGATIONS	
In Impacted Area: ☐ Yes ☒ No	
Proposed Land Use: N/A	
Impacts: None	
Mitigations: None	

Comments & Notes: Included bark at codoms; most of canopy to west over slope

[28] Health: A =Outstanding; B = Above Average; C = Average; D = Below Average; F = Dead
[29] Decurrent = Lacking Strong Central Leader. Excurrent = Strong Central Leader.
[30] Aesthetic (compared to standard tree of same species) : A = nearly symmetrical, healthy tree – F = Dead

F. AB52 TRIBAL CULTURAL RESOURCES COMPLIANCES CHECKLIST

TRIBAL CULTURAL RESOURCES ("AB 52")

Compliance Checklist

(Initial Study Attachment)

Procedural Compliance

1. **Has a California Native American Tribe (s) requested formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe?**

   ☒ Yes Tribe(s) to notify: Tataviam Band of Mission Indians

   ☐ No **(**End of process)

2. **Notification letter (s) informing the California Native American Tribe (s) of the proposed project was mailed on** August 18, 2015 **, which was within 14 days when project application was determined complete or the County decided to undertake a project.**

3. **Did the County receive a written request for consultation from the California Native American Tribe(s) within 30 days of when formal notification was provided?**

   ☒ Yes Date: September 16, 2015

   ☐ No **(**End of process)

4. **Consultation process with the California Native American Tribe(s) consisted of the following:**

   Staff contacted the Tribe by phone and spoke to Kimia Fatehi on September 16, 2015 to discuss the project and potential impacts to the cultural resources. Between September 22-29, 2015, staff communicated with Ms. Fatehi on this project. She requested that staff contact Anthony Morales of the Gabrieleño Band of Mission Indians because they have a more direct lineage to the project location. Staff contacted Mr. Morales on September 29, 2015. During a phone conversation, Mr. Morales indicated that he concurred with the determination that the impacts to the project would be less than significant because the oak tree stump would not be removed and the project scope would be limited to one single-family residence with minimal grading. A phone call to Ms. Fatehi confirmed that she is satisfied with the consultation after understanding that the oak tree stump would not be removed.

5. **Consultation process concluded on** September 29, 2015 **by either of the following:**

☒ The parties concluded that no mitigation measures are necessary

☐ The parties agreed to measures to mitigate or avoid a significant effect on a tribal cultural resource (see attached mitigation measures)

☐ The County acted in good faith and after reasonable effort, concluded that mutual agreement cannot be reached.

G. ADDENDUM TO GEOTECHNICAL REPORT AND GEOTECHNICAL REPORT

March 7, 2016
IC 14037-C

Stephen Kuhn
4381 Canyon Crest Road
Altadena, California 91001

Subject

Addendum Geologic and Soils Engineering Exploration
Proposed Residence
Lot C, Tract 7344
APN 5830-003-016
Canyon Crest Road
Altadena, California

References: Report by Irvine Geotechnical, Inc.:

Geologic and Soils Engineering Exploration, Proposed Residence, Lot C, Tract 7344, APN 5830-003-016, Canyon Crest Road, Altadena, California, dated April 17, 2014

County of Los Angeles Department of Public Works, Geotechnical and Materials Engineering Group:

Geologic and Soils Engineering Review Sheet, Building P.C. No. 1508100055, dated November 19, 2015

Dear Gentle Persons;

Irvine Geotechnical has prepared this addendum report to provide additional geotechnical recommendations to the Geotechnical and Materials Engineering Division (GMED) for the design and construction of the proposed project. Responses to the 21 items of the Geologic and Soils Engineering Review Sheet are provided below. A copy of the November 19, 2015, GMED review letter is appended to this report for reference. All recommendations presented in the referenced report remain valid except where superceded herein.

The plans have evolved since our preliminary report. The footprint of the structure has rotated and changed shaped, and the structure has been raised to avoid deep basement retaining walls and associated excavations. Retaining walls and associated excavations for the basement will now be about 7 to 8 ½ feet (maximum). For some reason, the base elevations of the topographic survey were changed (raised 89.27 feet). The Geologic Map and Section A have been revised to show the revised plan.

The following responses pertain to the referenced GMED letter.

Item G1 - A private sewage disposal system is not recommended for the subject site or proposed project. It is recommended to tie into the existing sewage system.

Item G2 - Due to the presence of several large oak trees on the building pad at the time of the exploration, exploration was not performed on the pad to conform with the Oak Tree Ordinance. The depth to bedrock was estimated from test pits performed on the adjacent slope beyond the oak trees, and is considered conservative with respect to construction of the proposed project. Shallower bedrock conditions may be encountered during construction.

Alluvial terrace deposits recommended for support of engineered structures are part of the Qal_4f unit of older alluvial deposits that cap the bedrock in this area of Altadena, near the base of the San Gabriel Mountains. These older deposits are part of the La Vina Fan. Discontinuous deposits of the Qal_3f unit of older alluvium has also been mapped along the margins of Millard Canyon. The surface between the bedrock and older alluvium is relatively planar in an east-west direction and is inclined gently toward the south. The surficial deposits mantling the slope and encountered in the test pits are better described as colluvium or more recent terrace deposits that are not part of the Qal_4f unit. The geologic cross sections and Geologic Map have been revised to reflect the distinction. The shear strengths reported for the Older Alluvium in our preliminary report are representative of colluvium or recent terrace deposit and are considered conservative for the Qal_4f unit of older alluvium. Retaining walls for the residence will be excavated into the cap of older alluvium near the top of slope and is not expected to encounter colluvium.

Item G3 - "Disturbed terrace" as described in the report was intended to refer to existing older alluvium that has been surficially disturbed due to activities at the site during construction. This may include, but not be limited to, the removal of roots and large bedrock fragments to prepare a bottom to receive compacted fill. To be consistent with the discussion above, any colluvium encountered excavations should be removed prior to placing compacted fill.

Item S1 - The gross stability of slopes was analyzed in our preliminary report in conformance with Los Angeles County Manual for Preparation of Geotechnical Report, dated July 2013 and the with Southern California Earthquake Center (SCEC), 2002, "*Recommended Procedures for Implementation of DMG Special Publication 117* and California Geological Survey (CGS), Special Publication 117A, 2008 "*Guidelines for Evaluating and Mitigating Seismic Hazards in California.*" Both documents indicate that Bishop's Method and circular-type failures surfaces are appropriate for homogenous to horizontally layered slopes. The SLIDE Ver 6.38 optimization feature only works for non-circular failure types.

Slope stability analyses have been revised as requested using Spencer's method and allowing the SLIDE program to optimize failure surfaces. The computed safety factors remain greater than 1.5 under static conditions and greater than 1.1 under seismic.

Item S2 - The phi angle of the "residual strength of the bedrock is considered reasonable for the quartz diorite bedrock in this area of the Altadena. A significant reduction in phi angle is not expected between the peak and "residual" strengths.

Item S3 - The proposed residence and other improvements are to be located at the top of slope and are remote to slopes and surificial deposits. The colluvium mantling the slope below the residence is not surficially stable, whether the site is developed with a residence of not, as is typical for all properties along Millard Canyon. There are no downslope structures and the active stream from Millard Canyon passes through site. The surficial instability potential will be reduced as a consequence of development by actively collecting anc conveying runoff to the storm drain system or the active creek via pipes and non-erosive drainage devises. Mitigation of the theoretical hazard does not appear reasonable or warranted for this project.

Item S4 - There is no technical reason for different embedment depths of friction piles versus shoring piles and page 21 of our preliminary report contains a typographical error. The shoring piles should be embedded at least 8 feet into alluvial terrace or bedrock to match the minimum embedment of friction piles.

Item S5 - As discussed above and shown on the revised cross sections, alluvial terrace deposits are not present on the slope below the residence. The colluvium is not recommended for foundation and/or slab support. The older alluvium shown on the revised Geologic Map and cross sections may be used for slab support.

Item S6 - The dynamic pressures and seismic increments contained in our preliminary report were determined following the guidelines contained in *Section 3.5.12 Retaining Walls*

of the Los Angeles County Manual for Preparation of Geotechnical Reports, dated July 2013 and following published standards and guidelines. Since BCM #35 pre-dates the County's Geotechnical Manual and the document appears to indicate that the prescriptive methodologies ***could*** be used in lieu more rigorous methods. It is not clear to the undersigned that BCM #35 ***shall*** be followed for all projects.

S_{DS} for this project was determined to be 1.768g. K_h is $S_{DS}/2.5$ = 0.707g. The unit weight of the older alluvium and retaining wall backfill is 130 pcf. Thus, according to BCM #35, the seismic increment for this project would be 35H^2 pounds, or an inverted equivalent fluid pressure of 70 pcf. While BCM #35 is certainly conservative for level backslopes, it is not clear why important parameters such as shear strength, retained height, backslope angle, earth material type, are to be ignored. Also, the assumed inverted distribution of pressure is contrary to modern studies and publications based on instrumented retaining walls.

Per BCM #35, retaining walls higher than 6 feet should be designed for a pressure of 35H^2. The resultant force should be applied at 0.6H.

Item S7 - The foundation setback for proposed structures should conform to the Code. The required setback is ⅓ the height of the slope with a minimum of five feet and a maximum of 40 feet measured horizontally from the base of the foundation to the slope face. On the subject property, the slope descends below the building area 115 feet at a roughly 1:1 gradient. The code required clearance is 39 feet for structures as illustrated on Section A.

Item S8 - The attached calculations indicate the vertical excavations in older alluvium with a 1:1 backslope are stable (FS > 1.25) up to 5 feet. The depth of the tension for the critical failure wedge is 4.5 feet.

As stated in the preliminary report, significant joints were not observed in the bedrock that would affect the stability of temporary excavations. The attached calculations indicate the vertical excavations in bedrock with a 1:1 backslope are stable (FS > 1.25) up to 10 feet. The depth of the tension for the critical failure wedge is 9.1 feet.

Based on the revised plan, the building has been reconfigured to have excavations and retaining walls on the order of 7 to 8 feet, maximum. Thus, bedrock is not anticipated for retaining wall excavations. It is recommended that the engineering geologist observe the excavations as they are being made to enure that field conditions are similar to the assumptions made for the calculations.

Item S9 - Relative to Code Section 111, provided that the recommendations contained in this report are included in the design and implemented in the field, the proposed improvements will not be subject to geologic and geotechnical hazards associated with settlement, slippage, landsliding, expansive soils, liquefaction or chemical attack. Also, construction of the project will not have an adverse effect on the existing structures or offsite properties.

Item S10 - This item is deferred to the civil/structural engineer.

Item S11 - This item is deferred to the civil/structural engineer.

Item S12 - The seismic factors shown on S1 of the plans still do not match the soils report. It is not clear where the values assumed for structural design came from.

Item S13 - We are not aware of existing foundations on the site. This note and reference does not appear to be on the existing foundations plans.

Item S14 - It should be noted that the elevations in the pile table do not conform to the elevations shown on the latest architectural plans and topographic survey. The elevations of the bedrock shown on geotechnical Section A, are based on mapping and experience, and are considered approximate. The elevations of the bedrock should be expected to vary 3 to 5 feet across the building area.

Item S15 - This item is deferred to the civil/structural engineer.

Item S16 - Acknowledged.

Item S17 - Acknowledged.

Item S18 - A copy of the referenced review sheet is enclosed.

Irvine Geotechnical appreciates the opportunity to provide our service on this project. Any questions concerning the data or interpretation of this or the referenced report should be directed to the undersigned.

Respectfully submitted,
Irvine Geotechnical, Inc.

Jon A. Irvine
E.G. 1691/G.E. 2891
R:\ICprojects\2014 Projects\IC14037 Kuhn\IC14037 Kuhn Addendum.wpd

Enc: *Geologic and Soils Engineering Review Sheet,* dated November 19, 2015
Calculation Sheets (18)
Section A
In pocket: Geologic Map

xc: (7) Addressee

IRVINE GEOTECHNICAL Inc

TEMPORARY EXCAVATION HEIGHT

IC: **14037-C** CONSULT: **JAI**
CLIENT: **KUHN**

CALCULATION SHEET #

CALCULATE THE HEIGHT TO WHICH TEMPORARY EXCAVATIONS ARE STABLE (NEGATIVE THRUST). THE EXCAVATION HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE EARTH MATERIAL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE.

CALCULATION PARAMETERS

EARTH MATERIAL:	BEDROCK	WALL HEIGHT:	10 feet
SHEAR DIAGRAM:	B-3	BACKSLOPE ANGLE:	45 degrees
COHESION:	770 psf	SURCHARGE:	0 pounds
PHI ANGLE:	49 degrees	SURCHARGE TYPE:	U Uniform
DENSITY:	147 pcf	INITIAL FAILURE ANGLE:	17 degrees
SAFETY FACTOR:	1.25	FINAL FAILURE ANGLE:	70 degrees
WALL FRICTION:	0 degrees	INITIAL TENSION CRACK:	2 feet
CD (C/FS):	616.0 psf	FINAL TENSION CRACK:	30 feet
PHID = ATAN(TAN(PHI)/FS) =	42.6 degrees		

CALCULATED RESULTS

CRITICAL FAILURE ANGLE	55 degrees
AREA OF TRIAL FAILURE WEDGE	19.1 square feet
TOTAL EXTERNAL SURCHARGE	0.0 pounds
WEIGHT OF TRIAL FAILURE WEDGE	2814.1 pounds
NUMBER OF TRIAL WEDGES ANALYZED	1566 trials
LENGTH OF FAILURE PLANE	3.5 feet
DEPTH OF TENSION CRACK	9.1 feet
HORIZONTAL DISTANCE TO UPSLOPE TENSION CRACK	2.0 feet
CALCULATED HORIZONTAL THRUST	**-1000.6 pounds**
CALCULATED EQUIVALENT FLUID PRESSURE	**-20.0 pcf**
MAXIMUM HEIGHT OF TEMPORARY EXCAVATION	**10.0 feet**

CONCLUSIONS:

THE CALCULATION INDICATES THAT TEMPORARY VERTICAL EXCAVATIONS IN BEDROCK, AND UP TO 10 FEET HIGH, HAVE A NEGATIVE THRUST AND ARE TEMPORARILY STABLE.

IRVINE GEOTECHNICAL Inc

TEMPORARY EXCAVATION HEIGHT

IC: **14037-C** CONSULT: **JAI**
CLIENT: **KUHN**

CALCULATION SHEET #

CALCULATE THE HEIGHT TO WHICH TEMPORARY EXCAVATIONS ARE STABLE (NEGATIVE THRUST). THE EXCAVATION HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE EARTH MATERIAL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE.

CALCULATION PARAMETERS

EARTH MATERIAL:	BEDROCK	WALL HEIGHT:	10 feet
SHEAR DIAGRAM:	B-3	BACKSLOPE ANGLE:	45 degrees
COHESION:	770 psf	SURCHARGE:	0 pounds
PHI ANGLE:	49 degrees	SURCHARGE TYPE:	U Uniform
DENSITY:	147 pcf	INITIAL FAILURE ANGLE:	17 degrees
SAFETY FACTOR:	1.25	FINAL FAILURE ANGLE:	70 degrees
WALL FRICTION:	0 degrees	INITIAL TENSION CRACK:	2 feet
CD (C/FS):	616.0 psf	FINAL TENSION CRACK:	30 feet
PHID = ATAN(TAN(PHI)/FS) =	42.6 degrees		

CALCULATED RESULTS

CRITICAL FAILURE ANGLE	55 degrees
AREA OF TRIAL FAILURE WEDGE	19.1 square feet
TOTAL EXTERNAL SURCHARGE	0.0 pounds
WEIGHT OF TRIAL FAILURE WEDGE	2814.1 pounds
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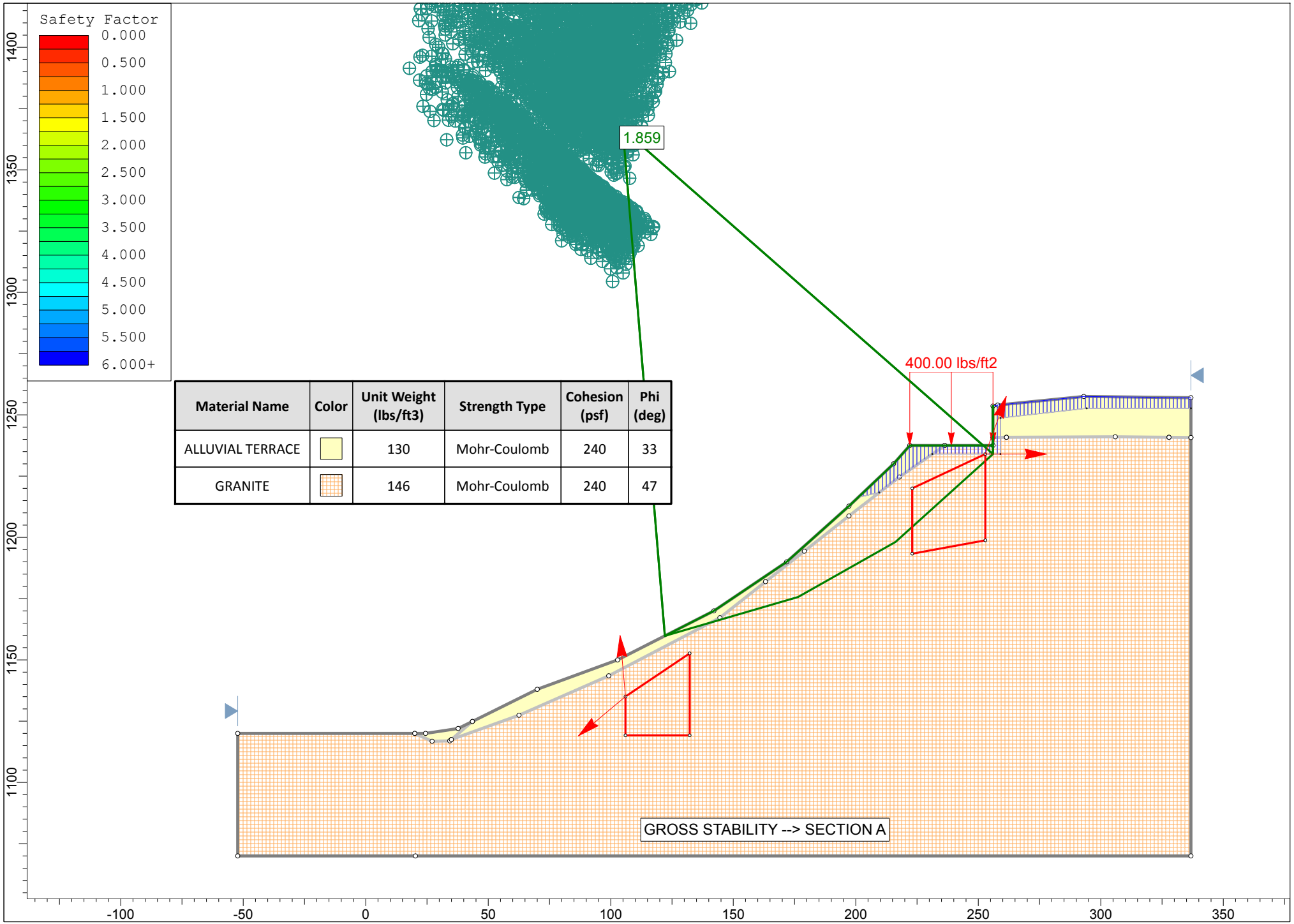
CALCULATED HORIZONTAL THRUST	**-1000.6 pounds**
CALCULATED EQUIVALENT FLUID PRESSURE	**-20.0 pcf**
MAXIMUM HEIGHT OF TEMPORARY EXCAVATION	**10.0 feet**

CONCLUSIONS:

THE CALCULATION INDICATES THAT TEMPORARY VERTICAL EXCAVATIONS IN BEDROCK, AND UP TO 10 FEET HIGH, HAVE A NEGATIVE THRUST AND ARE TEMPORARILY STABLE.



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
ALLUVIAL TERRACE		130	Mohr-Coulomb	240	33
GRANITE		146	Mohr-Coulomb	240	47

Slide Analysis Information

KUHN - CANYON CREST

Project Summary

File Name: IC14037KuhnSecA2.slim
Slide Modeler Version: 6.038
Project Title: KUHN - CANYON CREST
Analysis: GROSS STABILITY - SECTION A

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Spencer

Number of slices: 25
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Non-Circular Block Search
Number of Surfaces: 5000

Pseudo-Random Surfaces: Enabled
Convex Surfaces Only: Disabled
Left Projection Angle (Start Angle): 95
Left Projection Angle (End Angle): 220
Right Projection Angle (Start Angle): 70
Right Projection Angle (End Angle): 0
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Loading

1 Distributed Load present

Distributed Load 1

Distribution: Constant
Magnitude [psf]: 400
Orientation: Normal to boundary

Tension Crack

Tension crack Water level: filled with water

Material Properties

Property	ALLUVIAL TERRACE	GRANITE
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	130	146
Cohesion [psf]	240	240
Friction Angle [deg]	33	47
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: spencer

FS: 1.859150
Axis Location: 104.937, 1366.656
Left Slip Surface Endpoint: 122.083, 1159.813
Right Slip Surface Endpoint: 256.005, 1234.007
Left Slope Intercept: 122.083 1159.813
Right Slope Intercept: 256.005 1253.586
Resisting Moment=6.91152e+007 lb-ft
Driving Moment=3.71758e+007 lb-ft
Resisting Horizontal Force=291338 lb
Driving Horizontal Force=156705 lb
Total Slice Area=2259.03 ft2

Global Minimum Coordinates

Method: spencer

X	Y
122.083	1159.81
176.446	1175.69
216.226	1198.15
256.005	1234.01
256.006	1253.59

Valid / Invalid Surfaces

Method: spencer

Number of Valid Surfaces: 2973
Number of Invalid Surfaces: 2028

Error Codes:

Error Code -108 reported for 162 surfaces
Error Code -111 reported for 288 surfaces
Error Code -112 reported for 1578 surfaces

Error Codes

The following errors were encountered during the computation:

-108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
-111 = safety factor equation did not converge
-112 = The coefficient M-Alpha = cos(alpha)(1+tan(alpha)tan(phi)/F) < 0.2 for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.

Slice Data

Global Minimum Query (spencer) - Safety Factor: 1.85915

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	6.23926	548.591	ALLUVIAL TERRACE	240	33	173.679	322.894	127.646	0	127.646
2	6.23926	1645.77	ALLUVIAL TERRACE	240	33	231.404	430.215	292.905	0	292.905
3	6.23926	2742.95	ALLUVIAL TERRACE	240	33	289.129	537.535	458.164	0	458.164
4	5.09223	3257.3	GRANITE	240	47	533.909	992.616	701.825	0	701.825
5	5.09223	4700.58	GRANITE	240	47	700.783	1302.86	991.133	0	991.133
6	5.09223	6191.86	GRANITE	240	47	873.205	1623.42	1290.06	0	1290.06
7	5.09223	7683.13	GRANITE	240	47	1045.63	1943.98	1588.99	0	1588.99

8	5.09223	9174.4	GRANITE	240	47	1218.05	2264.54	1887.93	0	1887.93
9	5.09223	10665.7	GRANITE	240	47	1390.47	2585.1	2186.85	0	2186.85
10	5.09223	12468.7	GRANITE	240	47	1598.95	2972.69	2548.26	0	2548.26
11	5.68279	15914.5	GRANITE	240	47	1360.76	2529.86	2135.33	0	2135.33
12	5.68279	17420.3	GRANITE	240	47	1476.77	2745.54	2336.45	0	2336.45
13	5.68279	18926.1	GRANITE	240	47	1592.78	2961.21	2537.58	0	2537.58
14	5.68279	20444.6	GRANITE	240	47	1709.77	3178.71	2740.39	0	2740.39
15	5.68279	22116.4	GRANITE	240	47	1838.57	3418.17	2963.69	0	2963.69
16	5.68279	23833	GRANITE	240	47	1970.82	3664.05	3192.98	0	3192.98
17	5.68279	25557.6	GRANITE	240	47	2103.69	3911.07	3423.33	0	3423.33
18	4.97244	23536.5	GRANITE	240	47	1692.28	3146.21	2710.09	0	2710.09
19	4.97244	22937.4	GRANITE	240	47	1762.61	3276.95	2831.99	0	2831.99
20	4.97244	20010.4	GRANITE	240	47	1589.52	2955.16	2531.92	0	2531.92
21	4.97244	17031.1	GRANITE	240	47	1390.36	2584.88	2186.64	0	2186.64
22	4.97244	13924.4	GRANITE	240	47	1182.67	2198.77	1826.59	0	1826.59
23	4.97244	10670.6	GRANITE	240	47	965.156	1794.37	1449.47	0	1449.47
24	4.97244	7416.48	GRANITE	240	47	747.621	1389.94	1072.34	0	1072.34
25	4.97244	4167.94	GRANITE	240	47	0	0	-223.804	0	-223.804

Interslice Data

Global Minimum Query (spencer) - Safety Factor: 1.85915

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	122.083	1159.81	0	0	0
2	128.322	1161.64	850.993	564.356	33.5513
3	134.561	1163.46	1760.97	1167.83	33.5513
4	140.8	1165.28	2729.92	1810.41	33.5513
5	145.893	1166.77	4404.78	2921.14	33.5513
6	150.985	1168.26	6499.08	4310.02	33.5513
7	156.077	1169.74	9026.76	5986.31	33.5513
8	161.169	1171.23	11987.8	7950	33.5513
9	166.262	1172.72	15382.3	10201.1	33.5512
10	171.354	1174.21	19210.1	12739.6	33.5512
11	176.446	1175.69	23561.9	15625.6	33.5512
12	182.129	1178.9	24444.7	16211.1	33.5513
13	187.812	1182.11	25341.5	16805.8	33.5513
14	193.494	1185.32	26252.4	17409.9	33.5513
15	199.177	1188.52	27177.5	18023.4	33.5513
16	204.86	1191.73	28118.1	18647.2	33.5513
17	210.543	1194.94	29074.8	19281.6	33.5512
18	216.226	1198.15	30047.6	19926.8	33.5513
19	221.198	1202.63	26314.9	17451.3	33.5512
20	226.17	1207.11	22385.4	14845.4	33.5513
21	231.143	1211.6	18940.3	12560.7	33.5513
22	236.115	1216.08	16052.5	10645.6	33.5513
23	241.088	1220.56	13745.9	9115.93	33.5513

24	246.06	1225.04	12048.1	7989.98	33.5513
25	251.033	1229.53	10959	7267.74	33.5514
26	256.005	1234.01	11962.2	0	0

List Of Coordinates

Distributed Load

X	Y
256	1237.5
236.3	1237.5
222.043	1237.5

Tension Crack

X	Y
200.982	1216.33
209.576	1218.3
231.272	1234.01
259.027	1234.01
259.027	1248.72
294.271	1252.7
336.8	1252.7

Block Search Window

X	Y
105.989	1135.06
105.989	1119.24
132.204	1119.24
132.204	1152.69

Block Search Window

X	Y
223.052	1220.03
223.052	1193.37
252.883	1198.79
252.883	1234.01

External Boundary

X	Y
257.9	1254
256.005	1253.59
256.001	1240.78
256	1237.5
236.3	1237.5
222.043	1237.5

215.4	1230
197.2	1212.75
171.8	1190
142.1	1170
102.8	1150
70	1138
43.5442	1124.89
37.7	1122
24.4	1120
20	1120
-52.2558	1120
-52.2558	1070
20.2817	1070
336.8	1070
336.8	1240.77
336.8	1257
293.066	1257.5

Material Boundary

X	Y
256.001	1240.78
261.523	1240.85

Material Boundary

X	Y
34.9592	1117.53
62.5242	1127.43
99.1773	1143.52
144.553	1167.24
163.165	1181.92
179	1194.4
197.2	1208.75
217.789	1224.64
236.3	1237.5

Material Boundary

X	Y
261.523	1240.85
305.906	1241.05
327.842	1240.85

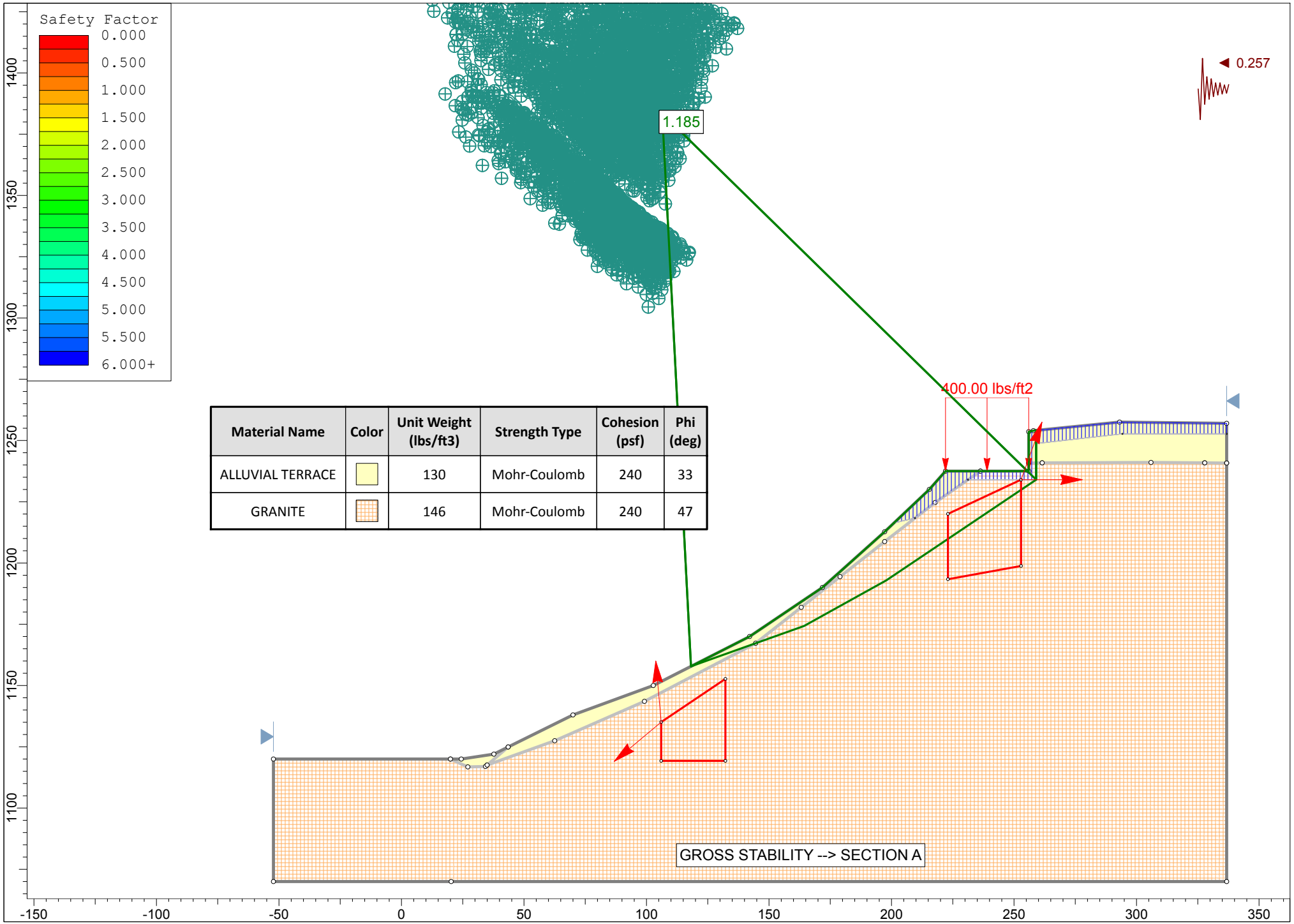
Material Boundary

X	Y
20	1120
27.0962	1116.79

34.3008	1116.96
34.9592	1117.53
43.5442	1124.89

Material Boundary

X	Y
327.842	1240.85
336.8	1240.77



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
ALLUVIAL TERRACE		130	Mohr-Coulomb	240	33
GRANITE		146	Mohr-Coulomb	240	47

Slide Analysis Information

KUHN - CANYON CREST

Project Summary

File Name: IC14037KuhnSecA2 SEIS.slim
Slide Modeler Version: 6.038
Project Title: KUHN - CANYON CREST
Analysis: GROSS STABILITY - SECTION A

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Spencer

Number of slices: 25
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Non-Circular Block Search
Number of Surfaces: 5000

Pseudo-Random Surfaces: Enabled
Convex Surfaces Only: Disabled
Left Projection Angle (Start Angle): 95
Left Projection Angle (End Angle): 220
Right Projection Angle (Start Angle): 70
Right Projection Angle (End Angle): 0
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Loading

Seismic Load Coefficient (Horizontal): 0.257
1 Distributed Load present

Distributed Load 1

Distribution: Constant
Magnitude [psf]: 400
Orientation: Normal to boundary

Tension Crack

Tension crack Water level: filled with water

Material Properties

Property	ALLUVIAL TERRACE	GRANITE
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	130	146
Cohesion [psf]	240	240
Friction Angle [deg]	33	47
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: spencer

FS: 1.184910
Axis Location: 106.401, 1383.452
Left Slip Surface Endpoint: 118.167, 1157.821
Right Slip Surface Endpoint: 259.027, 1234.007
Left Slope Intercept: 118.167 1157.821
Right Slope Intercept: 259.027 1254.112
Resisting Moment=5.41825e+007 lb-ft
Driving Moment=4.57273e+007 lb-ft
Resisting Horizontal Force=221200 lb
Driving Horizontal Force=186681 lb
Total Slice Area=1920.04 ft2

Global Minimum Coordinates

Method: spencer

X	Y
118.167	1157.82
164.273	1174.28
197.878	1192.92
259.027	1234.01
259.028	1254.11

Valid / Invalid Surfaces

Method: spencer

Number of Valid Surfaces: 2749
Number of Invalid Surfaces: 2252

Error Codes:

Error Code -108 reported for 73 surfaces
Error Code -111 reported for 168 surfaces
Error Code -112 reported for 2011 surfaces

Error Codes

The following errors were encountered during the computation:

-108 = Total driving moment or total driving force < 0.1. This is to limit the calculation of extremely high safety factors if the driving force is very small (0.1 is an arbitrary number).
-111 = safety factor equation did not converge
-112 = The coefficient M-Alpha = cos(alpha)(1+tan(alpha)tan(phi)/F) < 0.2 for the final iteration of the safety factor calculation. This screens out some slip surfaces which may not be valid in the context of the analysis, in particular, deep seated slip surfaces with many high negative base angle slices in the passive zone.

Slice Data

Global Minimum Query (spencer) - Safety Factor: 1.18491

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	5.27707	274.842	ALLUVIAL TERRACE	240	33	292.859	347.012	164.785	0	164.785
2	5.27707	824.526	ALLUVIAL TERRACE	240	33	335.178	397.156	242	0	242
3	5.27707	1374.21	ALLUVIAL TERRACE	240	33	377.497	447.3	319.214	0	319.214
4	5.27707	1923.89	ALLUVIAL TERRACE	240	33	419.816	497.444	396.43	0	396.43
			ALLUVIAL							

			TERRACE							
6	4.9301	3409.93	GRANITE	240	47	946.092	1121.03	821.578	0	821.578
7	4.9301	4577.21	GRANITE	240	47	1150.35	1363.06	1047.27	0	1047.27
8	4.9301	5744.5	GRANITE	240	47	1354.62	1605.1	1272.97	0	1272.97
9	4.9301	6911.78	GRANITE	240	47	1558.88	1847.13	1498.67	0	1498.67
10	5.6008	8816.34	GRANITE	240	47	1190.77	1410.95	1091.93	0	1091.93
11	5.6008	9613.85	GRANITE	240	47	1273.99	1509.56	1183.88	0	1183.88
12	5.6008	11068.9	GRANITE	240	47	1425.83	1689.48	1351.66	0	1351.66
13	5.6008	12577.6	GRANITE	240	47	1583.26	1876.02	1525.62	0	1525.62
14	5.6008	14086.3	GRANITE	240	47	1740.7	2062.57	1699.58	0	1699.58
15	5.6008	15596.4	GRANITE	240	47	1898.29	2249.3	1873.7	0	1873.7
16	6.11491	18577.5	GRANITE	240	47	1733.71	2054.29	1691.85	0	1691.85
17	6.11491	19978.4	GRANITE	240	47	1846.04	2187.39	1815.97	0	1815.97
18	6.11491	21387.2	GRANITE	240	47	1959	2321.24	1940.79	0	1940.79
19	6.11491	23319.7	GRANITE	240	47	2126.62	2519.85	2125.99	0	2125.99
20	6.11491	22553.9	GRANITE	240	47	2315.13	2743.22	2334.29	0	2334.29
21	6.11491	19300.9	GRANITE	240	47	2054.29	2434.15	2046.08	0	2046.08
22	6.11491	15941.2	GRANITE	240	47	1784.9	2114.95	1748.41	0	1748.41
23	6.11491	12289.3	GRANITE	240	47	1492.09	1767.99	1424.88	0	1424.88
24	6.11491	8620.74	GRANITE	240	47	1197.94	1419.45	1099.85	0	1099.85
25	6.11491	11556.7	GRANITE	240	47	0	0	-251.118	0	-251.118

Interslice Data

Global Minimum Query (spencer) - Safety Factor: 1.18491

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	118.167	1157.82	0	0	0
2	123.444	1159.7	1164.32	1146.57	44.5599
3	128.721	1161.59	2265.19	2230.66	44.56
4	133.999	1163.47	3302.62	3252.27	44.5599
5	139.276	1165.36	4276.61	4211.41	44.5599
6	144.553	1167.24	5179.73	5100.77	44.5599
7	149.483	1169	7521.44	7406.78	44.5599
8	154.413	1170.76	10172.9	10017.8	44.5599
9	159.343	1172.52	13134.1	12933.8	44.5598
10	164.273	1174.28	16404.9	16154.9	44.5601
11	169.874	1177.39	17417.5	17152	44.56
12	175.475	1180.49	18405.7	18125.1	44.5599
13	181.075	1183.6	19349.3	19054.4	44.56
14	186.676	1186.71	20246.8	19938.1	44.5599
15	192.277	1189.81	21098.1	20776.5	44.56
16	197.878	1192.92	21903.2	21569.3	44.5599
17	203.993	1197.02	20778.2	20461.4	44.5599
18	210.108	1201.13	19470.1	19173.2	44.5598
19	216.223	1205.24	17977.7	17703.7	44.56
20	222.338	1209.35	16252.6	16004.9	44.56

21	228.452	1213.46	15021.2	14792.2	44.5599
22	234.567	1217.57	14215.1	13998.4	44.5599
23	240.682	1221.68	13848.2	13637.1	44.56
24	246.797	1225.79	13958.9	13746.1	44.5599
25	252.912	1229.9	14549.2	14327.4	44.5599
26	259.027	1234.01	12611	0	0

List Of Coordinates

Distributed Load

X	Y
256	1237.5
236.3	1237.5
222.043	1237.5

Tension Crack

X	Y
200.982	1216.33
209.576	1218.3
231.272	1234.01
259.027	1234.01
259.027	1248.72
294.271	1252.7
336.8	1252.7

Block Search Window

X	Y
105.989	1135.06
105.989	1119.24
132.204	1119.24
132.204	1152.69

Block Search Window

X	Y
223.052	1220.03
223.052	1193.37
252.883	1198.79
252.883	1234.01

External Boundary

X	Y
257.9	1254
256.005	1253.59
256.001	1240.78

256	1237.5
236.3	1237.5
222.043	1237.5
215.4	1230
197.2	1212.75
171.8	1190
142.1	1170
102.8	1150
70	1138
43.5442	1124.89
37.7	1122
24.4	1120
20	1120
-52.2558	1120
-52.2558	1070
20.2817	1070
336.8	1070
336.8	1240.77
336.8	1257
293.066	1257.5

Material Boundary

X	Y
256.001	1240.78
261.523	1240.85

Material Boundary

X	Y
34.9592	1117.53
62.5242	1127.43
99.1773	1143.52
144.553	1167.24
163.165	1181.92
179	1194.4
197.2	1208.75
217.789	1224.64
236.3	1237.5

Material Boundary

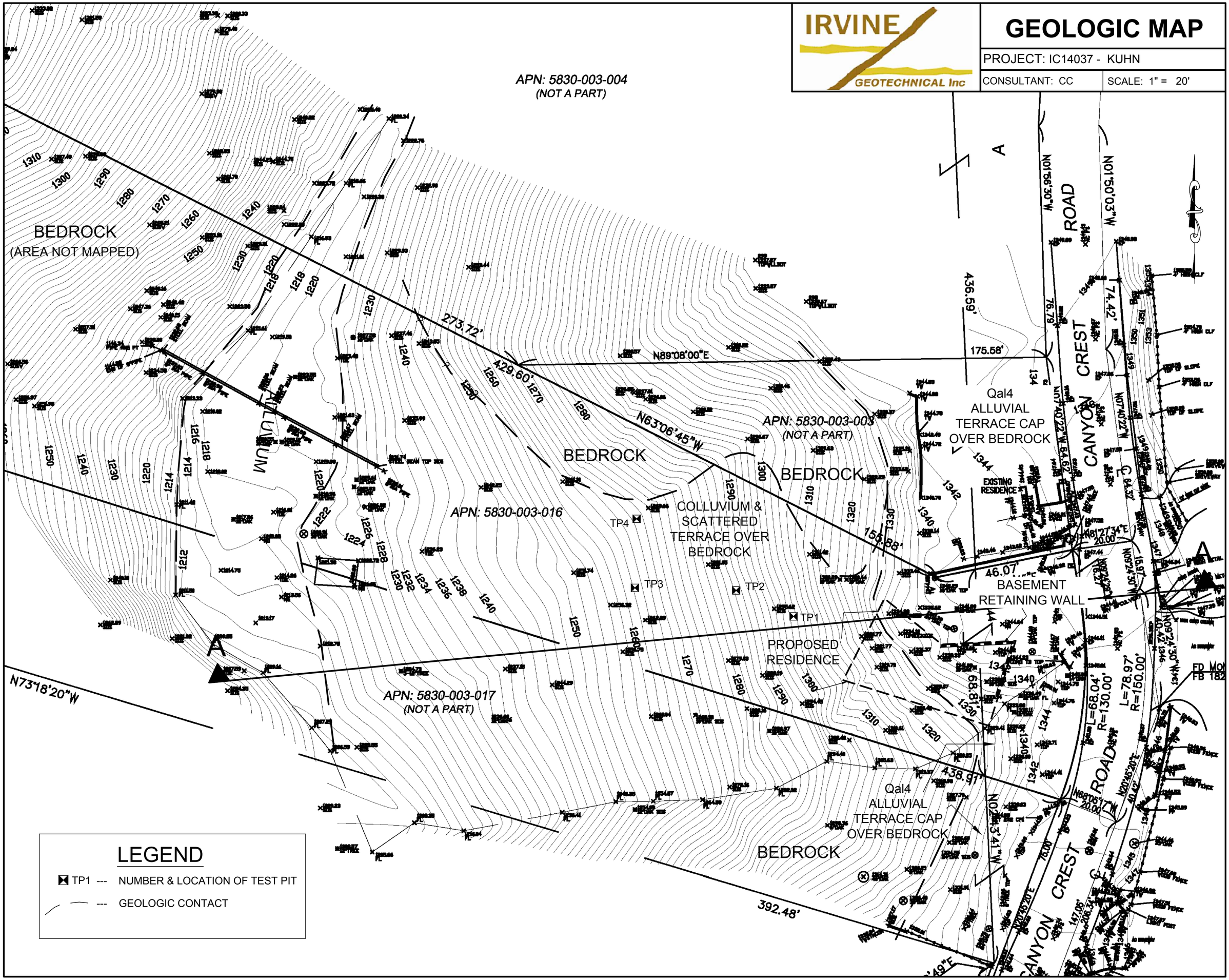
X	Y
261.523	1240.85
305.906	1241.05
327.842	1240.85

Material Boundary

X	Y
20	1120
27.0962	1116.79
34.3008	1116.96
34.9592	1117.53
43.5442	1124.89

Material Boundary

X	Y
327.842	1240.85
336.8	1240.77

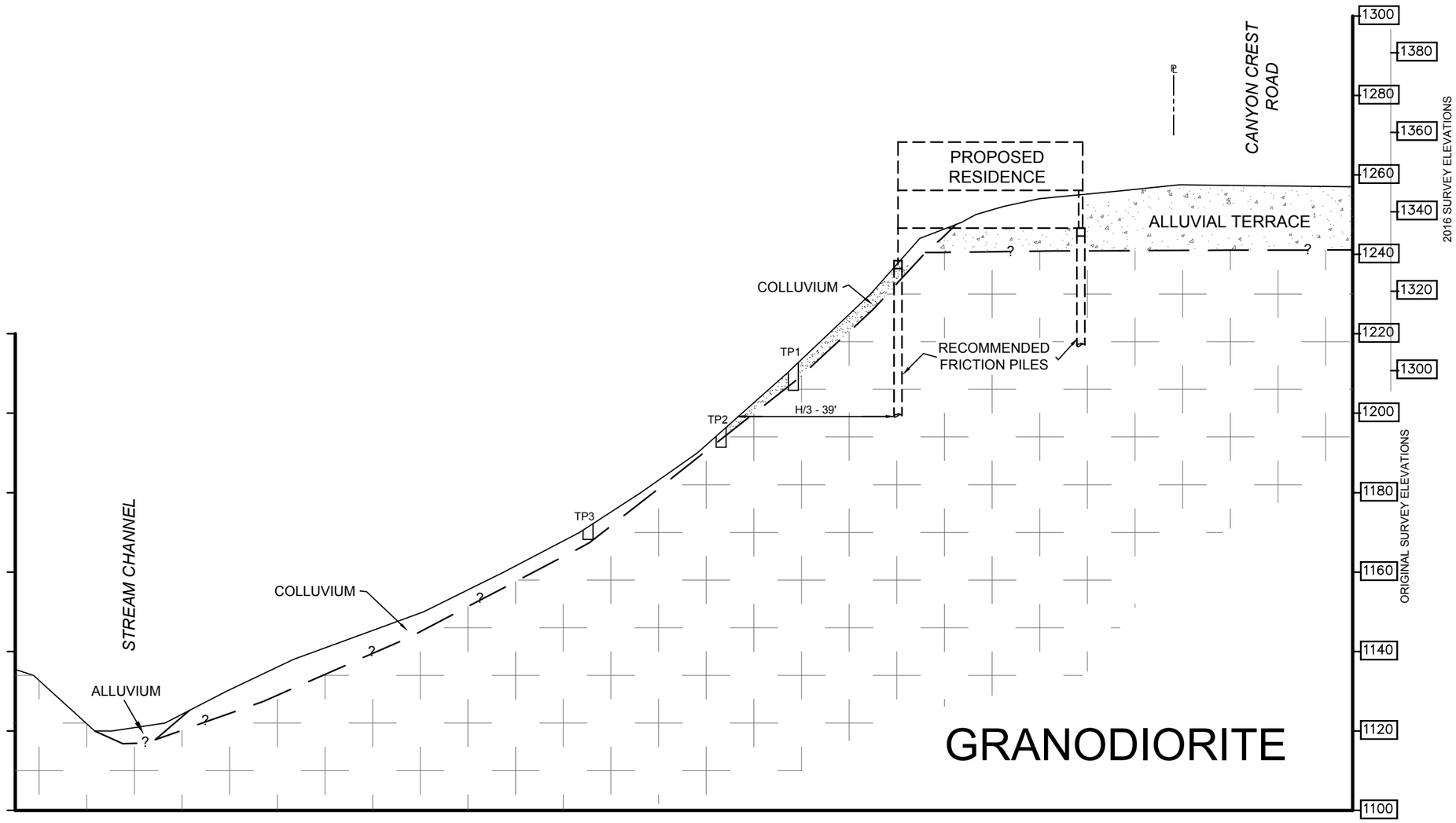

IRVINE GEOTECHNICAL Inc
GEOLOGIC MAP
PROJECT: IC14037 - KUHN
CONSULTANT: CC
SCALE: 1" = 20'
APN: 5830-003-004
(NOT A PART)
BEDROCK
(AREA NOT MAPPED)
273.72'
429.60'
N89°08'00"E
175.58'
436.59'
N63°06'45"W
APN: 5830-003-003
(NOT A PART)
BEDROCK
BEDROCK
Qal4
ALLUVIAL
TERRACE CAP
OVER BEDROCK
EXISTING RESIDENCE
CANYON CREST ROAD
N01°56'30"W
N01°50'03"W
74.42'
76.79'
APN: 5830-003-016
TP4
COLLUVIUM &
SCATTERED
TERRACE OVER
BEDROCK
155.88'
46.07'
BASEMENT
RETAINING WALL
TP3
TP2
TP1
PROPOSED
RESIDENCE
N73°18'20"W
APN: 5830-003-017
(NOT A PART)
68.81'
L=68.04'
R=130.00'
L=78.97'
R=150.00'
438.91'
Qal4
ALLUVIAL
TERRACE CAP
OVER BEDROCK
BEDROCK
392.48'
CANYON CREST ROAD
LEGEND
TP1 --- NUMBER & LOCATION OF TEST PIT
--- GEOLOGIC CONTACT

IRVINE GEOTECHNICAL Inc

SECTION A - A

PROJECT: IC14037 - KUHN

CONSULTANT: CC | SCALE: 1" = 30'



GEOLOGIC AND SOILS ENGINEERING EXPLORATION

PROPOSED RESIDENCE

LOT C, TRACT 7344

APN 5830-003-016

CANYON CREST ROAD

ALTADENA, CALIFORNIA

FOR STEPHEN KUHN

IRVINE GEOTECHNICAL, INC. PROJECT NUMBER IC 14037-C

APRIL 17, 2014

TABLE OF CONTENTS

EXPLORATION 2

RESEARCH 3

PROPOSED PROJECT 3

SITE DESCRIPTION 4

GROUNDWATER 5

EARTH MATERIALS 5
- Fill 5
- Alluvial Terrace 5
- Bedrock 6

GEOLOGIC STRUCTURE 6

GENERAL SEISMIC CONSIDERATIONS 6
- Alquist-Priolo Fault Rupture Hazard Study Zone 7
- Building Code Seismic Coefficients 8
- Seismic Hazards 8
- Seismic Hazard Zones 9

SLOPE STABILITY 10
- Gross Stability 10
- Surficial Stability 11

CONCLUSIONS AND RECOMMENDATIONS 11
- General Findings 11
- Geotechnical Issues 11
- Section 111 12

SITE PREPARATION 12
- General Grading Specifications 12
- Fill Slopes 13
- Excavation Characteristics 13

FOUNDATION DESIGN 14
- Spread Footings 14
- Deepened Foundations - Friction Piles 15
- Lateral Design 16
- Foundation Settlement 17
- Foundation Setback 17

RETAINING WALLS 17
General Design - Static Loading 17
Seismic Surcharge 18
Surcharge Loading 19
Subdrain 19
Backfill 19
Freeboard 20

TEMPORARY EXCAVATIONS 20
Shoring 20
Deflection Monitoring 22

CORROSION 22

FLOOR SLABS & CONCRETE DECKING 23

DRAINAGE 25

WATERPROOFING 25

SITE OBSERVATIONS DURING CONSTRUCTION 26

STATEMENT OF RESPONSIBILITY - SOIL TESTING BY SOIL LABWORKS, LLC 29

INTRODUCTION

This report has been prepared per our agreement and summarizes findings of Irvine Geotechnical's geologic and soils geotechnical engineering exploration performed on the site. The purpose of this study is to evaluate the nature, distribution, engineering properties, relative stability, and geologic structure of the earth materials underlying the site with respect to the design and construction of the proposed project.

INTENT

It is the intent of this report to assist in the design and completion of the proposed project. The recommendations are intended to reduce geotechnical risks affecting the project. The

professional opinions and advice presented in this report are based upon commonly accepted standards and are subject to the general conditions described in the NOTICE section of this report.

EXPLORATION

The scope of the field exploration was determined from our initial site visit and consultation with the client. The preliminary sketch prepared by the client was considered prior to beginning work on this project. The topographic map prepared by RB Engineers, Inc., dated February 20, 2014, was used during exploration and as a base map for the Geologic Map. Exploration was conducted using techniques normally applied to this type of project in this setting. This report is limited to the area of the exploration and the proposed project as shown on the enclosed Geologic Map and cross section. Conditions affecting portions of the property outside the area explored are beyond the scope of this report.

Exploration was conducted on March 18, 2014, with the aid of hand labor, and included excavating 4 test pits to a maximum depth of 7 feet. Samples of the earth materials were obtained and delivered to the soils engineering laboratory of Soil Labworks, LLC, for testing and analysis. Downhole observation of the earth materials was performed by the engineering geologist.

It should be noted that only the portion of the site relevant to the proposed project was explored; exploration of the northwest portion of the property, beyond the stream, was not performed. Additionally, due to the occurrence of several mature oak trees on the easternmost portion of the site, exploration was performed farther downslope to comply with the County's oak tree ordinance.

Office tasks included laboratory testing of selected soil samples, researching records on file at the County of Los Angeles, reviewing historical topographic maps and aerial

photographs, preparing the Geologic Map and cross section, and performing engineering analysis. Earth materials exposed in the test pits are described on the enclosed Log of Test Pits. Appendix I contains a discussion of the laboratory testing procedures and results.

The proposed project, surface geologic conditions, and the location of the test pits are shown on the Geologic Map. Subsurface distribution of the earth materials, projected geologic structure, and the proposed project are shown on Section A, which also forms the basis for the enclosed stability calculations.

RESEARCH

The building and grading records of the County of Los Angeles Department of Public Works Building and Safety were researched prior to preparing this report. The records did not contain geotechnical reports concerning the subject property.

PROPOSED PROJECT

Information concerning the proposed project was provided by the client. The preliminary sketch prepared by the client was a guide for exploring the site and preparing this report. It is proposed to construct a two-story to three-story single-family residence on the eastern portion of the property, adjacent to Canyon Crest Road. The uppermost level is planned to be coincident with the street grade, and the lower levels will be notched into the descending slope. Retaining walls up to 20 feet high are planned to support the below-grade levels. Grading will be limited to removals for the lower levels and backfilling of retaining walls.

Formal plans have not been prepared and await the conclusions and recommendations of this report.

SITE DESCRIPTION

The subject property consists of a partially graded and vacant hillside lot, near the base of the southwest flank of the San Gabriel Mountains, in the Altadena section of the County of Los Angeles, California. It is located on the west side of Canyon Crest Road, about ⅓ mile northwest of the intersection of West Alta Loma Drive and Lincoln Avenue, and about 1⅓ miles northeast of the Foothill (210) Freeway. The Jet Propulsion Laboratory campus is located about a quarter of a mile to the southwest. A small graded pad exists on the northeast corner of the eastern portion of the subject property. The surrounding area is developed with scattered single-family residences.

Topographically, the site consists of an east-facing slope and a west-facing slope, with a stream running southward though the central portion. The east-facing slope is situated on the nose of a southeast-trending secondary ridge. The west-facing slope is situated on the western flank of a dissected older alluvial deposit. Physical relief over the site is about 170 feet on the western portion of the site, and about 130 on the eastern portion, measured from the tops of the slopes to the axis of the stream channel. The gradient of the east-facing slope is generally 1:1 (H:V, 45 degrees), and locally as flat as 2:1 (26 degrees) and as steep as 0.7:1 (55 degrees). The gradient of the west-facing slope, where the proposed project is planned, is generally 1:1 (45 degrees) in the upper portions, and flattens to 3:1 (18 degrees) as it approaches the stream channel.

Vegetation on the site consists of several mature oak trees and a thick assemblage of native grasses and shrubs. Surface drainage generally is by sheet flow runoff down the contours of the land toward the stream channel at the central portion of the lot.

GROUNDWATER

Groundwater was not encountered in the test pits during exploration; however, surficial water was observed flowing southward in the stream axis at the central portion of the property. Seasonal fluctuations in groundwater levels may occur due to variations in climate, irrigation, and other factors not evident at the time of the exploration. Fluctuations in groundwater levels may also occur across the site.

EARTH MATERIALS

Fill

Although not encountered during the exploration, fill is anticipated to blanket the uppermost portion of the west-facing slope in the area of the proposed project. The fill likely consists of admixtures of silts, sands, and gravel derived from onsite or nearby sources. The fill is expected to be thickest along the western portion of the small pad.

Alluvial Terrace

Older alluvial fan deposits mapped on the site consist of materials shed from the San Gabriel Mountains to the north (R. Crook, Jr., *et al*, *Quaternary Geology and Seismic Hazard of the Sierra Madre and Associated Faults, Western San Gabriel Mountains*, in *Recent Reverse Faulting in the Transverse Ranges California*: United States Geologic Survey Professional Paper 1339, Plates 2.1 and 2.2, 1987). The majority of the proposed building pad and upper portion of the eastern slope is underlain by the Qal_4f unit, dated between 200,000 years to the middle Quaternary. Canyon Crest Road at the top of the slope is underlain by the younger Qal_3f unit, dated between 11,000 years to 200,000 years. These units were deposited on the granitic basement rocks and were later incised by stream development near the center of the property.

For the purposes of this report, all older alluvial fan material overlying the bedrock will be referred to as "alluvial terrace" and "older alluvium" interchangeably.

Natural alluvial terrace deposits underlie the subject property and were encountered in all of the test pits. The terrace deposits consist of silty sand that is gray-brown, very slightly moist to moist, porous, medium dense, and contains roots, rootlets, gravel to 2 inches in diameter, cobbles to 4 inches in diameter, and boulders to 4 feet in diameter.

Bedrock

Bedrock underlying the site and encountered in the test pits consists of granodiorite as mapped by Crook, Jr., *et al* (1987). The bedrock is well exposed in slopes along the northeast portion of the site, as shown on the Geologic Map. The granodiorite is light brown to light orange-brown, massive, tight, moderately weathered, and moderately hard. For simplicity, the bedrock will be referred to herein as "granite."

GEOLOGIC STRUCTURE

The alluvial terrace and bedrock described are common to this area of the San Gabriel Mountains and the geologic structure is consistent with regional trends. The alluvial terrace and granite are generally massive to horizontally-layered and lacks significant structural planes. Joint planes observed in the bedrock are randomly-oriented and steeply-dipping. The massive nature of both the alluvial terrace and the bedrock are favorably-oriented for stability of the site and proposed project.

GENERAL SEISMIC CONSIDERATIONS

Southern California is located in an active seismic region and numerous known and undiscovered earthquake faults are present in the region. Hazards associated with fault

rupture and earthquakes include direct affects such as strong ground shaking and ground rupture, as well as secondary affects such as liquefaction, landsliding and lurching. The United States Geological Survey (USGS), California Geologic Survey (CGS), Southern California Earthquake Center (SCEC), private consultants and universities have been studying earthquakes in southern California for several decades. Early studies were directed toward earthquake prediction and early warning of strong ground shaking. Research and practice have shown that earthquake prediction is not practical or sufficiently accurate to benefit the general public. Also, several recent and damaging earthquakes have occurred on faults that were unknown prior to rupture. Current standards and the California Building Code call for earthquake resistant design of structures as opposed to prediction.

Alquist-Priolo Fault Rupture Hazard Study Zone

California faults are classified as active, potentially active, or inactive. Faults from past geologic periods of mountain building that do not display any evidence of recent offset are considered "inactive" or "potentially active." Faults that have historically produced earthquakes or show evidence of movement within the Holocene (past 11,000 years) are considered "active faults." Active faults that are capable of causing large earthquakes may also cause ground rupture. The Alquist Priolo Special Studies Zone Act of 1972 was enacted to protect structures from hazards associated with fault ground rupture.

No known active faults cross the subject property and the site is not located within an Alquist-Priolo Fault Rupture Hazard Study Zone. The surface trace of the potentially active Sierra Madre fault zone is mapped about 150 feet south of the site. There is no geomorphic or geologic evidence that would indicate faulting within the subject property. The ground rupture hazard at the site is considered low to nil.

Building Code Seismic Coefficients

Seismic design parameters within the California Building Code include amplification of the seismic forces on the structure depending on the soil type, distance to seismic source, and intensity of shaking. The purpose of the code seismic design parameters is to prevent collapse of structures and loss of life during strong ground shaking. Cosmetic damage should be expected.

The following table lists the applicable seismic coefficients for the 2013 California Building Code.

SEISMIC COEFFICIENTS (2013 California Building Code)		
Latitude = 34.20487°N Longitude = 118.16271°W	Short Period (0.2s)	One-Second Period
Earth Materials and Site Class from Table 1613.5.2 and Section 1613.5.2	Granitic Bedrock – C	
Seismic Design Category from Table 1613.5.6(1) and 1613.5.6(2)	E	
Spectral Accelerations from Figures 1613.5 (1) through 1613.5(14)	S_s = 2.652 (g)	S_1 = 0.961 (g)
Site Coefficients from Tables 1613.5.3 (1) and 1613.5.3 (2)	F_A = 1.0	F_V = 1.3
Spectral Response Accelerations from Equations 16-36 and 16-37	S_{MS} = 2.652 (g)	S_{M1} = 1.249 (g)
Design Accelerations from Equations 16-38 and 16-39	S_{DS} = 1.768 (g)	S_{D1} = 0.833 (g)

Seismic Hazards

The principal seismic hazard to the subject property and proposed project is strong ground shaking from earthquakes produced by local faults. Modern, well-constructed buildings are designed to resist ground shaking through the use of shear panels, moment-resisting

frames and reinforcement. Additional precautions may be taken to protect personal property and reduce the chance of injury, including strapping down water heaters and securing furniture and appliances. It is likely that the subject property will be shaken by future earthquakes produced in southern California. However, secondary effects such as surface rupture, lurching, liquefaction, consolidation, ridge shattering, and landsliding should not occur at the subject property.

Seismic Hazard Zones

The California State Legislature enacted the Seismic Hazards Mapping Act of 1990, which was prompted by damaging earthquakes in California, and was intended to protect public safety from the effects of strong ground shaking, liquefaction, landslides, and other earthquake-related hazards. The Seismic Hazards Mapping Act requires that the State Geologist delineate various "seismic hazards zones." The maps depicting the zones are released by the California Geological Survey.

The Seismic Hazards Mapping Act requires a site investigation by a certified engineering geologist and/or civil engineer with expertise in geotechnical engineering, for projects sited within a hazard zone. The investigation is to include recommendations for a "minimum level of mitigation" that should reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy. The Seismic Hazards Mapping Act does not require mitigation to a level of no ground failure and/or no structural damage.

Seismic Hazard Zone delineations are based on correlation of a combination of factors, including: surface distribution of soil deposits; physical relief; depth to historic high groundwater; shear strength of the soils; and occurrence of past seismic deformation. The subject property is located within the United States Geologic Survey, Pasadena Quadrangle. Seismic hazards within the Pasadena Quadrangle were evaluated by the CGS in their report,

"Seismic Hazard Zone Report for the Pasadena 7.5-minute Quadrangle, Los Angeles County, California," Seismic Hazard Zone Report 014, dated 1998, updated 2006. According to the Seismic Hazard Zones Map, portions of the subject property lie within zones of required investigation for liquefaction and earthquake-induced landsliding.

The potentially liquefiable soils are located within the stream channel and are remote to the proposed project. As such, liquefaction is not expected to impact the proposed development.

SLOPE STABILITY

Gross Stability

Slopes affecting the subject property include a 130-foot-high slope between the street grade and the stream channel axis. Section A was prepared to show the highest and steepest topography on the site that affects the proposed project. The gross stability of the slope shown in Section A was calculated using a computerized version of the Simplified Bishop's method (SLIDE Version 6.027) developed by ROCSCIENCE, Inc.

The seismic stability of the site was calculated in conformance with Southern California Earthquake Center (SCEC), 2002, "*Recommended Procedures for Implementation of DMG Special Publication 117* and California Geological Survey (CGS), Special Publication 117A, 2008 "*Guidelines for Evaluating and Mitigating Seismic Hazards in California.*" Using the screening procedure and for a maximum allowable displacement of 5 cm, the horizontal acceleration (Keq) is 0.257g.

The analysis shows that the subject property and existing slopes are grossly stable with a factor of safety in excess of 1.5 under static conditions and in excess of 1.0 under seismic conditions. The calculations use the shear tests of samples believed to represent the

weakest earth materials encountered during exploration. The cross section and geologic structure used are the most critical for the slopes analyzed.

Surficial Stability

There are no slopes above the property that could adversely affect the proposed project.

CONCLUSIONS AND RECOMMENDATIONS

General Findings

The conclusions and recommendations of this exploration are based upon four test pits, field geologic mapping, research of available records, consultation, years of experience observing similar properties in similar settings, and review of the development plans. It is the finding of Irvine Geotechnical that construction of the proposed project is feasible from a geologic and soils engineering standpoint, provided the advice and recommendations contained in this report are included in the plans and are implemented during construction.

The recommended bearing materials are the bedrock and the alluvial terrace deposits. The existing fill is not recommended for foundation or slab support. Deepened foundations consisting of friction piles tied with grade beams is recommended to support portions of the structure located on or near slopes. Existing fill, if any, is not considered suitable for foundation or slab support.

Geotechnical Issues

Due to the height of temporary excavations, shoring will likely be required to construct the basement levels. The shoring system could be integrated into the permanent retaining walls.

Section 111

Relative to Code Section 111, provided that the recommendations contained in this report are included in the design and implemented in the field, the proposed improvements will not be subject to geologic and geotechnical hazards associated with settlement, slippage, landsliding, expansive soils, liquefaction or chemical attack. Also, construction of the project will not have an adverse effect on the existing structures or offsite properties.

SITE PREPARATION

Surficial materials consisting of fill and disturbed terrace deposits are present on the site. Remedial grading is recommended to improve site conditions.

General Grading Specifications

The following guidelines may be used in preparation of the grading plan and job specifications. Irvine Geotechnical would appreciate the opportunity of reviewing the plans to insure that these recommendations are included. The grading contractor should be provided with a copy of this report.

A. The site should be prepared to receive compacted fill by removing all vegetation, debris, existing fill, and disturbed terrace. The exposed excavated area should be observed by the soils engineer or geologist prior to placing compacted fill. Specific removal depths can be found in the "Site Preparation" section of this report. The exposed grade should be scarified to a depth of six inches, moistened to optimum moisture content, and recompacted to 90 percent of the maximum density.

B. Fill, consisting of soil approved by the soils engineer, shall be placed in horizontal lifts and compacted in six inch layers with suitable compaction equipment. The excavated onsite materials are considered satisfactory for

reuse in the controlled fills. Any imported fill shall be observed by the soils engineer prior to use in fill areas. Rocks larger than six inches in diameter shall not be used in the fill.

C. The fill shall be compacted to at least 90 percent of the maximum laboratory density for the material used. Where cohesionless soil (less than 15 percent finer than 0.005 millimeters) is used for fill, it shall be compacted to a minimum of 95 percent relative compaction. The fill should be placed at a moisture content that is at or within 3 percent over optimum. The maximum density and optimum moisture content shall be determined by ASTM D 1557-12 or equivalent.

D. Field observation and testing shall be performed by the soils engineer during grading to assist the contractor in obtaining the required degree of compaction and the proper moisture content. Where compaction is less than required, additional compactive effort shall be made with adjustment of the moisture content, as necessary, until 90 percent compaction is obtained. One compaction test is required for each 500 cubic yards or two vertical feet of fill placed.

Fill Slopes

Fill slopes may be constructed at a 2:1 gradient. Compacted fill should be keyed and benched into bedrock/terrace or supported laterally by retaining walls. Keyways should be a minimum of 10 feet wide and 2 feet into bedrock or terrace as measured on the downhill side. The base of all fills and the axis of drainage courses require subdrains.

Excavation Characteristics

The test pits encountered hard, cemented boulders within the alluvial terrace. Additionally, the bedrock encountered was moderately hard, but is expected to become harder and more difficult to excavate with increasing depth. Hard cemented layers are also known to occur at random locations and depths and may be encountered during foundation excavation. Should a hard cemented layer or boulder be encountered, coring or the use of jackhammers may become necessary.

FOUNDATION DESIGN

General Conditions

The following foundation recommendations are minimum requirements. The structural engineer may require foundations that are deeper, wider, or larger in diameter, depending on the final loads.

Spread Footings

Continuous and/or pad footings may be used to support portions of the proposed structures that are not on of near slopes. Bedrock is the recommended bearing material for the residence. Terrace may be used to support accessory structures outside the building footprint provided they are founded in alluvial terrace or bedrock. Continuous footings should be a minimum of 12 inches in width. Pad footings should be a minimum of 24 inches square. The following chart contains the recommended allowable design parameters.

Bearing Material	Minimum Embedment Depth of Footing (Inches)	Vertical Bearing (psf)	Coefficient of Friction	Passive Earth Pressure (pcf)	Maximum Earth Pressure (psf)
Bedrock	12	6,000	0.50	600	6,000
Alluvial Terrace	18	2,500	0.40	300	4,500

Increases in the bearing values of the bedrock and terrace are allowable at a rate of 20 percent for each additional foot of footing width or depth to a maximum of 6,000 (bedrock) and 4,500 (terrace) pounds per square foot. For bearing calculations, the weight of the concrete in the footing may be neglected.

The bearing value shown above is for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. When combining passive and friction for lateral resistance, the passive component should be reduced by one third.

The on-site soils are non-expansive. Footings should be reinforced following the recommendations of the structural engineer. It is recommended that continuous footings be reinforced with a minimum of four #4 steel bars; two placed near the top and two near the bottom of the footings. Footings should be cleaned of all loose soil, moistened, free of shrinkage cracks and approved by the geologist and geotechnical engineer prior to placing forms, steel or concrete.

Footings should not be supported by retaining wall backfill or derive support within the active wedge behind the retaining wall. Foundations adjacent to basements should be deepened below a 1:1 plane projected up from the base of the retaining wall. Alternatively, foundations adjacent to basements may be designed as a grade beam and structurally connected to the wall.

Deepened Foundations - Friction Piles

Drilled, cast-in-place concrete friction piles are recommended to support portions of the proposed structures located on or near slopes. Piles should be a minimum of 24 inches in diameter and a minimum of 8 feet into alluvial terrace or bedrock. Piles may be assumed fixed at 3 feet into alluvial terrace or bedrock. For the vertical forces, the piles may be

designed for a skin friction of 500 pounds per square foot for that portion of pile in contact with the alluvial terrace and a skin friction of 700 pounds per square foot for that portion of pile in contact with the bedrock. The friction values are for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces.

Lateral Design

The existing fill on the site is subject to downhill creep. Pile shafts are subject to lateral loads due to the creep forces. Pile shafts should be designed for a lateral load of 1,000 pounds per linear foot for each foot of shaft exposed to the existing fill.

Resistance to lateral loading may be provided by passive earth pressure within the terrace and bedrock.

Passive earth pressure may be computed as an equivalent fluid having a density of 300 pounds per cubic foot for alluvial terrace and 600 pounds per cubic foot for bedrock. The maximum allowable earth pressures are 4,500 pounds per square foot for alluvial terrace and 6,000 pounds per square foot for bedrock. For design of isolated piles, the allowable passive and maximum earth pressures may be increased by 100 percent. Piles spaced more than 2½ pile diameters on center may be considered isolated.

All piles should be designed to resist lateral forces in conformance with Section 1810.2 of the California Building Code. This may require tying the piles in two horizontal directions with grade beams or structural slabs.

Foundation Settlement

Settlement of the foundation system is expected to occur on initial application of loading. A settlement of ¼ to ½ inch may be anticipated. Differential settlement should not exceed ½ inch in 30 feet.

Foundation Setback

The Building Code requires that foundations be a sufficient depth to provide horizontal setback from a descending slope steeper than 3:1. The required setback is ⅓ the height of the slope with a minimum of five feet and a maximum of 40 feet measured horizontally from the base of the foundation to the slope face. The setback for pools is half that of other structures, or H/6 with a maximum of 20 feet. On the subject property, the slope descends below the building area 115 feet at a roughly 1:1 gradient. The code required clearance is 39 feet for structures and 19½ feet for pools.

It is the opinion of Irvine Geotechnical that, in the event the foundations are fully embedded into the bedrock, the required setback can be reduced to 20 feet from the slope face. The recommended setback is less than that required by the building code but may be considered as an "alternative setback" per the Uniform Building Code, Section 1808.7.5 (Alternate setback and clearance).

RETAINING WALLS

General Design - Static Loading

Cantilevered retaining walls up to 20 feet high that support, bedrock, alluvial terrace and approved retaining wall backfill may be designed for an equivalent fluid pressure of 35 pounds per cubic foot per the enclosed calculations. Restrained basement walls that are

pinned at the top by a non-yielding floor should be designed for an at-rest earth pressure. The recommended design at-rest earth pressure on restrained basement walls is an equivalent fluid pressure of 60 pcf.

Seismic Surcharge

Retaining walls higher than 12 feet need to be considered for seismic loading for the design ground motion resulting from the Maximum Considered Earthquake. The horizontal coefficient of seismic increment (K_E) and seismic increment (P_E) were estimated following procedures by Sitar, N. et. al.,2010, (*Seismic Earth Pressures on Deep Building Basements,* SEAOC 2010 Convention Proceedings). The Peak Ground Acceleration (PGA) of the site was assumed to be 0.515g. From Sitar (2010), K_E is estimated to be ½ PGA, or 0.258g.

For 20-foot-high cantilevered retaining walls, the static design force is equal to 7.000 kips (20ft^2 * 35 pcf /2). For 20-foot-high restrained retaining walls, the static design force is equal to 12.000 kips (20ft^2 * 60 pcf /2). For a ground motion of 0.258g and a FS of 1.1, the enclosed calculations indicate an unbalanced force under seismic conditions from the Maximum Considered Earthquake is 7.616 kips.

For retaining walls higher than 12 feet designed for an at-rest pressure, an additional seismic surcharge need **not** be added. For retaining walls higher than 12 feet designed for a cantilevered condition, the seismic increment is 0.616 kips (7.616 kips - 7.000 kips). For a 20-foot high wall, this is an equivalent fluid pressure of 3.1 pcf. The recommended seismic surcharge on cantilevered retaining walls higher than 12 feet is an equivalent fluid pressure of 8 pcf. The seismic surcharge should be applied as an inverted fluid.

Surcharge Loading

Retaining walls that are surcharged by traffic and/or structural loads should be designed to withstand the surcharge. For traffic within 10 feet of retaining walls, the recommended traffic surcharge is 100 psf, distributed evenly over the upper 10 feet of wall. Irvine Geotechnical would be happy to assist the structural engineer in evaluating the surcharge pressure and the point of application from concentrated structural loads.

Subdrain

The recommended design earth pressures assume a free-draining backfill and no buildup of hydrostatic pressures. Retaining walls should be provided with a subdrain or weepholes covered with a minimum of 12 inches of ¾-inch crushed gravel. Not all subdrain systems and pipes are approved by all Building Departments. It is recommended that the Building Department be consulted when using non-conventional systems. The subdrain system should discharge to the atmosphere or to an engineered sump via gravity. Surface drains should not be connected to the subdrain system.

Backfill

Retaining wall backfill should be compacted to a minimum of 90 percent of the maximum density as determined by ASTM D 1557-12. Where access between the retaining wall and the temporary excavation prevents the use of compaction equipment, retaining walls should be backfilled with ¾ inch crushed gravel to within 2 feet of the ground surface. Where the area between the wall and the excavation exceeds 18 inches, the gravel must be vibrated or wheel-rolled, and tested for compaction. The upper 2 feet of backfill above the gravel should consist of a compacted fill blanket to the surface. Retaining wall backfill should be capped with a paved surface drain or a concrete slab.

Freeboard

Retaining walls surcharged by a sloping condition should be provided with a minimum of 12 inches of freeboard for slough protection. An open "V" drain should be placed behind the wall so that all upslope flows are directed around the structure to the street.

TEMPORARY EXCAVATIONS

Depending on the configuration of temporary excavations during construction, temporary shoring may be required to construct the proposed retaining walls. The excavations will be up to 22 feet in height and will expose fill and alluvial terrace over bedrock. Shoring is recommended for excavations greater than 12 feet in height or that remove lateral support from adjacent properties or right-of-ways.

The fill should be trimmed to 1:1 for wall excavations. Where not surcharged by existing footings or structures, the alluvial terrace is capable of maintaining vertical excavations up to 5 feet. Where vertical excavations in the terrace exceed 5 feet in height, the upper portion should be trimmed to 1:1 (45 degrees).

Where not surcharged by existing footings or structures, the bedrock is capable of maintaining vertical excavations up to 10 feet. Where vertical excavations in the bedrock exceed 10 feet in height, the upper portion should be trimmed to 1:1 (45 degrees).

Shoring

Temporary shoring should be designed for an equivalent fluid pressure of 30 pounds per cubic foot per the enclosed calculations. If the shoring is integrated into the permanent retaining walls, the design soil pressures should conform to the RETAINING WALLS section of this report.

Shoring may consist of cast-in-place concrete piles with wood lagging. Shoring piles should be a minimum of 24 inches in diameter and a minimum of 10 feet into alluvial terrace or bedrock as measured below the base of the excavation. Piles may be assumed fixed three feet below the base of the excavation. For the vertical forces, piles may be designed for a skin friction of 500 pounds per square foot for that portion of pile in contact with the alluvial terrace and 700 pounds per square foot for that portion of pile in contact with the bedrock. Shoring piles should be spaced a maximum of 10 feet on center.

The friction values are for the total of dead and frequently applied live loads and may be increased by one third for short duration loading, which includes the effects of wind or seismic forces. Resistance to lateral loading may be provided by passive earth pressure within the alluvial terrace or bedrock below the base of the excavation.

Passive earth pressure may be computed as an equivalent fluid having a density of 300 pounds per cubic foot for alluvial terrace and 600 pounds per cubic foot for bedrock. The maximum allowable earth pressure is 4,500 pounds per square foot for the alluvial terrace and 6,000 pounds per square foot for the bedrock. For design of isolated piles, the allowable passive and maximum earth pressures may be increased by 100 percent. Piles spaced more than 2½ pile diameters on center may be considered isolated.

Lagging

Lagging will be required between piles. Due to arching in the soils, the pressure on the lagging will be less that on the shoring piles. It is recommended that the lagging be designed for the full design pressure but be limited to a maximum of 300 pounds per square foot. The void between the lagging and the back-cut should be slurry-filled and observed by a representative of the geotechnical engineer.

Deflection Monitoring

Prior to construction and excavation for the project, it is recommended that the existing conditions along the property lines be documented and surveyed. Documentation should include photographs and descriptions of the offsite structures and conditions. Survey monuments should be affixed to representative structures and to points along the property line and offsite. The survey points should be measured prior to construction to form a baseline for determining settlement and/or deformation. Upon installation of the shoring system, survey monuments should be affixed to the tops of representative piles so that deflection can be measured.

Some deflection is expected for a well designed and constructed cantilevered shoring system. Where offsite structures and the public right-of-way are located more than 20 feet of the shored excavation, it is recommended that deflection be limited to 1 inch. Where offsite structures and the public right-of-way are located within 20 feet of the shored excavation, it is recommended that the deflection be limited to ½ inch or less.

The shored excavations and offsite structures should be visually inspected everyday. Survey monuments should be measured once a month during the construction process. Should the surveys reveal offsite deformation or excessive deflection of the shoring system, the shoring engineer and geotechnical engineer should be notified. Excessive deflection may require additional anchors and/or internal bracing to restrain the shoring system.

CORROSION

The corrosiveness of the near surface soils at the site were determined at the laboratory of Schiff, with the results summarized in **Table I - Laboratory Tests of Soil Samples.** The pH of the soils is relatively low. The chloride content is low and not a factor in design. The

sulfate content is negligible and not a factor in concrete design. The resistivity indicates that the soils are moderately corrosive to ferrous metals.

FLOOR SLABS & CONCRETE DECKING

Floor slabs and concrete decking should be cast over undisturbed alluvial terrace, bedrock, or approved compacted fill. In areas of existing fill and disturbed soils, the ground should be prepared and the fill placed in conformance with the SITE PREPARATION section of this report.

Slabs should be at least 4 inches thick and reinforced with a minimum of four #4 bars on 16 inch centers, each way. Care should be taken to cast the reinforcement near the center of the slab. Slabs which will be provided with a floor covering should be protected by a polyethylene plastic vapor barrier or other approved moisture barrier.

For performance and concrete curing, it recommended that the vapor barrier be placed over at least two inches of clean sand and then covered by at least two inches of clean sand. The topping sand is intended to prevent punctures during placement of the reinforcing steel and to and aid in the concrete cure.

As an alternative, floor slabs may be constructed in conformance with the Green Building Code that requires slabs be poured directly on top of the vapor barrier, which is to be underlain by four inches of gravel. Since the vapor barrier is to be placed on the gravel, it is important to exercise care to prevent damaging the moisture barrier during construction. From a geotechnical engineering standpoint, a vapor barrier may be placed over 4 inches of gravel, provided that the vapor barrier is of sufficient strength to resist punctures and tearing. If plastic sheeting is used, this may require a greater than 10 mil thickness. Bentonitic barriers such as Miraclay or Volclay may also be used as long as they conform to the minimum requirements of durability, strength and waterproofing. Vapor barriers

should conform to ASTM E 1745 and ACI 302.2R-06 (Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials).

Decking that caps a retaining wall should be provided with a flexible joint to allow for the normal one to two percent deflection of the retaining wall. Decking that does not cap a retaining wall should not be tied to the wall. The space between the wall and the deck will require periodic caulking to prevent moisture intrusion into the retaining wall backfill.

It should be noted that cracking of concrete floor slabs is very common during curing. The cracking occurs because concrete shrinks as it dries. Crack control joints which are commonly used in exterior decking to control such cracking are normally not used in interior slabs. The reinforcement recommended above is intended to reduce cracking and its proper placement is critical to the slab's performance. The minor shrinkage cracks which often form in interior slabs generally do not present a problem when carpeting, linoleum, or wood floor coverings are used. The slab cracks can, however, lead to surface cracks in brittle floor coverings such as ceramic tile. A mortar bed or slip sheet is recommended between the slab and tile to limit, the potential for cracking.

Slabs should be protected with a polyethylene plastic vapor barrier placed beneath the slab. This barrier is intended to prevent the upward migration of moisture from the subgrade soils through the porous concrete slab. It should be noted that vapor barriers are penetrated by any number of elements including water lines, drain lines, and footings. These barriers are therefore not completely watertight. It is recommended that a surface seal be placed on slabs which will receive a wood floor. The floor installer should be consulted regarding an adequate product.

DRAINAGE

Control of site drainage is important for the performance of the proposed project. Pad and roof drainage should be collected and transferred to the street or approved location in non-erosive drainage devices. Drainage should not be allowed to pond on the pad or against any foundation or retaining wall. Drainage should not be allowed to flow uncontrolled over any descending slope. Planters located within retaining wall backfill should be sealed to prevent moisture intrusion into the backfill. Drainage control devices require periodic cleaning, testing and maintenance to remain effective.

Due to the sloping condition on the site, the high permeability of onsite earth materials, and the presence of a flowing stream at the base of the slope, onsite infiltration of surface runoff is not considered feasible.

WATERPROOFING

Interior and exterior retaining walls are subject to moisture intrusion, seepage, and leakage and should be waterproofed. Waterproofing paints, compounds, or sheeting can be effective if properly installed. Equally important is the use of a subdrain that daylights to the atmosphere. The subdrain should be covered with ¾ inch crushed gravel to help the collection of water. Yard areas above the wall should be sealed or properly drained to prevent moisture contact with the wall or saturation of wall backfill.

PLAN REVIEW

Formal plans ready for submittal to the Building Department should be reviewed by Irvine Geotechnical. Any change in scope of the project may require additional work.

SITE OBSERVATIONS DURING CONSTRUCTION

Please advise Irvine Geotechnical at least 24 hours prior to any required site visit. The agency approved plans and permits should be at the jobsite and available to our representative. The project consultant will perform the observation and post a notice at the jobsite of his visit and findings. This notice should be given to the agency inspector.

During construction, a number of reviews by this office are recommended to verify site geotechnical conditions and conformance with the intent of the recommendations for construction. Although not all possible geotechnical observation and testing services are required by the reviewing agency, the more site reviews requested, the lower the risk of future problems. It is recommended that all grading, foundation, and drainage excavations be seen by a representative of the geotechnical engineer PRIOR to placing fill, forms, pipe, concrete, or steel. Any fill which is placed should be approved, tested, and verified if used for engineering purposes. Temporary excavations should be observed by a representative of the Geotechnical Engineer.

The following site reviews are advised or required. Should the observations reveal any unforeseen hazards, the geologist/engineer will recommend treatment.

Pre-construction meeting	Advised
Temporary excavations	Required
Shoring pile installation	Required
Bottom excavation for removals	Required
Keyway excavations and benching	Required
Subdrains	Required
Compaction of fill	Required
Foundation excavations	Required
Slab subgrade moisture barrier membrane	Advised
Slab subgrade rock placement	Advised
Slab steel placement	Advised
Subdrain and rock placement behind retaining walls	Required
Compaction of retaining wall backfill	Required
Compaction of utility trench backfill	Advised

Irvine Geotechnical requires at least a 24 hour notice prior to any required site visits. The approved plans and building/grading permits should be on the job and available to the project consultant.

FINAL INSPECTION

Many projects are required by the agency to have final geologic and soils engineering reports upon completion of the grading.

CONSTRUCTION SITE MAINTENANCE

It is the responsibility of the contractor to maintain a safe construction site. When excavations exist on a site, the area should be fenced and warning signs posted. All pile excavations must be properly covered and secured. Soil generated by foundation and subgrade excavations should be either removed from the site or properly placed as a certified compacted fill. Soil must not be spilled over any descending slope. Workers should not be allowed to enter any unshored trench excavations over five feet deep.

GENERAL CONDITIONS

This report and the exploration are subject to the following NOTICE. Please read the NOTICE carefully, it limits our liability.

NOTICE

In the event of any changes in the design or location of any structure, as outlined in this report, the conclusions and recommendations contained herein may not be considered valid unless the changes are reviewed by us and the conclusions and recommendations are

modified or reaffirmed after such review.

The subsurface conditions, excavation characteristics, and geologic structure described herein and shown on the enclosed cross section have been projected from excavations on the site as indicated and should in no way be construed to reflect any variations that may occur between these excavations or that may result from changes in subsurface conditions.

Fluctuations in the level of groundwater may occur due to variations in rainfall, temperature, irrigation, and other factors not evident at the time of the measurements reported herein. Fluctuations also may occur across the site. High groundwater levels can be extremely hazardous. Saturation of earth materials can cause subsidence or slippage of the site.

If conditions encountered during construction appear to differ from those disclosed herein, notify us immediately so we may consider the need for modifications. Compliance with the design concepts, specifications or recommendations during construction requires the review of the engineering geologist and geotechnical engineer during the course of construction.

THE EXPLORATION WAS PERFORMED ONLY ON A PORTION OF THE SITE, AND CANNOT BE CONSIDERED AS INDICATIVE OF THE PORTIONS OF THE SITE NOT EXPLORED.

This report is issued and made for the sole use and benefit of the client, is not transferable and is as of the exploration date. Any liability in connection herewith shall not exceed the fee for the exploration. No warranty, expressed or implied, is made or intended in connection with the above exploration or by the furnishing of this report or by any other oral or written statement.

THIS REPORT WAS PREPARED ON THE BASIS OF THE PRELIMINARY DEVELOPMENT PLAN OR CONCEPT FURNISHED. FINAL PLANS SHOULD BE REVIEWED BY THIS OFFICE AS ADDITIONAL GEOTECHNICAL WORK MAY BE REQUIRED.

Irvine Geotechnical appreciates the opportunity to provide our service on this project. Any questions concerning the data or interpretation of this report should be directed to the undersigned.

Respectfully submitted,
Irvine Geotechnical, Inc.

Jon A. Irvine
E.G. 1691/G.E. 2891
R:\ICprojects\IC14037 Kuhn\IC14037 Kuhn GSE.wpd

Enc: Appendix I - Laboratory Testing by Soil Labworks
Shear Test Diagrams (Plates B-1 through B-3)
Vicinity Map
Regional Geologic Map
Log of Test Pits (2 Pages)
Calculation Sheets (17)
Section A
In pocket Geologic Map

xc: (7) Addressee

STATEMENT OF RESPONSIBILITY - SOIL TESTING BY SOIL LABWORKS, LLC

Laboratory testing by Soil Labworks, LLC, was performed under the supervision of the undersigned engineer. Irvine Geotechnical and Jon A. Irvine has reviewed referenced laboratory testing report dated March 27, 2014, and the results appear to be reasonable for this area of the San Gabriel Mountains. Irvine Geotechnical and the undersigned engineer concurs with the findings of Soil Labworks, LLC, and accepts professional responsibility for utilizing the data.

SOIL LABWORKS LLC

SL14.1613
March 27, 2014

Irvine Geotechnical
145 N. Sierra Madre Boulevard
Suite 12
Pasadena, California 91107

Subject: Laboratory Testing

Site: Canyon Crest Road APN# 5830-003-016
Altadena, California

Job: IRVINE/KUHN

Laboratory testing for the subject property was performed by Soil Labworks, LLC., under the supervision of the undersigned Engineer. Samples of the earth materials were obtained from the subject property by personnel of Irvine Geotechnical and transported to the laboratory of Soil Labworks for testing and analysis. The laboratory tests performed are described and results are attached.

Services performed by this facility for the subject property were conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

Respectfully Submitted:

SOIL LABWORKS, LLC

JON A. IRVINE
G.E. 2891

REGISTERED PROFESSIONAL ENGINEER
JON ALAN IRVINE
GE 2891
Exp. 6-30-14
GEOTECHNICAL
STATE OF CALIFORNIA

Enc: Appendix

2500 Townsgate Road, Suite E, Westlake Village, California 91361
(805) 370-1338 FAX (805) 371-4693

SOIL LABWORKS LLC

SL14.1613
March 27, 2014

APPENDIX

Laboratory Testing

Sample Retrieval - Hand Labor

Samples of earth materials were obtained by driving a thin-walled steel sampler with successive blows of a drop hammer. The earth material was retained in brass rings of 2.416 inches inside diameter and 1.00 inch height. The samples were stored in closefitting, water-tight containers for transportation to the laboratory.

Moisture Density

The field moisture content and dry density were determined for each of the soil samples. The dry density was determined in pounds per cubic foot following ASTM 2937-10. The moisture content was determined as a percentage of the dry soil weight conforming to ASTM 2216-10. The results are presented below in the following table. The percent saturation was calculated on the basis of an estimated specific gravity. Description of earth materials used in this report and shown on the attached Plates were provided by the client.

Test Pit/Boring No.	Sample Depth (Feet)	Soil Type	Dry Density (pcf)	Moisture Content (percent)	Percent Saturation (G_s=2.65)
TP1	4	Bedrock	116.2	7.6	47
TP1	7	Bedrock	111.4	7.8	43
TP2	5	Bedrock	124.5	2.8	23
TP3	3	Older Alluvium	109.0	7.6	39
TP4	2	Older Alluvium	106.7	5.5	27
TP4	5	Bedrock	131.6	2.6	27

Shear Strength

The peak and residual shear strengths of the older alluvium and bedrock were determined by performing consolidated and drained direct shear tests in conformance with ASTM D3080/D3080M-11. The tests were performed in a strain-controlled machine manufactured by GeoMatic. The rate of deformation was 0.01 inches per minute. Samples were sheared under varying confining pressures, as shown on the "Shear Test Diagrams," B-Plates. The moisture conditions during testing are shown on the following table and on the B-Plates. The samples indicated as saturated were artificially saturated in the laboratory. All saturated samples were sheared under submerged conditions.

2500 Townsgate Road, Suite E, Westlake Village, California 91361
(805) 370-1338 FAX (805) 371-4693

Shear Strength (continued)

Test Pit/ Boring No.	Sample Depth (Feet)	Dry Density (pcf)	As-Tested Moisture Content (percent)
TP4	2	106.7	20.9
TP3	3	109.0	19.7
TP2	5	124.5	17.8

SOIL LABWORKS LLC

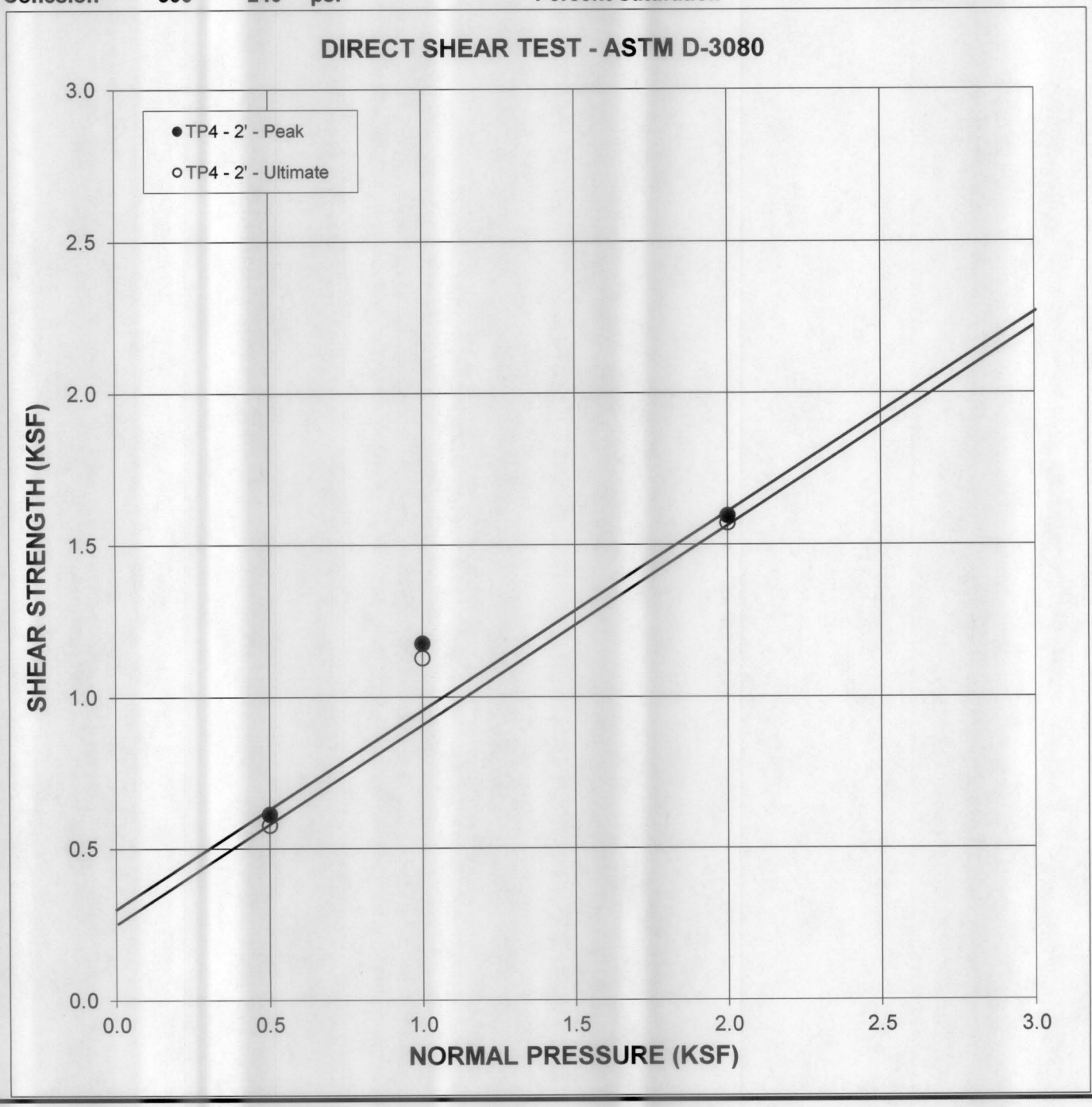
SHEAR DIAGRAM B-1

JN: SL14.1613 CONSULTANT JAI
CLIENT: Irvine/Kuhn-Canyon Crest Road

EARTH MATERIAL: OLDER ALLUVIUM

	PEAK	RESIDUAL	
Phi Angle	33	33	degrees
Cohesion	300	240	psf

Average Moisture Content	20.9%
Average Dry Density (pcf)	106.7
Percent Saturation	100.0%



SOIL LABWORKS LLC

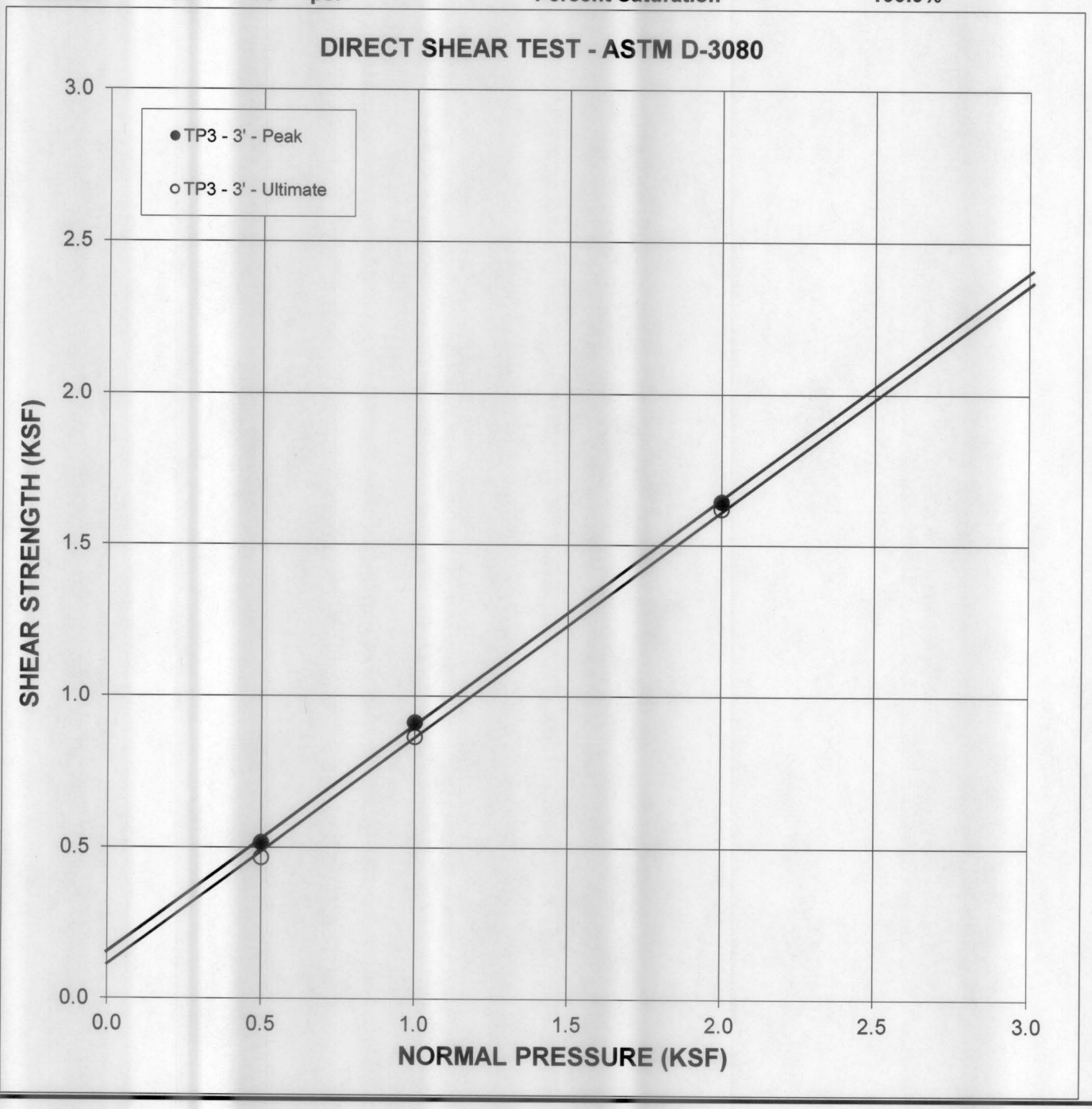
SHEAR DIAGRAM B-2

JN: SL14.1613 CONSULTANT JAI
CLIENT: Irvine/Kuhn-Canyon Crest Road

EARTH MATERIAL: OLDER ALLUVIUM

	PEAK	RESIDUAL	
Phi Angle	37	37	degrees
Cohesion	160	70	psf

Average Moisture Content	19.7%
Average Dry Density (pcf)	109.0
Percent Saturation	100.0%



SOIL LABWORKS LLC

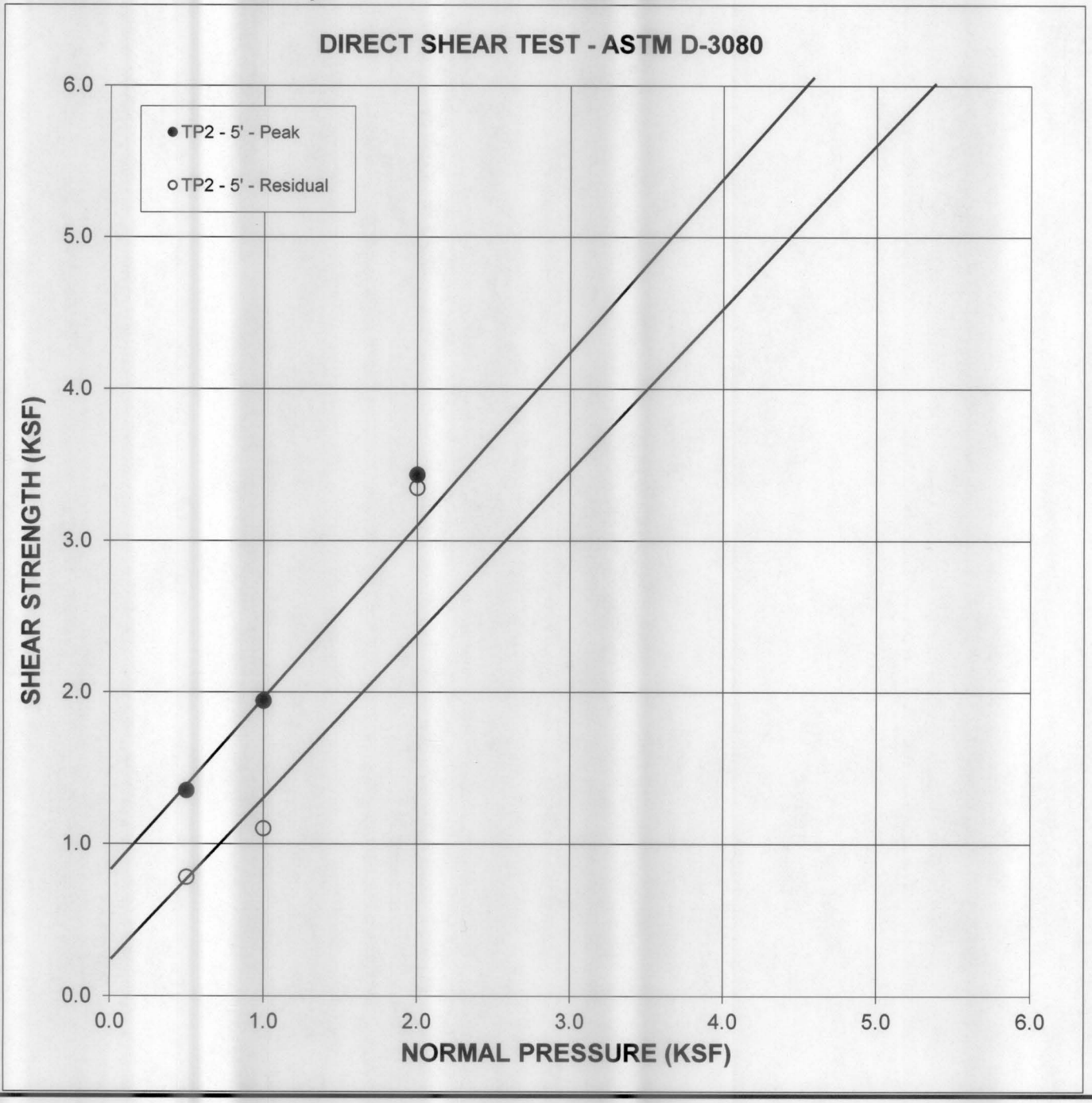
SHEAR DIAGRAM B-3

JN: SL14.1613 CONSULTANT JAI
CLIENT: Irvine/Kuhn - Canyon Crest Road

EARTH MATERIAL: BEDROCK

	PEAK	RESIDUAL	
Phi Angle	49	47	degrees
Cohesion	820	240	psf

Average Moisture Content	17.8%
Average Dry Density (pcf)	124.5
Percent Saturation	100.0%



SOIL LABWORKS LLC

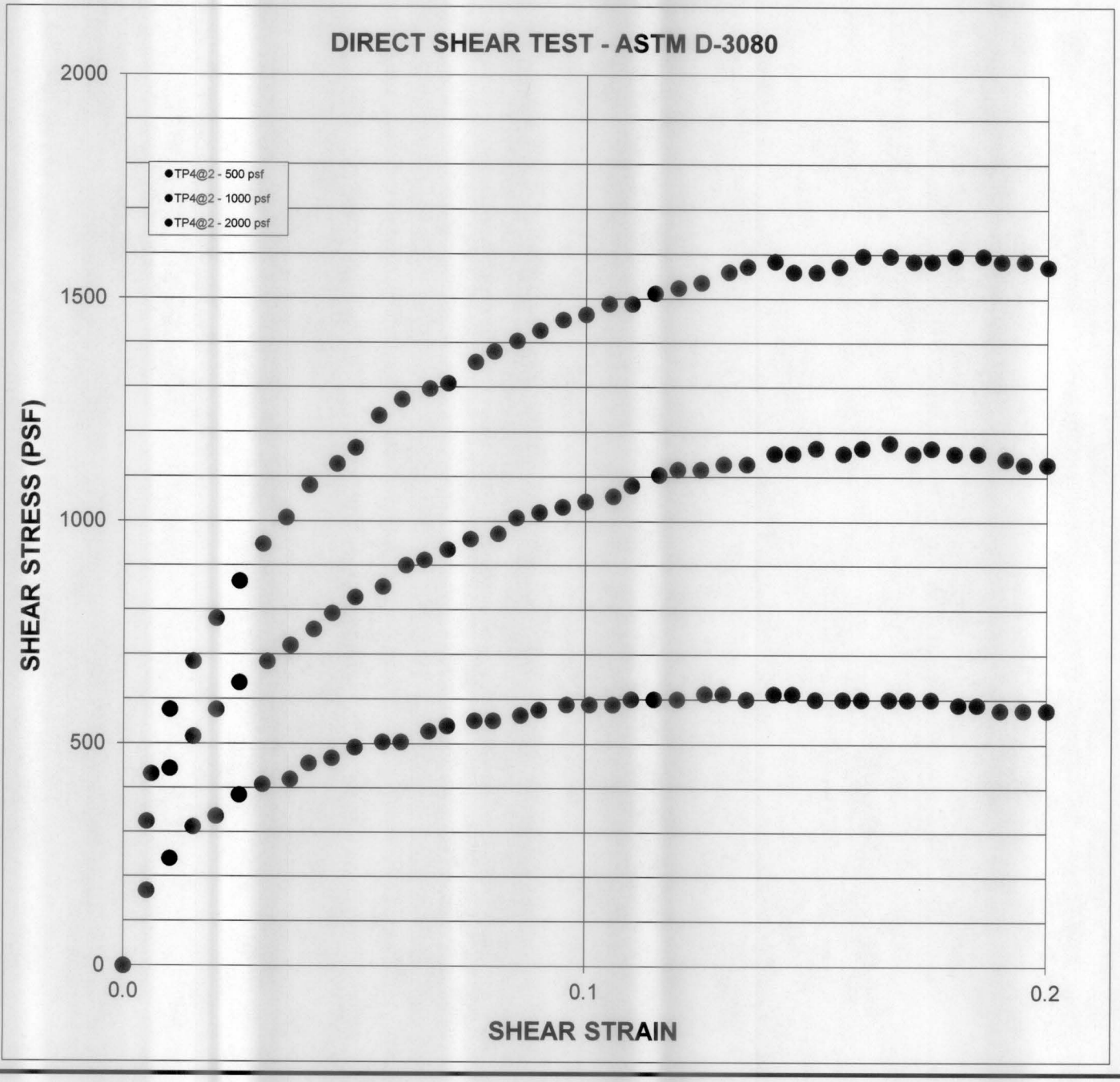
SHEAR DIAGRAM DATA

IC: **SL14.1613** CONSULTANT: **JAI**
CLIENT: **IRVINE/KUHN**

EARTH MATERIAL: **OLDER ALLUVIUM**

SAMPLE **TP4 - 2 FEET**

Average Moisture Content	**20.9%**
Average Dry Density (pcf)	**106.7**
Percent Saturation	**100.0%**



SOIL LABWORKS LLC

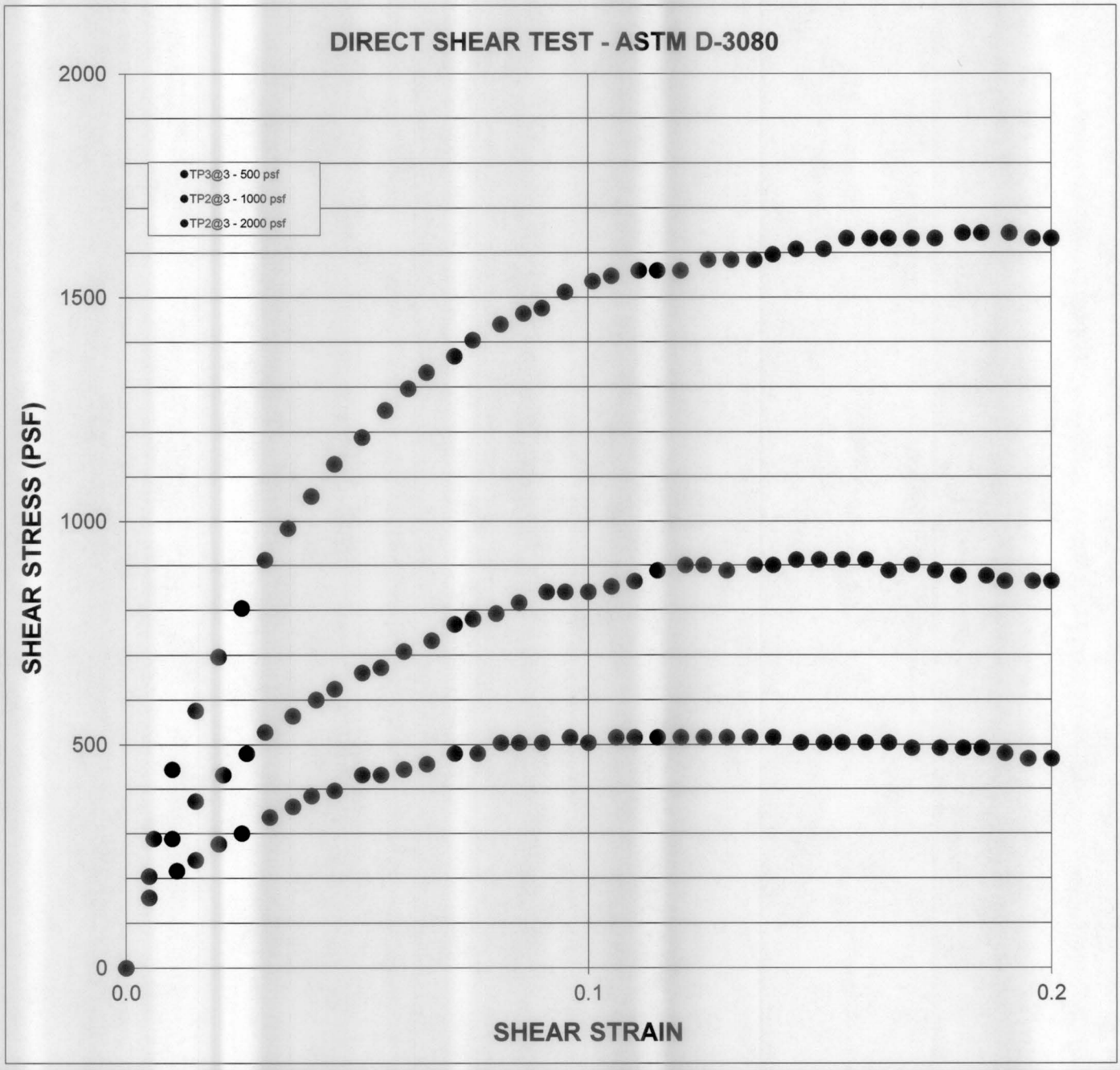
SHEAR DIAGRAM DATA

IC: **SL14.1613** CONSULTANT: **JAI**
CLIENT: **IRVINE/KUHN**

EARTH MATERIAL: **OLDER ALLUVIUM**

SAMPLE **TP3 - 3 FEET**

Average Moisture Content	**19.7%**
Average Dry Density (pcf)	**109.0**
Percent Saturation	**100.0%**



SOIL LABWORKS LLC

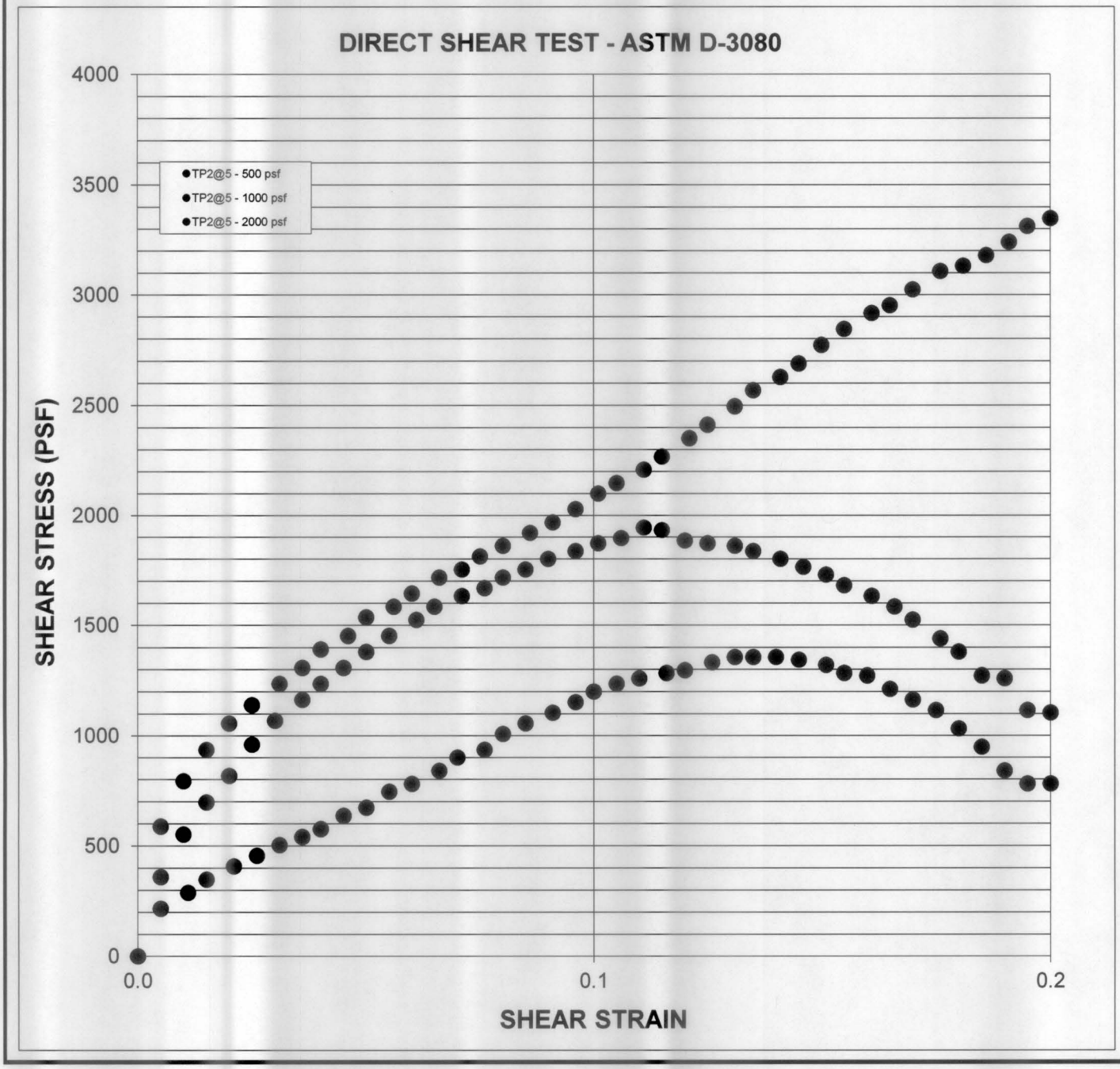
SHEAR DIAGRAM DATA

IC: **SL14.1613** CONSULTANT: **JAI**
CLIENT: **IRVINE/KUHN**

EARTH MATERIAL: **BEDROCK**

SAMPLE **TP2 - 5 FEET**

Average Moisture Content	**17.8%**
Average Dry Density (pcf)	**124.5**
Percent Saturation	**100.0%**



HDR | SCHIFF

www.hdrinc.com
Corrosion Control and Condition Assessment (C3A) Department

14037

TRANSMITTAL LETTER

DATE: April 1, 2014

ATTENTION: **Jon Irvine**

TO: Irvine Geotechnical
145 North Sierra Madre Boulevard, Suite 12
Pasadena, CA 91107

SUBJECT: Laboratory Test Data
Kuhn
Your #1613, HDR|Schiff #14-0183LAB

COMMENTS: Enclosed are the results for the subject project.

Leo Solis
Laboratory Manager

431 West Baseline Road · Claremont, CA 91711
Phone: 909.626.0967 · Fax: 909.626.3316

Table 1 - Laboratory Tests on Soil Samples

Irvine Geotechnical
Kuhn
Your #1613, HDR\|Schiff #14-0183LAB
25-Mar-14

Sample ID			TP1 @ 0-4' Bedrock
Resistivity		**Units**	
as-received		ohm-cm	32,400
minimum		ohm-cm	9,380
pH			5.8
Electrical Conductivity		mS/cm	0.05
Chemical Analyses			
Cations			
calcium	Ca^{2+}	mg/kg	46
magnesium	Mg^{2+}	mg/kg	4.8
sodium	Na^{1+}	mg/kg	6.4
potassium	K^{1+}	mg/kg	9.0
Anions			
carbonate	CO_3^{2-}	mg/kg	ND
bicarbonate	HCO_3^{1-}	mg/kg	31
fluoride	F^{1-}	mg/kg	ND
chloride	Cl^{1-}	mg/kg	2.7
sulfate	SO_4^{2-}	mg/kg	12
phosphate	PO_4^{3-}	mg/kg	ND
Other Tests			
ammonium	NH_4^{1+}	mg/kg	ND
nitrate	NO_3^{1-}	mg/kg	70
sulfide	S^{2-}	qual	na
Redox		mV	na

Minimum resistivity per CTM 643, Chlorides per CTM 422, Sulfates per CTM 417
Electrical conductivity in millisiemens/cm and chemical analysis were made on a 1:5 soil-to-water extract.
mg/kg = milligrams per kilogram (parts per million) of dry soil.
Redox = oxidation-reduction potential in millivolts
ND = not detected
na = not analyzed

431 West Baseline Road · Claremont, CA 91711
Phone: 909.626.0967 · Fax: 909.626.3316

PSH Deaggregation on NEHRP BC rock
IC14037_KUHN 118.163° W, 34.205 N.

Peak Horiz. Ground Accel.>=0.5150 g

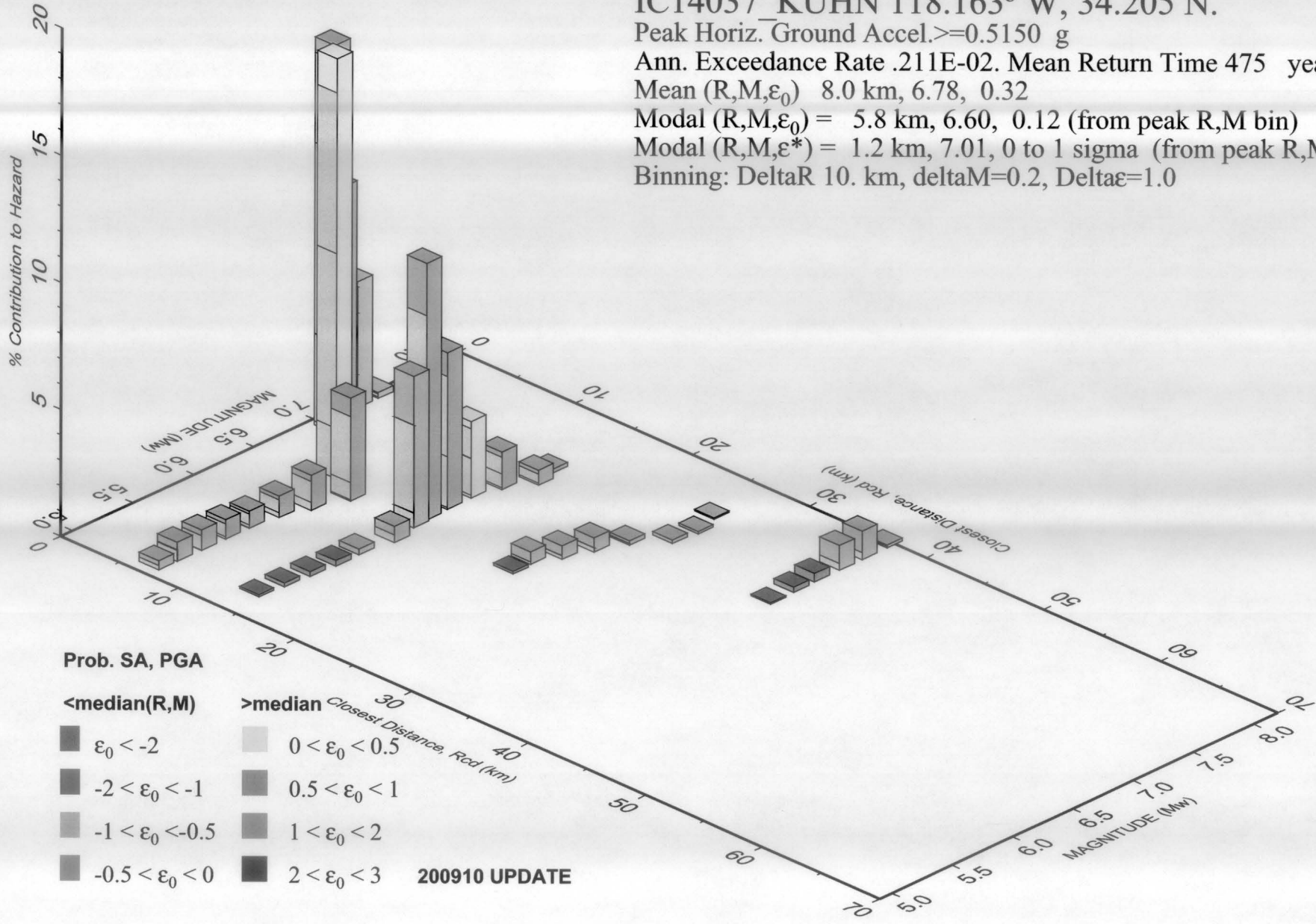
Ann. Exceedance Rate .211E-02. Mean Return Time 475 years

Mean (R,M,ε_0) 8.0 km, 6.78, 0.32

Modal (R,M,ε_0) = 5.8 km, 6.60, 0.12 (from peak R,M bin)

Modal (R,M,ε^*) = 1.2 km, 7.01, 0 to 1 sigma (from peak R,M,ε bin)

Binning: DeltaR 10. km, deltaM=0.2, Deltaε=1.0



GMT 2014 Mar 26 20:59:27 Distance (R), magnitude (M), epsilon (E0,E) deaggregation for a site on rock with average vs= 760. m/s top 30 m. USGS CGHT PSHA2008 UPDATE Bins with lt 0.05% contrib. omitted

IRVINE GEOTECHNICAL Inc

SCREENING ACCELERATION

IC: **14037** CONSULT: **JAI**
CLIENT **KUHN**

REFERENCES

CGS, SP117A, 2008 (Guidelines for Evaluating and Mitigating Seismic Hazards in California) & SCEC, 2002 (Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Landsliding in California)

Longitude	118.163	W
Latitude	34.205	N
Mean Return Time	475	years
Modal EQ Magnitude (M)	6.6	
Modal Source Distance (r)	1.2	km
Max. Horinzontal Acceleration (MHA)	0.515	g
Significant Duration of Shaking (D_{5-95})	10.07	secs
Modal Mean Period (T_m)	0.464	
Nonlinear Response Factor (NRF)	0.623	
Design Allowable Displacement	5	cm
Seismic Factor (f_{eq})	0.499	
Screening Acceleration (Keq)	**0.257**	**g**

CONCLUSIONS: The screening acceleration for determining the seismic slope stability is 0.257g.

IRVINE GEOTECHNICAL Inc

RETAINING WALL

IC: **14037-C** CONSULT: **JAI**
CLIENT: **KUHN**

CALCULATION SHEET #

CALCULATE THE DESIGN MINIMUM EQUIVALENT FLUID PRESSURE (EFP) FOR PROPOSED RETAINING WALLS. THE WALL HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE BACKFILL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE. USE THE MONONOBE-OKABE METHOD FOR SEISMIC FORCES.

CALCULATION PARAMETERS

EARTH MATERIAL:	ALLUVIAL TERRACE	WALL HEIGHT	20 feet
SHEAR DIAGRAM:	B-1	BACKSLOPE ANGLE:	0 degrees
COHESION:	300 psf	SURCHARGE:	0 pounds
PHI ANGLE:	33 degrees	SURCHARGE TYPE:	P Point
DENSITY	130 pcf	INITIAL FAILURE ANGLE:	10 degrees
SAFETY FACTOR:	1.5	FINAL FAILURE ANGLE:	70 degrees
WALL FRICTION	0 degrees	INITIAL TENSION CRACK:	2 feet
CD (C/FS):	200.0 psf	FINAL TENSION CRACK:	30 feet

PHID = ATAN(TAN(PHI)/FS) = 23.4 degrees

HORIZONTAL PSEUDO STATIC SEISMIC COEFFICIENT (k_h) 0 %g

VERTICAL PSEUDO STATIC SEISMIC COEFFICIENT (k_v) 0 %g

CALCULATED RESULTS

CRITICAL FAILURE ANGLE	57 degrees
AREA OF TRIAL FAILURE WEDGE	123.0 square feet
TOTAL EXTERNAL SURCHARGE	0.0 pounds
WEIGHT OF TRIAL FAILURE WEDGE	15990.9 pounds
NUMBER OF TRIAL WEDGES ANALYZED	1769 trials
LENGTH OF FAILURE PLANE	18.4 feet
DEPTH OF TENSION CRACK	4.6 feet
HORIZONTAL DISTANCE TO UPSLOPE TENSION CRACK	10.0 feet
CALCULATED HORIZONTAL THRUST ON WALL	**6575.0 pounds**
CALCULATED EQUIVALENT FLUID PRESSURE	**32.9 pcf**
DESIGN EQUIVALENT FLUID PRESSURE	**35.0 pcf**

THE CALCULATION INDICATES THAT THE PROPOSED RETAINING WALL MAY BE DESIGNED FOR AN EQUIVALENT FLUID PRESSURE OF 35 POUNDS PER CUBIC FOOT.

IRVINE GEOTECHNICAL Inc

RETAINING WALL

IC: **14037-C** CONSULT: **JAI**
CLIENT: **KUHN**

CALCULATION SHEET #

CALCULATE THE DESIGN MINIMUM EQUIVALENT FLUID PRESSURE (EFP) FOR PROPOSED RETAINING WALLS. THE WALL HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE BACKFILL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE. USE THE MONONOBE-OKABE METHOD FOR SEISMIC FORCES.

CALCULATION PARAMETERS

EARTH MATERIAL:	ALLUVIAL TERRACE	WALL HEIGHT	20 feet
SHEAR DIAGRAM:	B-1	BACKSLOPE ANGLE:	0 degrees
COHESION:	300 psf	SURCHARGE:	0 pounds
PHI ANGLE:	33 degrees	SURCHARGE TYPE:	P Point
DENSITY	130 pcf	INITIAL FAILURE ANGLE:	10 degrees
SAFETY FACTOR:	1.1	FINAL FAILURE ANGLE:	70 degrees
WALL FRICTION	0 degrees	INITIAL TENSION CRACK:	2 feet
CD (C/FS):	272.7 psf	FINAL TENSION CRACK:	30 feet

PHID = ATAN(TAN(PHI)/FS) = 30.6 degrees

HORIZONTAL PSEUDO STATIC SEISMIC COEFFICIENT (k_h) 0.258 %g

VERTICAL PSEUDO STATIC SEISMIC COEFFICIENT (k_v) 0 %g

CALCULATED RESULTS

CRITICAL FAILURE ANGLE	50 degrees
AREA OF TRIAL FAILURE WEDGE	159.3 square feet
TOTAL EXTERNAL SURCHARGE	0.0 pounds
WEIGHT OF TRIAL FAILURE WEDGE	20708.6 pounds
NUMBER OF TRIAL WEDGES ANALYZED	1769 trials
LENGTH OF FAILURE PLANE	20.2 feet
DEPTH OF TENSION CRACK	4.5 feet
HORIZONTAL DISTANCE TO UPSLOPE TENSION CRACK	13.0 feet
CALCULATED HORIZONTAL THRUST ON WALL	**7616.2 pounds**

THE CALCULATION INDICATES THAT THE FOR THE DESIGN GROUND MOTION, THE UNBALANCED FORCE ON THE RETAINING WALL IS 7.616 KIPS.

IRVINE GEOTECHNICAL Inc

SHORING PILE

IC: **14037-C** CONSULT: **JAI**
CLIENT: **KUHN**

CALCULATION SHEET #

CALCULATE THE DESIGN MINIMUM EQUIVALENT FLUID PRESSURE (EFP) FOR PROPOSED RETAINING WALLS. THE WALL HEIGHT AND BACKSLOPE AND SURCHARGE CONDITIONS ARE LISTED BELOW. ASSUME THE BACKFILL IS SATURATED WITH NO EXCESS HYDROSTATIC PRESSURE. USE THE MONONOBE-OKABE METHOD FOR SEISMIC FORCES.

CALCULATION PARAMETERS

EARTH MATERIAL:	ALLUVIAL TERRACE	RETAINED LENGTH	22 feet
SHEAR DIAGRAM:	B-1	BACKSLOPE ANGLE:	0 degrees
COHESION:	300 psf	SURCHARGE:	0 pounds
PHI ANGLE:	33 degrees	SURCHARGE TYPE:	P Point
DENSITY	130 pcf	INITIAL FAILURE ANGLE:	10 degrees
SAFETY FACTOR:	1.25	FINAL FAILURE ANGLE:	70 degrees
PILE FRICTION	0 degrees	INITIAL TENSION CRACK:	2 feet
CD (C/FS):	240.0 psf	FINAL TENSION CRACK:	30 feet

PHID = ATAN(TAN(PHI)/FS) = 27.5 degrees

HORIZONTAL PSEUDO STATIC SEISMIC COEFFICIENT (k_h) 0 %g

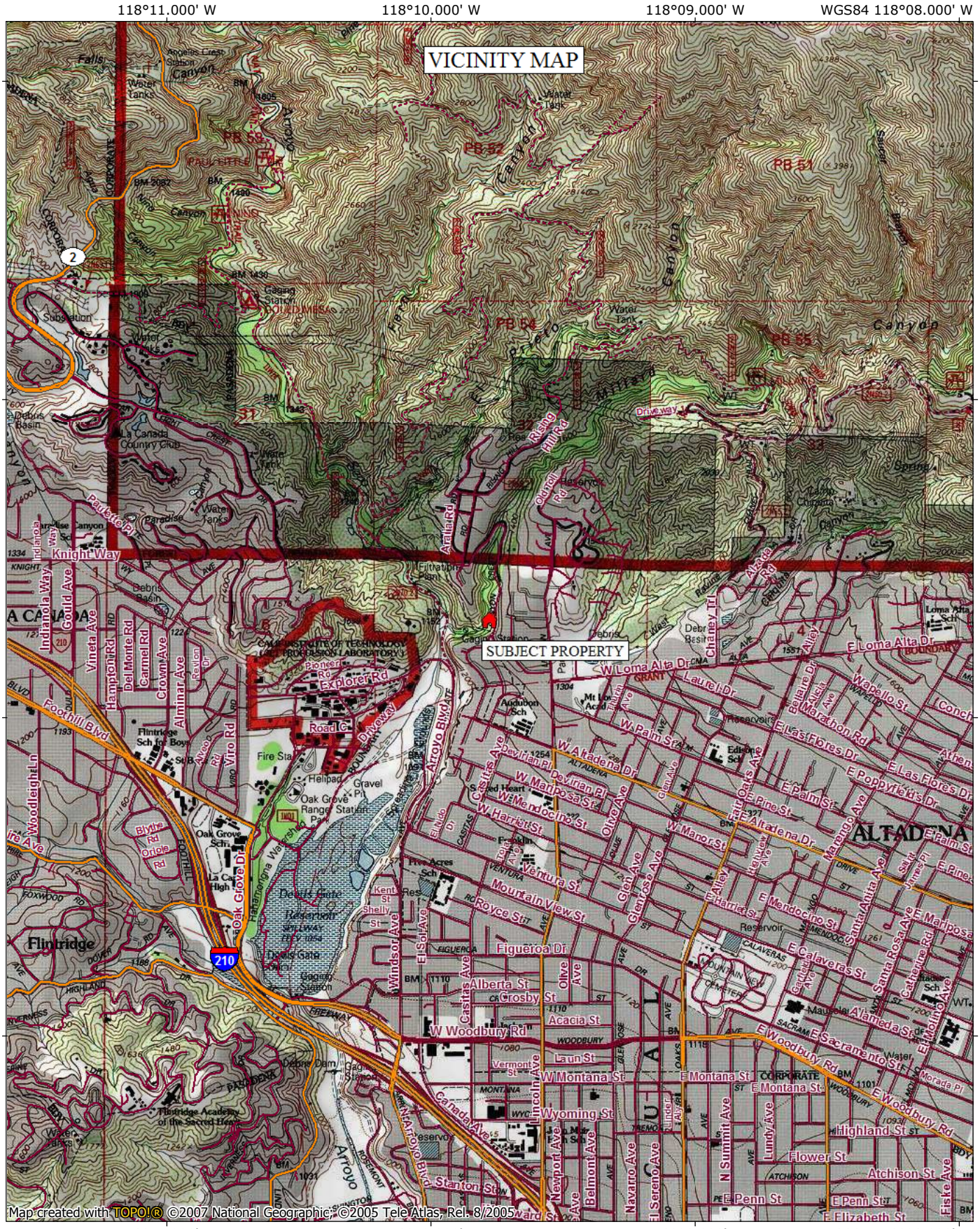
VERTICAL PSEUDO STATIC SEISMIC COEFFICIENT (k_v) 0 %g

CALCULATED RESULTS

CRITICAL FAILURE ANGLE	58 degrees
AREA OF TRIAL FAILURE WEDGE	140.0 square feet
TOTAL EXTERNAL SURCHARGE	0.0 pounds
WEIGHT OF TRIAL FAILURE WEDGE	18197.8 pounds
NUMBER OF TRIAL WEDGES ANALYZED	1769 trials
LENGTH OF FAILURE PLANE	18.9 feet
DEPTH OF TENSION CRACK	6.0 feet
HORIZONTAL DISTANCE TO UPSLOPE TENSION CRACK	10.0 feet
CALCULATED THRUST ON PILE	**6072.8 pounds**
CALCULATED EQUIVALENT FLUID PRESSURE	**25.1 pcf**
DESIGN EQUIVALENT FLUID PRESSURE	**30.0 pcf**

THE CALCULATION INDICATES THAT THE PROPOSED SHORING PILES MAY MAY BE DESIGNED FOR AN EQUIVALENT FLUID PRESSURE OF 30 POUNDS PER CUBIC FOOT. THE FLUID PRESSURE SHOULD BE MULTIPLIED BY THE PILE SPACING.

TOPO! map printed on 03/24/14 from "Untitled.tpo"

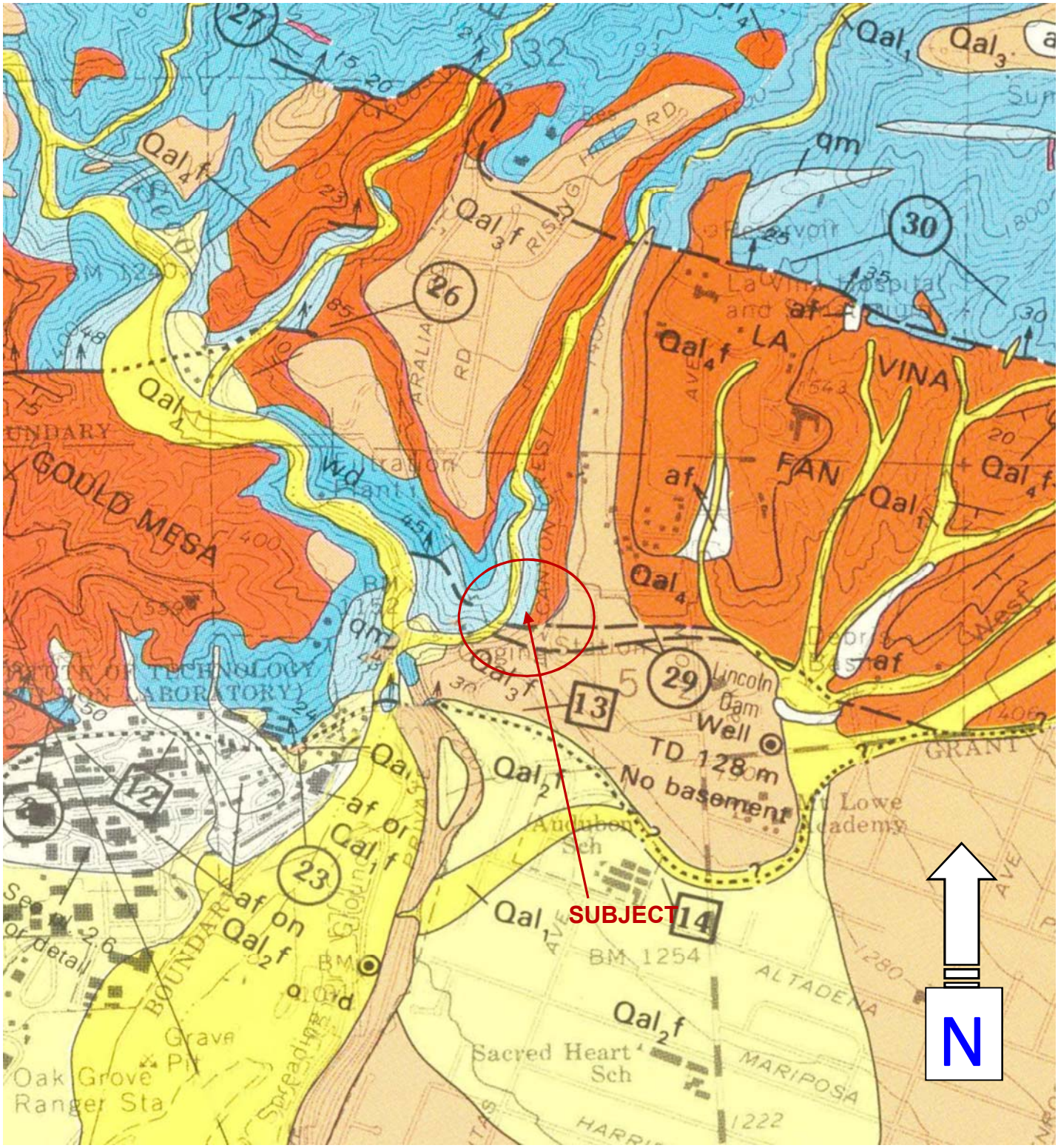


IRVINE GEOTECHNICAL Inc

REGIONAL GEOLOGIC MAP

IC: **14037** CONSULT: **JAI**
CLIENT **KUHN**
SCALE: **1" = 1,000'**

REFERENCE: *Recent Reverse Faulting in the Transverse Ranges, California* , USGS Professional Paper 1339, 1987.



LOG OF TEST PITS

IRVINE GEOTECHNICAL Inc

PROJECT	IC14037 KUHN
DRILL DATE	3/18/2014
LOG DATE	3/18/2014
LOGGED BY	CCLARK
DRILL TYPE	Hand Labor
DIAMETER	30 Inches

SURFACE ELEVATION 1210 feet
DRILLING CONTRACTOR Mike's Excavating Service
SURFACE CONDITIONS In vegetation on slope face

TEST PIT 1

Sample Type	Sample Depth (feet)	Blows per foot	Moisture (%)	Dry Unit Weight (pcf)	Saturation (%)	USCS Code	Elevation (feet)	Depth (feet)	Lithologic Description
						SM	1210.0	0	**ALLUVIAL TERRACE:** Silty Sand, gray-brown, very slightly moist to moist, porous, medium dense, roots and rootlets, gravel to 2" in diameter, cobbles to 4" in diameter
							1209.0	1	
							1208.0	2	
							1207.0	3	
R	4	N/A	7.6	116.2	47		1206.0	4	**BEDROCK**: Granodiorite, light orange-brown, massive, tight, moderately weathered, moderately hard
							1205.0	5	
							1204.0	6	
R	7	N/A	7.8	111.4	43		1203.0	7	**END TP1 @ 7':** No Water; No Caving; No Fill

SURFACE ELEVATION 1196 feet
DRILLING CONTRACTOR Mike's Excavating Service
SURFACE CONDITIONS In vegetation on slope face

TEST PIT 2

Sample Type	Sample Depth (feet)	Blows per foot	Moisture (%)	Dry Unit Weight (pcf)	Saturation (%)	USCS Code	Elevation (feet)	Depth (feet)	Lithologic Description
						SM	1196.0	0	**ALLUVIAL TERRACE:** Silty Sand, gray-brown, very slightly moist to moist, porous, medium dense, roots and rootlets, gravel to 2" in diameter, occasional boulders to 12" in diameter
							1195.0	1	
							1194.0	2	**BEDROCK**: Granodiorite, light brown, massive, tight, moderately weathered, moderately hard
							1193.0	3	
							1192.0	4	
R	5	N/A	2.8	124.5	23		1191.0	5	**END TP2 @ 5':** No Water; No Caving; No Fill

LOG OF TEST PITS

IRVINE GEOTECHNICAL Inc

PROJECT	IC14037 KUHN
DRILL DATE	3/18/2014
LOG DATE	3/18/2014
LOGGED BY	CCLARK
DRILL TYPE	Hand Labor
DIAMETER	30 Inches

SURFACE ELEVATION 1173 feet
DRILLING CONTRACTOR Mike's Excavating Service
SURFACE CONDITIONS In vegetation on slope face

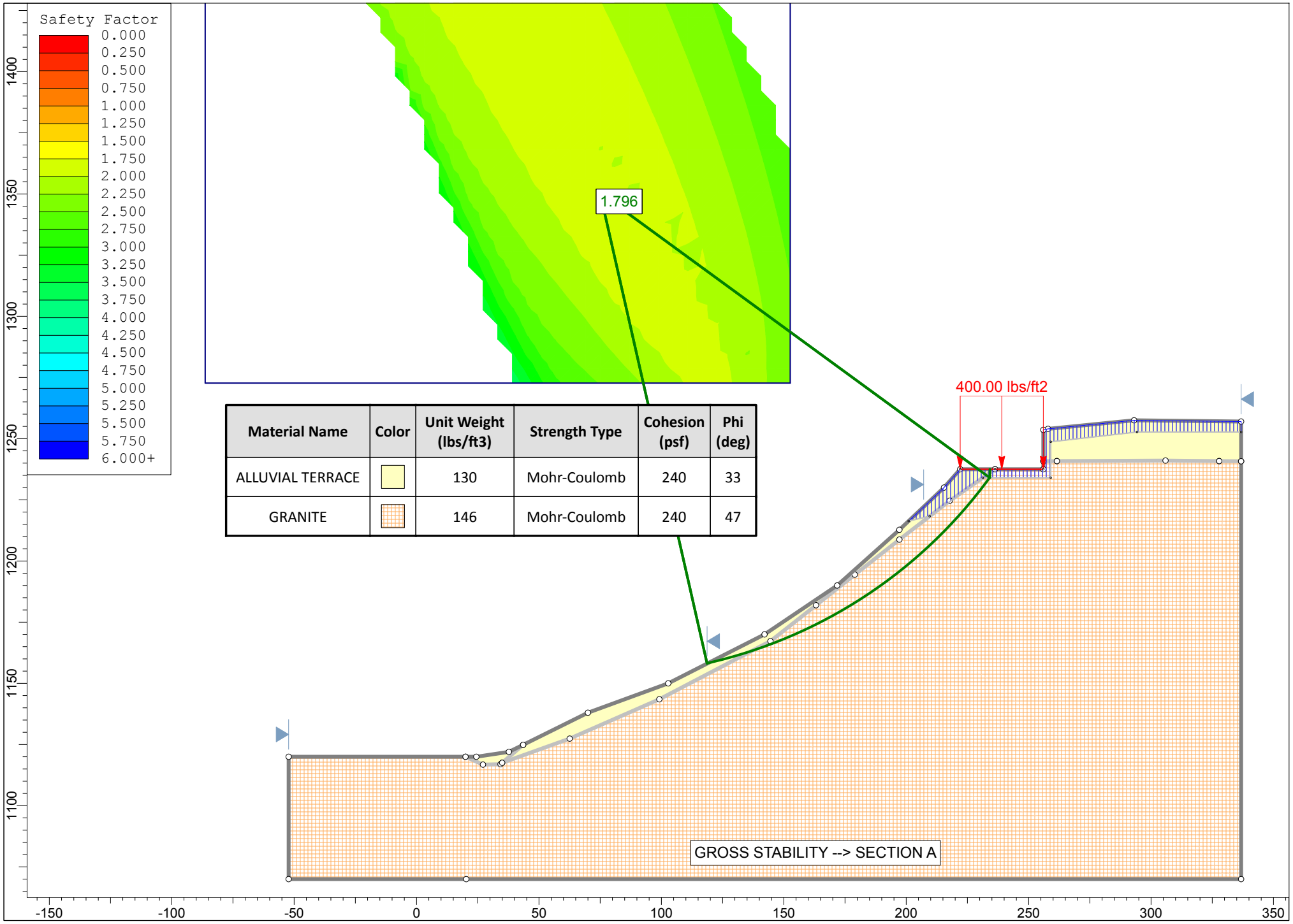
TEST PIT 3

Sample Type	Sample Depth (feet)	Blows per foot	Moisture (%)	Dry Unit Weight (pcf)	Saturation (%)	USCS Code	Elevation (feet)	Depth (feet)	Lithologic Description
						SM	1173.0	0	**ALLUVIAL TERRACE:** Silty Sand, gray-brown, moist, porous, medium dense, roots and rootlets, gravel to 2" in diameter, boulders to 4' in diameter
							1172.0	1	
							1171.0	2	
R	3	N/A	7.6	109.0	39		1170.0	3	
							1169.0	4	**END TP3 @ 4':** No Water; No Caving; No Fill

SURFACE ELEVATION 1177 feet
DRILLING CONTRACTOR Mike's Excavating Service
SURFACE CONDITIONS In vegetation on slope face

TEST PIT 4

Sample Type	Sample Depth (feet)	Blows per foot	Moisture (%)	Dry Unit Weight (pcf)	Saturation (%)	USCS Code	Elevation (feet)	Depth (feet)	Lithologic Description
						SM	1177.0	0	**ALLUVIAL TERRACE:** Silty Sand, gray-brown, very slightly moist to moist, porous, medium dense, roots and rootlets, gravel to 2" in diameter, cobbles to 4" in diameter
							1176.0	1	
R	2	N/A	5.5	106.7	27		1175.0	2	
							1174.0	3	**BEDROCK**: Granodiorite, brown, massive, tight, moderately weathered, moderately hard
							1173.0	4	
R	5	N/A	2.6	131.6	27		1172.0	5	**END TP4 @ 5':** No Water; No Caving; No Fill



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
ALLUVIAL TERRACE		130	Mohr-Coulomb	240	33
GRANITE		146	Mohr-Coulomb	240	47

Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: IC14037KuhnSecA2
Slide Modeler Version: 6.027
Project Title: SLIDE - An Interactive Slope Stability Program
Date Created: 4/7/2014, 9:24:11 AM

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Bishop simplified

Number of slices: 25
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
Search Method: Grid Search
Radius Increment: 10
Composite Surfaces: Disabled
Reverse Curvature: Create Tension Crack
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Loading

1 Distributed Load present

Distributed Load 1

Distribution: Constant
Magnitude [psf]: 400
Orientation: Normal to boundary

Tension Crack

Tension crack Water level: filled with water

Material Properties

Property	ALLUVIAL TERRACE	GRANITE
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	130	146
Cohesion [psf]	240	240
Friction Angle [deg]	33	47
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: bishop simplified

FS: 1.796370
Center: 74.943, 1350.369
Radius: 197.205
Left Slip Surface Endpoint: 118.658, 1158.070
Right Slip Surface Endpoint: 234.160, 1234.007
Left Slope Intercept: 118.658 1158.070
Right Slope Intercept: 234.160 1237.500
Resisting Moment=3.87117e+007 lb-ft
Driving Moment=2.155e+007 lb-ft
Total Slice Area=1281.03 ft2

Valid / Invalid Surfaces

Method: bishop simplified

Number of Valid Surfaces: 9140
Number of Invalid Surfaces: 9351

Error Codes:

Error Code -101 reported for 404 surfaces
Error Code -103 reported for 32 surfaces
Error Code -113 reported for 1699 surfaces
Error Code -1000 reported for 7216 surfaces

Error Codes

The following errors were encountered during the computation:

-101 = Only one (or zero) surface / slope intersections.
-103 = Two surface / slope intersections, but one or more surface / nonslope external polygon intersections lie between them. This usually occurs when the slip surface extends past the bottom of the soil region, but may also occur on a benched slope model with two sets of Slope Limits.
-113 = Surface intersects outside slope limits.
-1000 = No valid slip surfaces are generated at a grid center. Unable to draw a surface.

Slice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.79637

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	4.44097	345.32	ALLUVIAL TERRACE	240	33	148.828	267.35	42.1154	0	42.1154
2	4.44097	1004.3	ALLUVIAL TERRACE	240	33	196.581	353.133	174.21	0	174.21
3	4.44097	1599.36	ALLUVIAL TERRACE	240	33	238.816	429.002	291.039	0	291.039
4	4.44097	2129.25	ALLUVIAL TERRACE	240	33	275.551	494.992	392.654	0	392.654
5	4.65419	2758.26	GRANITE	240	47	404.771	727.119	454.246	0	454.246
6	4.65419	3390.17	GRANITE	240	47	465.569	836.334	556.09	0	556.09
7	4.65419	4306.09	GRANITE	240	47	553.926	995.056	704.101	0	704.101
8	4.65419	5165.68	GRANITE	240	47	633.82	1138.58	837.935	0	837.935
9	4.65419	5929.01	GRANITE	240	47	701.453	1260.07	951.227	0	951.227
10	4.65419	6592.71	GRANITE	240	47	756.871	1359.62	1044.07	0	1044.07
11	4.65419	7152.98	GRANITE	240	47	800.114	1437.3	1116.5	0	1116.5
12	4.65419	7655.24	GRANITE	240	47	835.947	1501.67	1176.52	0	1176.52
13	4.65419	8507.86	GRANITE	240	47	903.194	1622.47	1289.18	0	1289.18
14	4.65419	9355.65	GRANITE	240	47	967.106	1737.28	1396.24	0	1396.24
15	4.65419	10079.2	GRANITE	240	47	1016.67	1826.31	1479.25	0	1479.25
16	4.65419	10671.5	GRANITE	240	47	1051.69	1889.23	1537.93	0	1537.93
17	4.65419	11124.2	GRANITE	240	47	1071.97	1925.66	1571.9	0	1571.9
18	4.65419	11490.6	GRANITE	240	47	1082.64	1944.83	1589.78	0	1589.78
19	4.65419	11775.7	GRANITE	240	47	1084.4	1947.99	1592.73	0	1592.73

20	4.65419	11888.1	GRANITE	240	47	1069.96	1922.04	1568.53	0	1568.53
21	4.65419	11812.5	GRANITE	240	47	1038.83	1866.13	1516.39	0	1516.39
22	4.65419	11796.9	GRANITE	240	47	1011.48	1816.99	1470.57	0	1470.57
23	4.65419	11192.6	GRANITE	240	47	1023.69	1838.93	1491.03	0	1491.03
24	4.65419	7977.38	GRANITE	240	47	808.981	1453.23	1131.35	0	1131.35
25	4.65419	4219.48	GRANITE	240	47	512.069	919.866	633.985	0	633.985

Interslice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.79637

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	118.658	1158.07	0	0	0
2	123.099	1159.13	616.014	0	0
3	127.54	1160.31	1284.43	0	0
4	131.981	1161.59	1970.77	0	0
5	136.422	1162.99	2644.84	0	0
6	141.076	1164.58	3805.39	0	0
7	145.73	1166.31	5013.68	0	0
8	150.384	1168.16	6282.96	0	0
9	155.038	1170.16	7558.6	0	0
10	159.692	1172.3	8785.68	0	0
11	164.347	1174.59	9916.02	0	0
12	169.001	1177.04	10908.4	0	0
13	173.655	1179.65	11730.3	0	0
14	178.309	1182.42	12352.9	0	0
15	182.963	1185.38	12727.2	0	0
16	187.618	1188.52	12809.2	0	0
17	192.272	1191.86	12563.9	0	0
18	196.926	1195.42	11966.8	0	0
19	201.58	1199.2	10995.4	0	0
20	206.234	1203.22	9632.27	0	0
21	210.889	1207.51	7884.07	0	0
22	215.543	1212.09	5775.87	0	0
23	220.197	1216.99	3280.82	0	0
24	224.851	1222.24	211.979	0	0
25	229.505	1227.89	-2420.85	0	0
26	234.16	1234.01	380.536	0	0

List Of Coordinates

Line Load

X	Y
256	1237.5

236.3	1237.5
222.043	1237.5

Tension Crack

X	Y
200.982	1216.33
209.576	1218.3
231.272	1234.01
259.027	1234.01
259.027	1248.72
294.271	1252.7
336.8	1252.7

External Boundary

X	Y
257.9	1254
256.005	1253.59
256.001	1240.78
256	1237.5
236.3	1237.5
222.043	1237.5
215.4	1230
197.2	1212.75
171.8	1190
142.1	1170
102.8	1150
70	1138
43.5442	1124.89
37.7	1122
24.4	1120
20	1120
-52.2558	1120
-52.2558	1070
20.2817	1070
336.8	1070
336.8	1240.77
336.8	1257
293.066	1257.5

Material Boundary

X	Y
256.001	1240.78
261.523	1240.85

Material Boundary

X	Y
34.9592	1117.53
62.5242	1127.43
99.1773	1143.52
144.553	1167.24
163.165	1181.92
179	1194.4
197.2	1208.75
217.789	1224.64
236.3	1237.5

Material Boundary

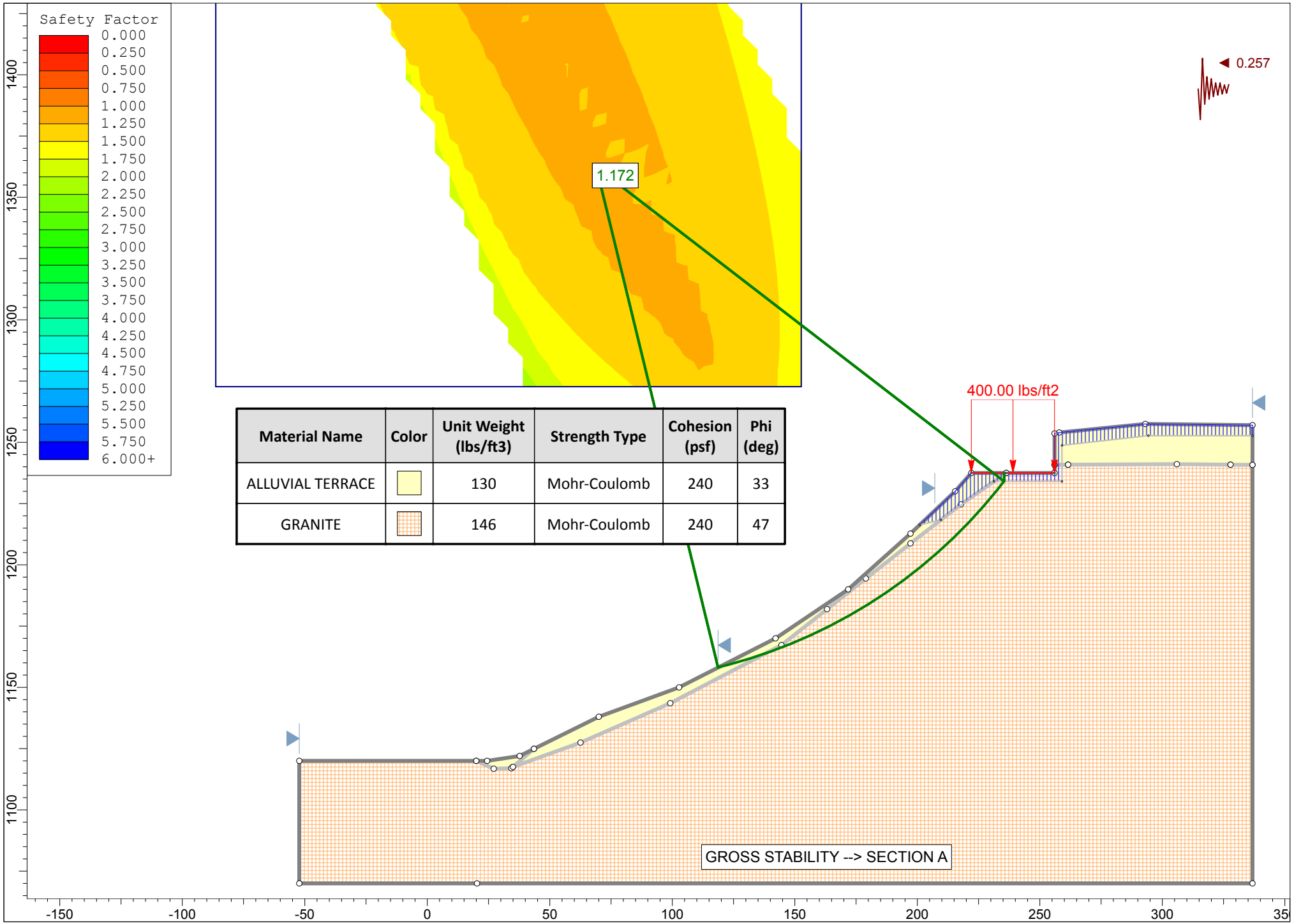
X	Y
261.523	1240.85
305.906	1241.05
327.842	1240.85

Material Boundary

X	Y
20	1120
27.0962	1116.79
34.3008	1116.96
34.9592	1117.53
43.5442	1124.89

Material Boundary

X	Y
327.842	1240.85
336.8	1240.77



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
ALLUVIAL TERRACE		130	Mohr-Coulomb	240	33
GRANITE		146	Mohr-Coulomb	240	47

Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: IC14037KuhnSecA2 SEIS
Slide Modeler Version: 6.027
Project Title: SLIDE - An Interactive Slope Stability Program
Date Created: 4/7/2014, 9:24:11 AM

General Settings

Units of Measurement: Imperial Units
Time Units: days
Permeability Units: feet/second
Failure Direction: Right to Left
Data Output: Standard
Maximum Material Properties: 20
Maximum Support Properties: 20

Analysis Options

Analysis Methods Used

Bishop simplified

Number of slices: 25
Tolerance: 0.005
Maximum number of iterations: 50
Check malpha < 0.2: Yes
Initial trial value of FS: 1
Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
Pore Fluid Unit Weight: 62.4 lbs/ft3
Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
Random Number Generation Method: Park and Miller v.3

Surface Options

Surface Type: Circular
Search Method: Grid Search
Radius Increment: 10
Composite Surfaces: Disabled
Reverse Curvature: Create Tension Crack
Minimum Elevation: Not Defined
Minimum Depth: Not Defined

Loading

Seismic Load Coefficient (Horizontal): 0.257
1 Distributed Load present

Distributed Load 1

Distribution: Constant
Magnitude [psf]: 400
Orientation: Normal to boundary

Tension Crack

Tension crack Water level: filled with water

Material Properties

Property	ALLUVIAL TERRACE	GRANITE
Color		
Strength Type	Mohr-Coulomb	Mohr-Coulomb
Unit Weight [lbs/ft3]	130	146
Cohesion [psf]	240	240
Friction Angle [deg]	33	47
Water Surface	None	None
Ru Value	0	0

Global Minimums

Method: bishop simplified

FS: 1.172330
Center: 68.970, 1362.317
Radius: 210.204
Left Slip Surface Endpoint: 118.658, 1158.070
Right Slip Surface Endpoint: 235.470, 1234.007
Left Slope Intercept: 118.658 1158.070
Right Slope Intercept: 235.470 1237.500
Resisting Moment=3.57666e+007 lb-ft
Driving Moment=3.05091e+007 lb-ft
Total Slice Area=1285.08 ft2

Valid / Invalid Surfaces

Method: bishop simplified

Number of Valid Surfaces: 9140
Number of Invalid Surfaces: 9351

Error Codes:

Error Code -101 reported for 404 surfaces
Error Code -103 reported for 32 surfaces
Error Code -113 reported for 1699 surfaces
Error Code -1000 reported for 7216 surfaces

Error Codes

The following errors were encountered during the computation:

-101 = Only one (or zero) surface / slope intersections.
-103 = Two surface / slope intersections, but one or more surface / nonslope external polygon intersections lie between them. This usually occurs when the slip surface extends past the bottom of the soil region, but may also occur on a benched slope model with two sets of Slope Limits.
-113 = Surface intersects outside slope limits.
-1000 = No valid slip surfaces are generated at a grid center. Unable to draw a surface.

Slice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.17233

Slice Number	Width [ft]	Weight [lbs]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]
1	4.77051	374.531	ALLUVIAL TERRACE	240	33	217.484	254.963	23.0403	0	23.0403
2	4.77051	1086.33	ALLUVIAL TERRACE	240	33	286.412	335.769	147.471	0	147.471
3	4.77051	1722.84	ALLUVIAL TERRACE	240	33	346.139	405.789	255.291	0	255.291
4	4.77051	2282.49	ALLUVIAL TERRACE	240	33	396.787	465.165	346.724	0	346.724
5	4.65381	2720.31	GRANITE	240	47	556.813	652.769	384.914	0	384.914
6	4.65381	3428.23	GRANITE	240	47	649.585	761.528	486.332	0	486.332
7	4.65381	4322.08	GRANITE	240	47	765.203	897.071	612.728	0	612.728
8	4.65381	5137.01	GRANITE	240	47	865.136	1014.23	721.977	0	721.977
9	4.65381	5860.34	GRANITE	240	47	948.276	1111.69	812.866	0	812.866
10	4.65381	6488.95	GRANITE	240	47	1014.92	1189.82	885.717	0	885.717
11	4.65381	7019.34	GRANITE	240	47	1065.31	1248.9	940.816	0	940.816
12	4.65381	7592.81	GRANITE	240	47	1118.51	1311.26	998.962	0	998.962
13	4.65381	8508.53	GRANITE	240	47	1212.06	1420.93	1101.24	0	1101.24
14	4.65381	9344.69	GRANITE	240	47	1290.78	1513.22	1187.3	0	1187.3
15	4.65381	10064	GRANITE	240	47	1350.64	1583.4	1252.74	0	1252.74
16	4.65381	10660	GRANITE	240	47	1391.71	1631.54	1297.63	0	1297.63
17	4.65381	11129.3	GRANITE	240	47	1414.4	1658.14	1322.44	0	1322.44
18	4.65381	11555.4	GRANITE	240	47	1429.07	1675.34	1338.48	0	1338.48

19	4.65381	11876.1	GRANITE	240	47	1429.03	1675.3	1338.44	0	1338.44
20	4.65381	12037.8	GRANITE	240	47	1409.21	1652.06	1316.77	0	1316.77
21	4.65381	12052.7	GRANITE	240	47	1372.02	1608.46	1276.11	0	1276.11
22	4.65381	12236.6	GRANITE	240	47	1350.71	1583.48	1252.81	0	1252.81
23	4.65381	11072.6	GRANITE	240	47	1356.32	1590.05	1258.95	0	1258.95
24	4.65381	7768.09	GRANITE	240	47	1016.45	1191.62	887.398	0	887.398
25	4.65381	4187.69	GRANITE	240	47	650.83	762.987	487.693	0	487.693

Interslice Data

Global Minimum Query (bishop simplified) - Safety Factor: 1.17233

Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	118.658	1158.07	0	0	0
2	123.428	1159.29	910.443	0	0
3	128.199	1160.63	1796.4	0	0
4	132.969	1162.09	2627.18	0	0
5	137.74	1163.68	3377.93	0	0
6	142.393	1165.35	4619.49	0	0
7	147.047	1167.15	5879.16	0	0
8	151.701	1169.08	7139.61	0	0
9	156.355	1171.14	8348.21	0	0
10	161.009	1173.33	9458.27	0	0
11	165.663	1175.67	10430.5	0	0
12	170.316	1178.16	11232.9	0	0
13	174.97	1180.8	11837.2	0	0
14	179.624	1183.6	12194.3	0	0
15	184.278	1186.56	12261.9	0	0
16	188.932	1189.71	12007.4	0	0
17	193.585	1193.03	11407.6	0	0
18	198.239	1196.56	10448.8	0	0
19	202.893	1200.3	9110.67	0	0
20	207.547	1204.26	7388.63	0	0
21	212.201	1208.46	5299.4	0	0
22	216.854	1212.93	2868.92	0	0
23	221.508	1217.69	36.1964	0	0
24	226.162	1222.76	-2899.42	0	0
25	230.816	1228.18	-4991.86	0	0
26	235.47	1234.01	380.536	0	0

List Of Coordinates

Line Load

X	Y

256	1237.5
236.3	1237.5
222.043	1237.5

Tension Crack

X	Y
200.982	1216.33
209.576	1218.3
231.272	1234.01
259.027	1234.01
259.027	1248.72
294.271	1252.7
336.8	1252.7

External Boundary

X	Y
257.9	1254
256.005	1253.59
256.001	1240.78
256	1237.5
236.3	1237.5
222.043	1237.5
215.4	1230
197.2	1212.75
171.8	1190
142.1	1170
102.8	1150
70	1138
43.5442	1124.89
37.7	1122
24.4	1120
20	1120
-52.2558	1120
-52.2558	1070
20.2817	1070
336.8	1070
336.8	1240.77
336.8	1257
293.066	1257.5

Material Boundary

X	Y
256.001	1240.78
261.523	1240.85

Material Boundary

X	Y
34.9592	1117.53
62.5242	1127.43
99.1773	1143.52
144.553	1167.24
163.165	1181.92
179	1194.4
197.2	1208.75
217.789	1224.64
236.3	1237.5

Material Boundary

X	Y
261.523	1240.85
305.906	1241.05
327.842	1240.85

Material Boundary

X	Y
20	1120
27.0962	1116.79
34.3008	1116.96
34.9592	1117.53
43.5442	1124.89

Material Boundary

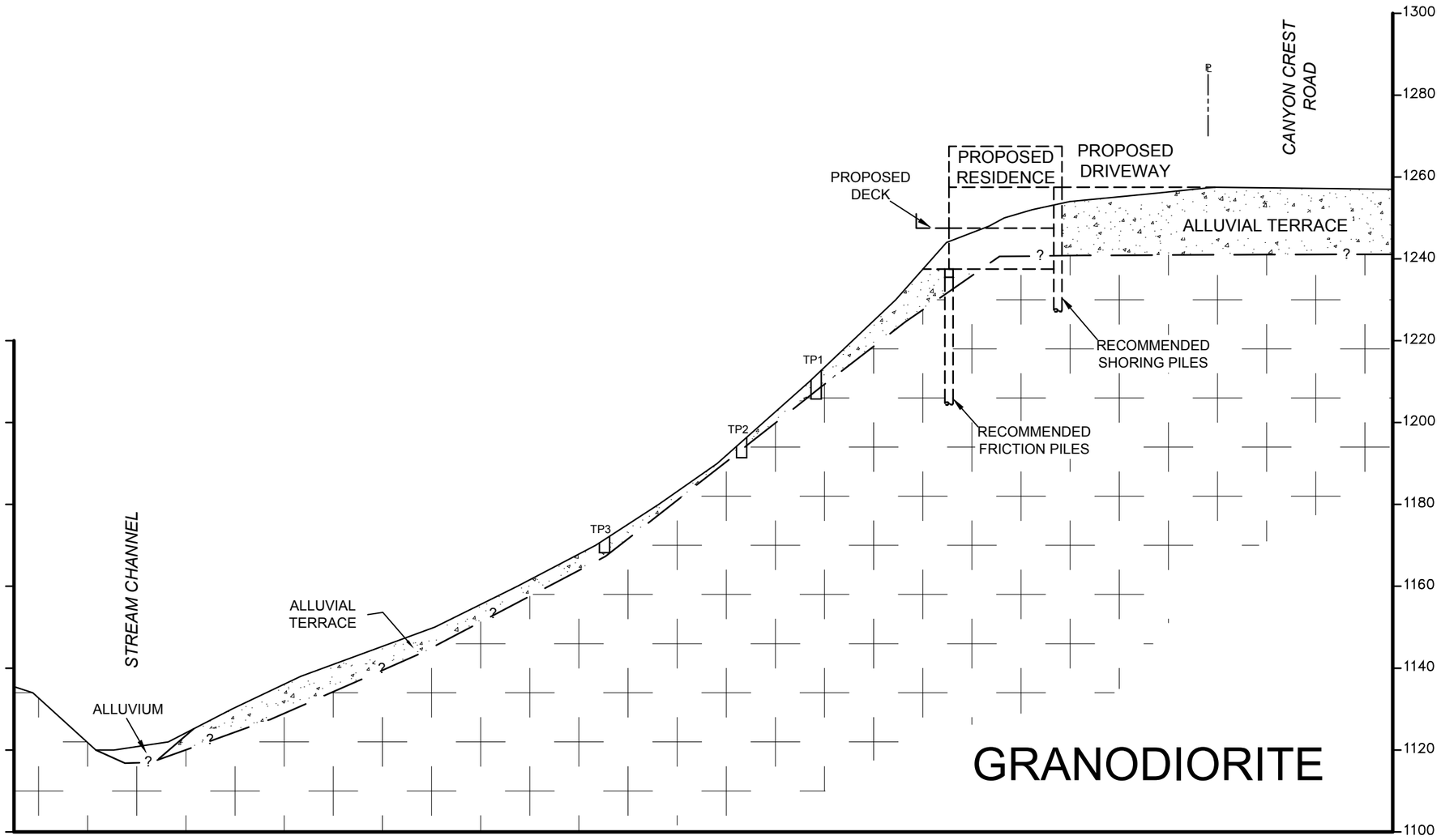
X	Y
327.842	1240.85
336.8	1240.77

IRVINE GEOTECHNICAL Inc

SECTION A - A

PROJECT: IC14037 - KUHN

CONSULTANT: CC | SCALE: 1" = 30'

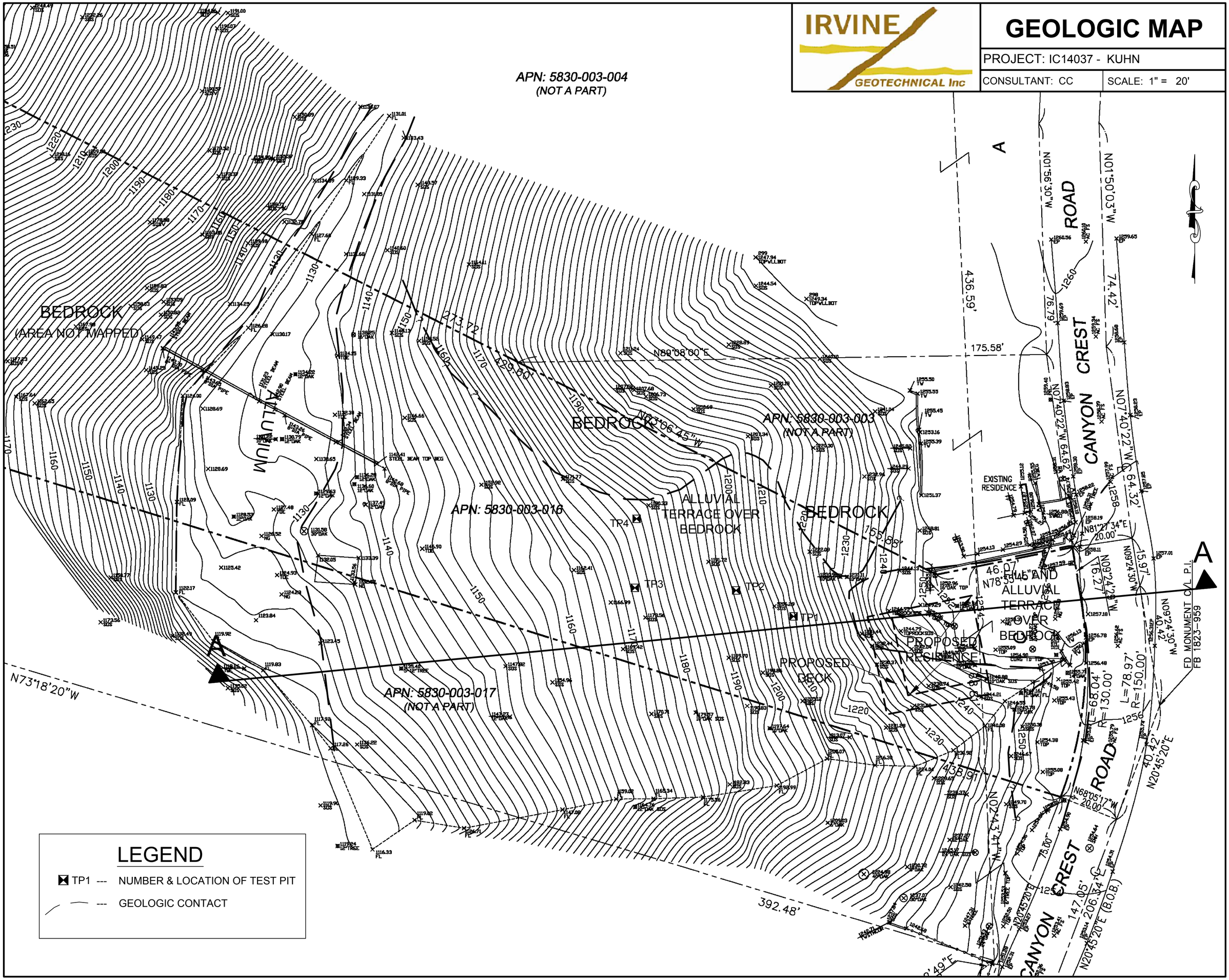


GEOLOGIC MAP

IRVINE GEOTECHNICAL Inc

PROJECT: IC14037 - KUHN

CONSULTANT: CC | SCALE: 1" = 20'



H. ARMY CORPS OF ENGINEERS NO PERMIT REQUIRED DETERMINATION

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BOULEVARD, SUITE 930
LOS ANGELES, CALIFORNIA 90017

March 28, 2018

SUBJECT: Determination of Need for Department of the Army Permit

Mr. Stephen Kuhn
3577 Canyon Crest Road
Altadena, California 91001

Dear Mr. Kuhn:

I am responding to your request (File No. SPL-2018-00037-PKK) dated January 3, 2018, for clarification whether a Department of the Army Permit is required for the Kuhn Residence project (34.204783, -118.163347) located within the city of Altadena, Los Angeles County, California.

The Corps' evaluation process for determining if you need a permit is based on whether or not the proposed project is located within or contains a water of the United States, and whether or not the proposed project includes an activity potentially regulated under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. If both conditions are met, a permit would be required.

Based on the previously mailed preliminary jurisdictional determination dated March 25, 2018, it appears the Kuhn Residence project site contains water(s) of the United States pursuant to 33 CFR Part 325.9.

However, if the residence is constructed in the manner shown in the figures (Figures 1-4) contained in your application, the proposed construction would avoid impacting all waters of the United States found within the proposed project area.

Therefore, I have determined the proposed project does not require a permit under Section 404 of the Clean Water Act pursuant to 33 CFR Part 323.4. Notwithstanding this determination, your proposed project may be regulated under other Federal, State, and local laws. If any aspect of your proposed project is located within the vicinity of an existing U.S. Army Corps of Engineers water resources development project, you may be required to seek permission from the Corps pursuant to 33 USC 408 ("Section 408") and/or real estate related permissions. Alterations/modifications to completed Corps projects requires a Corps permission pursuant to Section 408. In addition, real estate permissions may be necessary if the proposed project would affect United States real estate interests managed by the Corps. You are advised that the Corps' issuance of this letter does not preclude or discharge your obligation to acquire a Section 408 permission(s) or real estate permission(s) from the Corps should such permissions be required

for you to undertake your proposed project. For information on our Section 408 request process or to determine whether a Section 408 or real estate permission is required, please contact our Engineering Division: Marvin Mai at (213) 452-3190 or via e-mail at marvin.m.mai@usace.army.mil.

If you have any questions, please contact me at (213) 452-3420 or via e-mail at Pamela.K.Kostka@usace.army.mil. Thank you for participating in the Regulatory Program. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

KOSTKA.PAMELA.K.1468176625

Digitally signed by KOSTKA.PAMELA.K.1468176625
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=KOSTKA.PAMELA.K.1468176625
Date: 2018.03.28 09:22:56 -07'00'

Pam Kostka
Senior Project Manager
L.A. & San Bernardino Section
North Coast Branch
Regulatory Division

Enclosure(s)

Figure 1

Survey Overlay
APN: 5830-002-011
(NOT A PART)
1
Section 404
Delineation Area
2
3
Section 404
OHWM
4
APN: 5830-003-016
Survey Notes:
TOPOGRAPHIC SURVEY MAP
NORTH
1" = 20'
CANYON CREST ROAD
N
50 m
200 ft

I. STATE CEQA GUIDELINES SECTION 15168 CHECKLIST

INTRODUCTION

This document is a Continuation Environmental Checklist to evaluate the conformance of the proposed 3577 Canyon Crest Single-Family Residence project ("project") to the criteria established under CEQA (Public Resources Code Section 21000, et. seq.) and the State CEQA Guidelines ("CEQA") Section 15168 for identifying and streamlining continuations of prior analyzed projects.

Pursuant to State CEQA Guidelines Section 15168(d), "[a] program EIR can be used to simplify the task of preparing environmental documents on later parts of the program." Pursuant to State CEQA Guidelines Section 15168, the 2035 County General Plan EIR ("GPEIR") is a program EIR. For a subsequent activity that is properly within the scope of a program EIR, no subsequent or supplemental environmental document is required unless one of the following circumstances exists.

1. Pursuant to CEQA Section 21166(a) and State CEQA Guidelines Section 15162(a)(1), "[s]ubstantial changes are proposed in the project which will require major revisions of the environmental impact report."
2. Pursuant to CEQA Section 21166(b) and State CEQA Guidelines Section 15162(a)(2), "[s]ubstantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report."
3. Pursuant to CEQA Section 21166(c) and State CEQA Guidelines Section 15162(a)(3)(A), "[n]ew information, which was not known and could not have been known at the time the environmental impact report was certified as complete" shows that "[t]he project will have one or more significant effects not discussed in the previous EIR[.]"
4. Pursuant to CEQA Section 21166(c) and State CEQA Guidelines Section 15162(a)(3)(B), "[n]ew information, which was not known and could not have been known at the time the environmental impact report was certified as complete" shows that "[s]ignificant effects previously examined will be substantially more severe than shown in the previous EIR."
5. Pursuant to CEQA Section 21166(c) and State CEQA Guidelines Section 15162(a)(3)(C), "[n]ew information, which was not known and could not have been known at the time the environmental impact report was certified as complete" shows that "[m]itigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative."
6. Pursuant to CEQA Section 21166(c) and State CEQA Guidelines Section 15162(a)(3)(D), "[n]ew information, which was not known and could not have been known at the time the environmental impact report was certified as complete" shows that "[m]itigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative."

Pursuant to State CEQA Guidelines Section 15168(c)(2), "[w]hether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record."

Pursuant to State CEQA Guidelines Section 15168(c)(4), "the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR."

Pursuant to State CEQA Guidelines Section 15168(c)(5), when "later activities could be found to be within the scope of the project described in the program EIR, [] no further environmental documents would be required." The California Supreme Court has addressed procedures for notification of this determination, in *Committee for Green Foothills v. Santa Clara County Bd. of Supervisors* (2010) 48 Cal.4th 56 ("When…an agency determines a subsequent activity is within the scope of a program EIR and requires no further environmental review, must it file an NOD concerning its approval of the activity? The CEQA statutes and Guidelines do not directly address this question, although such a notice would seem to be required under the general rule that an agency file an NOD "[w]henever [it] approves or determines to carry out a project that is subject to" CEQA. (§§ 21108, subd. (a), 21152, subd. (a).) Moreover, CEQA specifically requires the filing of an NOD in the analogous context of subsequent projects to a master EIR. Even when the agency concludes a subsequent project will have no significant environmental effect not evaluated in the master EIR, and thus does not produce findings or prepare a new CEQA document, it must file an NOD announcing approval of the project. (§ 21157.1, subd. (c).)" Therefore, approval of the project under this track would be accompanied by the filing of a Notice of Determination pursuant to State CEQA Guidelines Section 15094.

CONTINUATION PROJECT DEFINITION

Project title:

3577 Canyon Crest Road Single-Family Residence Project

Lead agency name and address:

County of Los Angeles
320 W Temple St, Los Angeles, CA 90012

Contact name and address:

Stacy Corea
Regional Planner
Los Angeles County
Department of Regional Planning
320 W Temple Street,
13th Floor
Los Angeles, CA 90012
E-mail: scorea@planning.lacounty.gov

Project location:

3577 Canyon Crest Road
Altadena, CA 91001

Project sponsor's name and address:

Stephen Kuhn
443 W. Poppyfields Drive
Altadena, CA 91001

General plan designation:

Residential

Zoning:

R1-10000

This designation permits one single-family residence on a minimum 10,000 square foot lot.

Prior environmental document(s) analyzing the effects of the project:

GPEIR (SCH#2011081042)

Location of prior environmental documents analyzing the effects of the project:

Available at: https://planning.lacounty.gov/long-range-planning/general-plan/programmatic-eir/ or upon request at the Department of Regional Planning located at 320 W Temple Street, Room 1356, Los Angeles, CA 90012.

Page numbers quoted in this Checklist refer specifically to the Draft EIR incorporated in the Final EIR, available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Description of project:

The proposed project is the construction and occupancy of a 1,555 square-foot, single-family home with a 397 square-foot attached garage on a vacant residential parcel of 1.02 acres ("project") in Altadena, a census-designated place and urbanized area in the unincorporated area of the County of Los Angeles ("County"). The project parcel is located approximately 1,000 feet south of the Angeles National Forest and approximately 14 miles northeast of the County civic center, in the West San Gabriel Valley Planning Area. The project would be sited on the eastern portion of the project parcel in an existing residential neighborhood adjacent to other residences in and adjacent to Millard Canyon.

The proposed development footprint would be located more than 150 feet from the nearest waters, as determined by a United States Army Corps of Engineers wetlands delineation – an

intermittent, seasonal feature tributary to the Arroyo Seco in the bottom of Millard Canyon. In association with this feature, and like other residential parcels in the vicinity, a portion of the project parcel outside the development footprint is designated by the County as part of the Altadena Foothills and Arroyos Significant Ecological Area ("SEA"), as of December 2019. The project would continue pre-existing exempt fuel modification activities within the SEA, relative to adjacent existing single-family residences. The project parcel contains the California sagebrush scrub and coast live oak woodland plant communities.

The proposed design of the home complies with all applicable land use regulations in effect as of the date of the Notice of Preparation. The proposed design is terraced to complement the natural topography, consistently with the County's Hillside Management Area Sensitive Design Guidelines, and is one or two stories above grade in each building segment. The proposed design places most of its volume below the level of Canyon Crest Road, from which the home would be accessed with a driveway comprised of an open-celled tree root protection system. The total development footprint, comprised of the driveway and building footprint at grade, is approximately 2,000 square feet. The project would incorporate no other hardscape.

A single-family residence is permitted with a Site Plan Review in the County's R-1-10000 (Single-Family Residence, 10,000 Square Feet Minimum Required Lot Area) Zone. However, a Minor Conditional Use Permit ("MCUP") is required in the Altadena Community Standards District in order to construct on a slope greater than 25%. In addition, an Oak Tree Permit ("OTP") is required for the removal of one non-heritage coast live oak (Q. agrifolia) tree and encroachment into the protected zones of 10 non-heritage coast live oak trees on and adjacent to the project parcel, which form a part of a degraded oak woodland that extends through the developed residential area in all directions for hundreds or thousands of feet. Consistent with the standard requirements of the County Oak Tree Ordinance, the project would incorporate replacement plantings for the removed oak tree; oak-compatible landscaping comprising a native understory; and Best Management Practices and design features before, during, and after construction to promote the health of the oak trees on the project parcel. The project would also rehabilitate some of the existing impacts from the surrounding residential development that have degraded the oak trees affected by the project.

Surrounding land uses and setting:

Existing development in the vicinity consists of residential buildings of varying sizes and styles with associated facilities including above- and below-grade utilities, roadways and other hardscape, and residential landscaping. There are 52 residences within 500 feet of the project site.

To the south are single-family residences in the city of Pasadena, many of which are similarly situated at the rim of Millard Canyon or the Arroyo Seco. To the east are single-family residences zoned R1-10000 with low density land use designation (1-6 units/gross acre) in the Altadena Community Plan. To the north are five existing residences along the canyon side of Canyon Crest Road, similarly situated at the rim of Millard Canyon, as well as additional residences to the northeast, zoned R1-10000 with Non-Urban land use designation (up to one unit/gross acre) in the Altadena Community Plan. To the west are the southernmost residences of

the Meadows neighborhood of more than 200 homes, zoned predominantly R1-7000 with low density land use designation in the Altadena Community Plan. Farther west is the Arroyo Seco.

The easternmost portion of the project site was graded during the construction of Canyon Crest Road, and most of the frontage of the parcel has been used as a shoulder for street-side parking and as supplementary parking by adjacent residences. In the 1960's, a below-grade sewer siphon main was constructed spanning most of the length of the parcel from east to west, including an above-grade steel trestle structure across the intermittent stream that flows in the bottom of Millard Canyon. An easement exists for maintenance, repair, and eventual replacement of this utility.

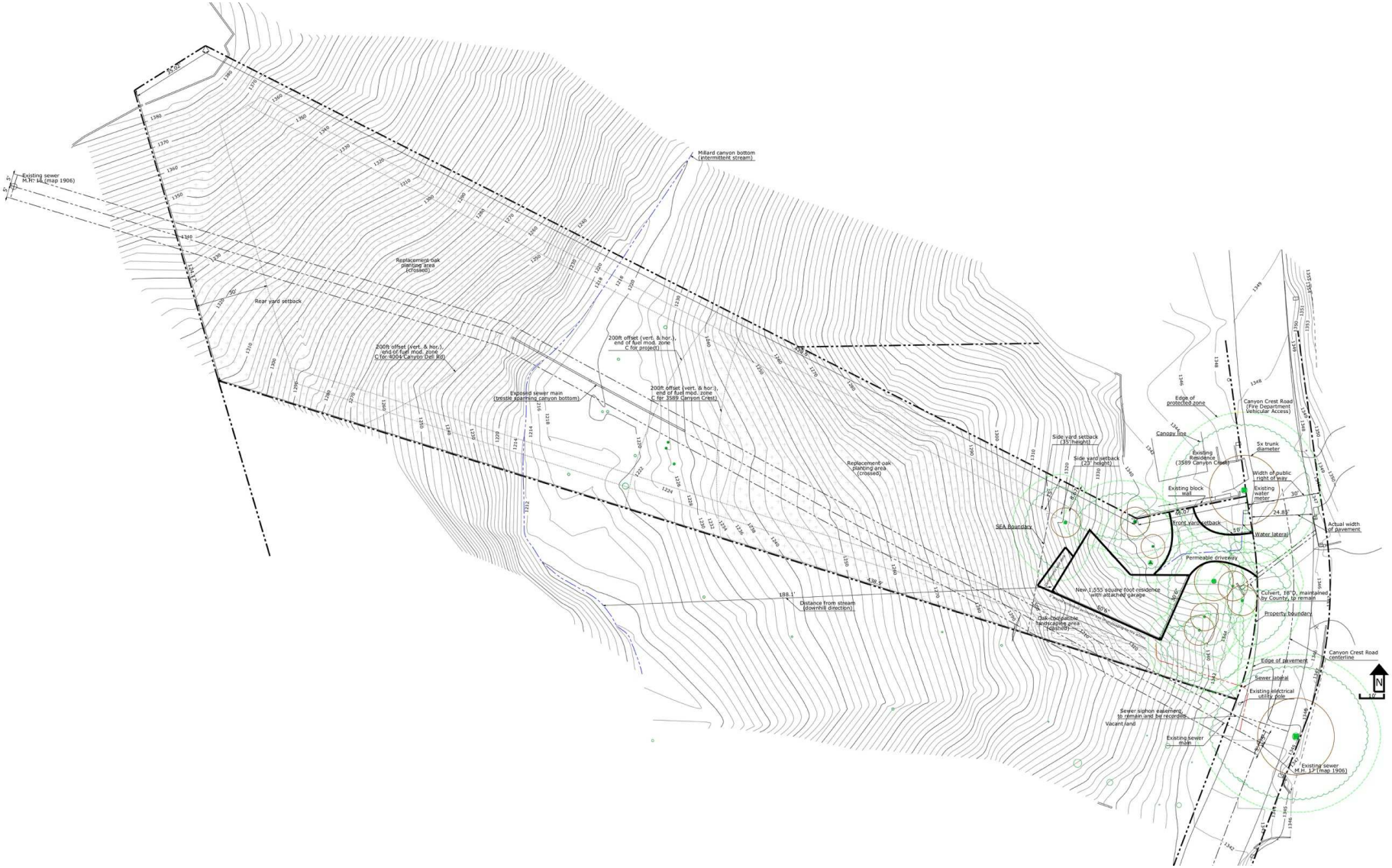


Figure 1: Proposed Project Site Plan

Figure 2: Before and After View of Project Site Driving South on Canyon Crest Road[1]

[1] Source: Applicant

Figure 3: Before and After View of Project Site Driving North on Canyon Crest Road[2]

[2] Source: Applicant

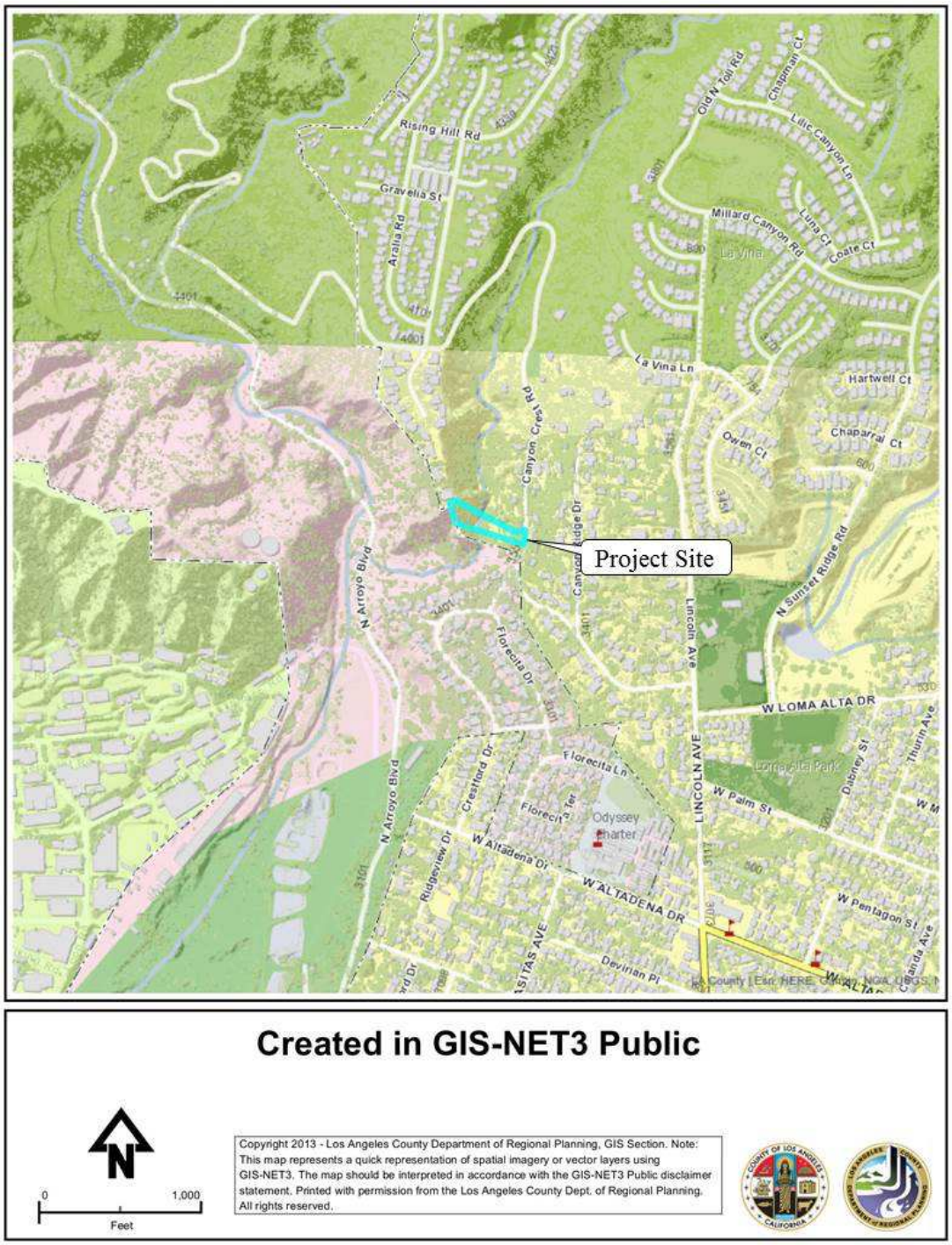


Figure 4: Project Vicinity Map[3]

[3] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

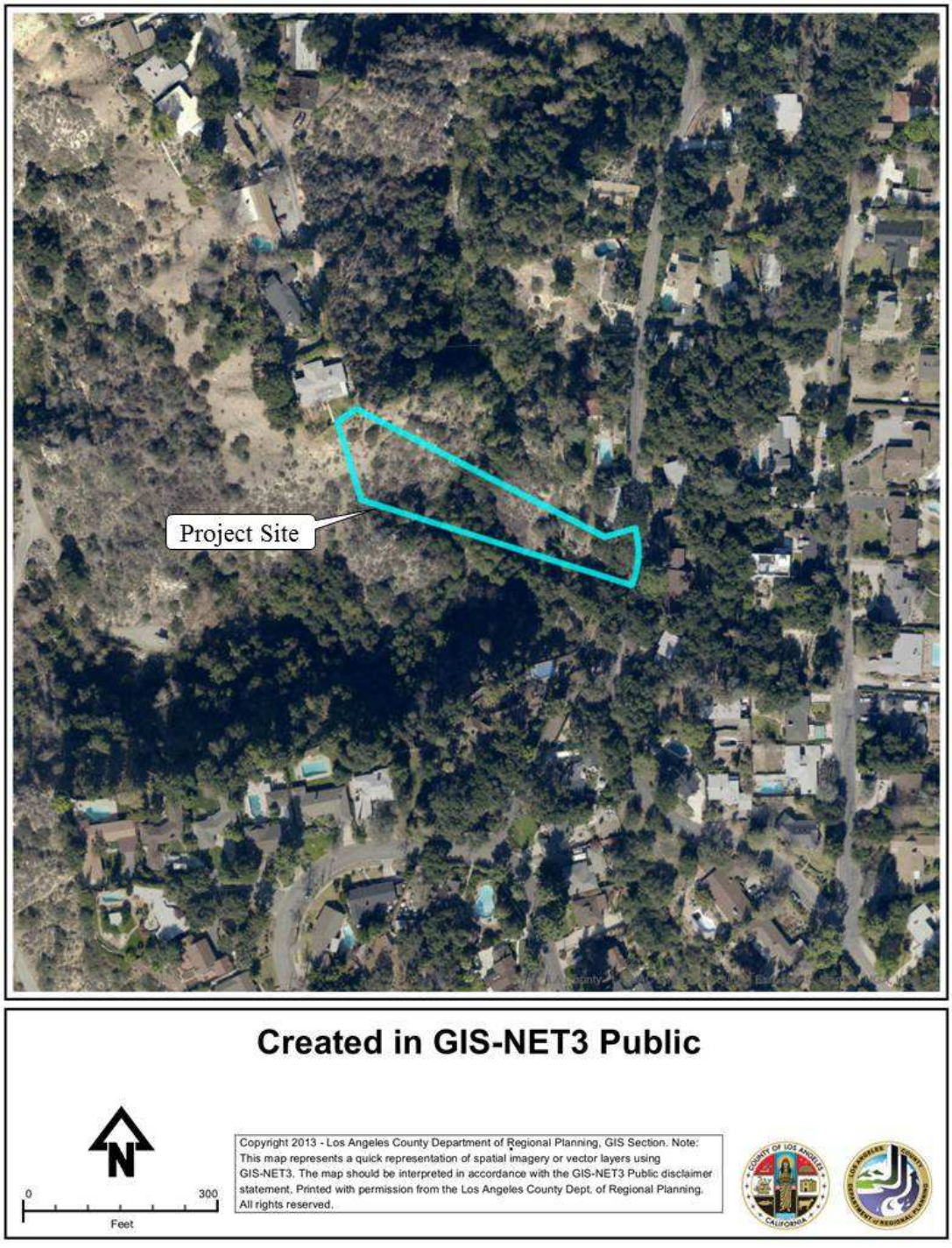


Figure 5: Project Vicinity Aerial Photograph[4]

[4]Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

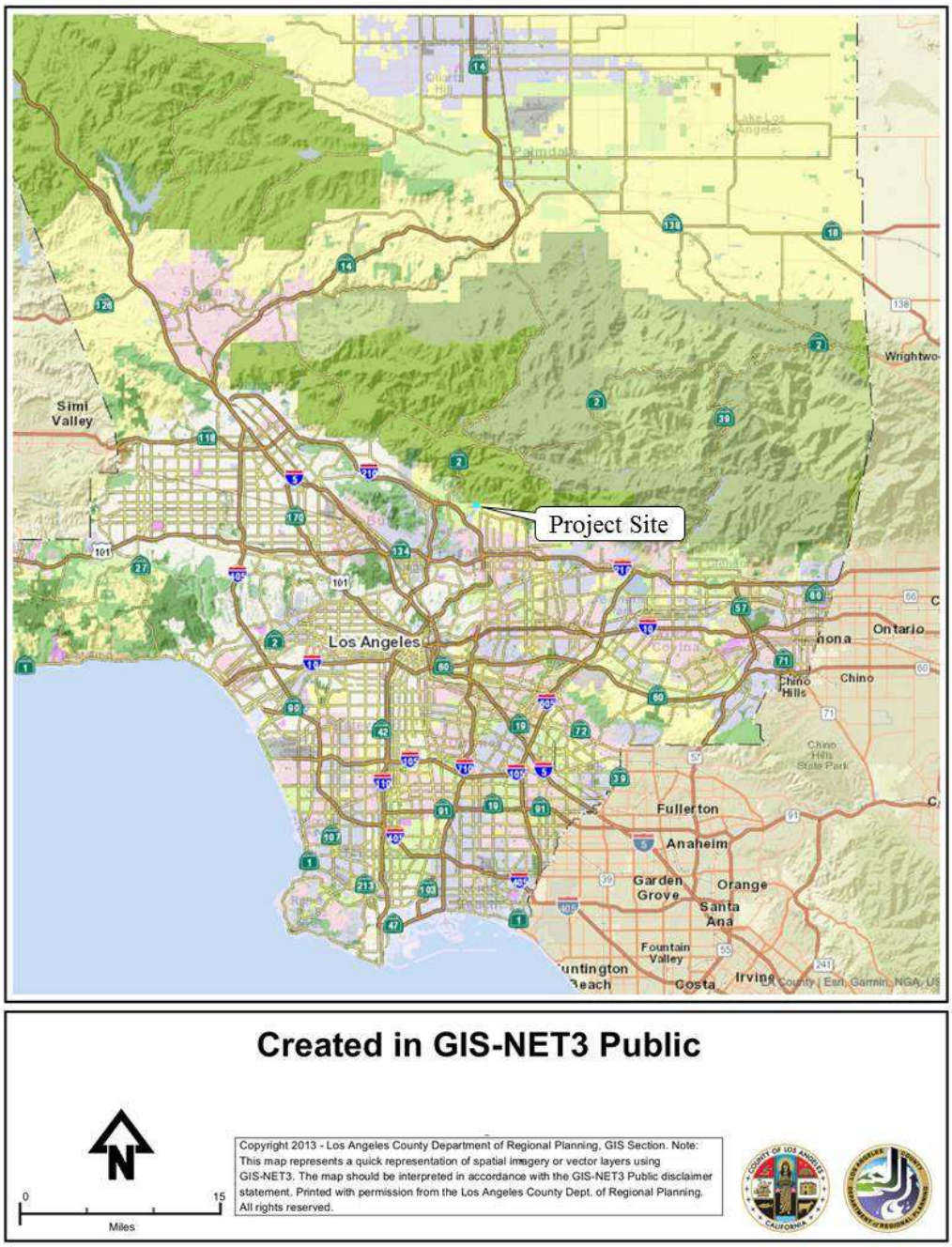


Figure 6: Regional Map[5]

Other public agencies whose approval is required:

Departments of the County of Los Angeles must approve all appurtenant building permits.

[5] Source: Regional Planning Geographical Information Systems. Available at: http://planning.lacounty.gov/gisnet3.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Because "a negative declaration, mitigated negative declaration, or environmental impact report" (CEQA Section 21080.3.1(b)) do not accompany this Checklist, which has identified that the project conforms to criteria of a continuation for which no additional environmental document is required, no tribal consultation is required. However, tribes requesting consultation were consulted, and agreed the type and scale of expected impacts from the project did not warrant any mitigation measures.

CONTINUATION PROJECT DEFINITION CRITERIA

Is the proposed project a part of or a continuation of the anticipated project analyzed in the prior EIR?

The GPEIR was intended to evaluate the environmental impacts of the 2035 County General Plan to the greatest extent possible and is used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with projects in the County. The GPEIR was certified as of October 7, 2015.[6] The scope of the GPEIR was to analyze a reasonably foreseeable progression of environmental state through 2035, and to mediate projects that would commence from the date of adoption in 2015, through to 2035. No new information or type of environmental effect has been identified that would invalidate or render insufficient the analysis of the GPEIR as it applies to the proposed project.

Pursuant to State CEQA Guidelines Section 15168(c)(2), "[f]actors that an agency may consider in [determining whether a proposed project is in the scope of the program EIR] include, but are not limited to, consistency of the later activity with the type of allowable land use, overall planned density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR." The scope of the 2035 County General Plan analyzed in its GPEIR was the complete buildout of all future development in the County pursued within its framework according to land use maps derived from assessor data representing zoning and occupancies.[7] This included "358,931 additional residential dwelling units, approximately 1,316,958 additional residents, and approximately 225,201 additional

[6] Source: County Department of Regional Planning. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/4.-gp_2035_nod-recorded.pdf.
[7] Source: 2035 County General Plan, Appendix D "Buildout Methodology". Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir-appendixD-Updated-Buildout-Methodology.pdf. As amended by the 2035 County General Plan FEIR, page 3-8. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/1.-gp_2035_lac-gpu-final-eir-final.pdf.

workers,"[8] including buildout of the proposed residential project parcel. The GPEIR used the land use designation of the Altadena Community Plan,[9] which portray the project parcel as a low-density residential parcel of one unit per acre, consistent with the proposed project. The proposed project also conforms to the parcel zoning of R1-10,000, permitting one single-family residence on a parcel at least 10,000 square feet in size. Provisioning of all infrastructure required of a single-family residence is analyzed in the GPEIR, including water and electricity supply, wastewater transport and treatment, and transportation fuel supply.

Is there any substantial new information that would indicate the continuation would materially change the buildout of the County, or that the projected buildout of the County had materially deviated from expectations due to other circumstances?

No such information has been identified. The proposed project is consistent with the land use designation and intensity assumed in the GPEIR, and buildout of the County has not materially deviated in kind or extent from what was projected by the GPEIR, which was premised on land use designations that have evolved only marginally.

Is there any substantial new information that would result in a finding of new or greater impact severity in the continuation than was anticipated by the prior EIR?

No significant effects identified in the GPEIR have been determined by the County to be presently more severe than they were when discussed in that EIR.

The GPEIR was certified as of October 7, 2015.[10] The scope of the GPEIR was to analyze a reasonably foreseeable progression of environmental state through 2035, and to mediate projects that would commence from the date of adoption in 2015, through to 2035. No new information or type of environmental effect has been identified that would invalidate or render insufficient the analysis of the GPEIR as it applies to the continuation.

Examples of new information that could invalidate prior analysis or the analyzed sufficiency of standard conditions include: interaction of a continuation with a new environmental contaminant like a chemical spill that produces a type of effect that was not anticipated by the prior EIR; failure of a similar project sited on the same geologic unit, due to a newly resolved instability in that unit, and; catastrophic failure of a reservoir, aquifer or other water supply infrastructure analyzed in the GPEIR to contribute to sufficient capacity for future projects, but no longer available.

Though the GPEIR anticipated wildfires in the wildland/urban interface, the Eaton Fire of January 2025 was more severe than reasonable predictions of disaster extent reflected in hazard

[8] Source: 2035 County General Plan EIR, page 5.10-35. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[9] Source: 2035 County General Plan EIR, Appendix C "Land Use and Zoning," page 55. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir-appendixC.pdf.
[10] Source: County Department of Regional Planning. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/4.-gp_2035_nod-recorded.pdf.

severity maps and other planning documents. However, the project site is located outside the burn perimeter, and the construction and operation of one single-family residence in the vicinity of the Eaton Fire produces no type of interaction that was unanticipated in the GPEIR. To the extent simultaneous re-construction of much of Altadena was unanticipated by the GPEIR, the relative contribution constructing one single-family residence is cumulatively inconsiderable in the context of re-construction of thousands of single-family residences nearby and would therefore produce no unanticipated cumulatively considerable effect interacting with this degraded condition. To the extent the GPEIR considered probabilities of wildfire-related impacts, the Eaton Fire has reasonably reduced the probability of future impact in the vicinity given reasonably expected improvements in fire-hardening re-constructed residences and utilities, changes in vegetation, and changes in disaster response processes and infrastructure.

Is there any substantial new information that would render a mitigation measure rejected as infeasible by the prior EIR newly feasible, or that would justify a modification to an adopted mitigation measure that applies to the continuation?

No such information has been identified.

The GPEIR analyzed that the following mitigation would "not be feasible" or would be "infeasible" in some or all circumstances, none of which would apply to the continuation:

1. "As most of Los Angeles County is 1) urbanized, 2) mountainous terrain unsuitable for intensive commercial agriculture, or 3) land with other constraints that make commercial agriculture infeasible (such as lack of water supply or lack of soil suitability), use of such mitigation would require acquisition of land outside of Los Angeles County. Therefore, mitigation banks and similar programs designed to offset the loss of agricultural land are considered infeasible." [11]
2. "[H]igh land values mak[e] some agricultural commodities economically infeasible."[12]
3. "[W]here avoidance or minimization of impacts to wildlife movement corridors is infeasible, the policies proposed in the Proposed Project do not provide for mitigation for loss of wildlife movement opportunities or nursery sites," [13] (implying that avoidance or minimization could be deemed infeasible mitigation in some circumstances).
4. "[Historical protection] policies afford only limited protection to historic structures and would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible. The determination of feasibility will occur on a case by case basis as future development applications on sites containing historic structures are submitted."[14]

[11] Source: GPEIR, pages 5.2-38. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[12] Source: GPEIR, pages 5.2-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[13] Source: GPEIR, pages 5.4-120. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[14] Source: GPEIR, pages 5.5.-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

5. "Throughout much of the Project Area south of the City of Santa Clarita, most Major and Secondary Highways are fully built to their ultimate cross sections, and further widening would not be feasible."[15]

All mitigation measures formulated in the GPEIR that could apply to the project remain more than sufficient to ensure that the continuation would not be expected to have a significant effect.

Consistency of the continuation with the analysis of the GPEIR is attributed in the following checklist.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Aesthetics					
Have a substantial adverse effect on a scenic vista	LTS	☐	☐	☐	☐
The aesthetic impacts of one single-family residence in an urbanized residential neighborhood are not peculiar to the project or its site and are uniformly mitigated by standard constraints on single-family residences with which the proposed project would comply. The proposed project is consistent with this GPEIR analysis and determination, which remains valid. The GPEIR analyzed that "[r]equirements relating to CUPs would ensure that development projects that would be accommodated by the [2035 County General Plan] would be held to appropriate development standards of the County Code. Regulations outlined in the County Code relating to HMAs would ensure that the physical character and scenic value of areas of the County with a natural slope gradient of steeper than 25 percent are preserved. Since hillsides and ridgelines are some of the primary resources related to scenic vistas in Los Angeles County, the provisions of the County Code would significantly reduce impacts to these areas….The existing regulatory setting, as well as the goals and policies contained in the [2035 County General Plan], would serve to lessen potential impacts to scenic vistas associated with implementation of the [2035 County General Plan]."[16] The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[17] As to cumulative impacts, the 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on scenic resources to a less than significant level, the Proposed Project's contribution to County-wide impacts would					

[15] Source: GPEIR, pages 5.16-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[16] Source: GPEIR, pages 5.1-19 and 5.1.20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[17] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
not be cumulatively considerable. Cumulative impacts of the Proposed Project related to scenic vistas and scenic resources are therefore considered less than significant."[18] A project that satisfies relevant CUP findings, and which is compliant with development standards in the County Code, would be expected to have less than significant aesthetic effects in an urbanized area. The proposed project satisfies all CUP findings relevant to aesthetics, complies with the County Code, and is not inconsistent with any 2035 County General Plan policy relating to aesthetics.					
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	LTS	☐	☐	☐	☐
The proposed project would not be visible from any state scenic highway or County-designated or eligible scenic highway, the nearest of which is more than 1.3 miles distant (a portion of the I-210 freeway), with sightlines to the project site obscured by topography and vegetation. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "future discretionary projects accommodated by the [2035 County General Plan] would be subject to a separate project-level environmental review in accordance with CEQA, wherein the individual project's contribution to the degradation of scenic highways would be assessed at the time formal development plans/applications are submitted to the County for review and approval. In addition, a number of goals and policies of the [2035 County General Plan] would also serve to minimize potential impacts to scenic highways by preventing degradation of existing vistas, as well as by promoting actions that would make existing scenic vistas more accessible to individuals."[19] Because the proposed project is not visible from a scenic highway, no additional project-level review would be warranted.					
Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, …conflict with applicable zoning	LTS	☐	☐	☐	☐

[18] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[19] Source: GPEIR, page 5.1-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
and other regulations governing scenic quality.					

The aesthetic impacts of one single-family residence in an urbanized residential neighborhood are not peculiar to the project or its site and are uniformly mitigated by standard constraints on single-family residences with which the proposed project would comply. The proposed project is consistent with this GPEIR analysis and determination, which remains valid.

The GPEIR analyzed that "[e]xisting regulations, including provisions contained in the County's Zoning Ordinance relating to the regulation of building form, massing, subdivisions, signs, architectural features, CUPs, design, and oak tree preservation would serve to lessen the impact of the [2035 County General Plan] on the visual character of [Los Angeles County]….Additionally, several of the guiding principles, goals, policies, and implementation programs contained in the [2035 County General Plan] would serve to lessen or mitigate potential impacts of the [2035 County General Plan] by providing direction for future decision making….[A]pplicable portions of the County Code, and relevant goals and policies of the [2035 County General Plan] would reduce these impacts to a less than significant level." The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[20]

As to cumulative impacts, the 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on visual and character to a less than significant level, the [2035 County General Plan's] contribution to Countywide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed Project related to visual character and quality are therefore considered less than significant."[21]

The proposed design of the home meets all developmental standards of the County Code, including those tightened in the Altadena Community Standards District, which "ensure[s] that new and expanded structures are compatible in size and scale with the characteristics of surrounding residential neighborhoods, protecting the light, air, and privacy of existing single-family residences from negative impacts while providing certain flexibility within residential areas."[22] The proposed project is consistent with the zoning of the project parcel, which anticipates the aesthetic effects of one code-compliant residence. The proposed project satisfies relevant CUP findings and is not inconsistent with any 2035 County General Plan policy relating to aesthetics.

[20] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[21] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[22] Source: County Code Section 22.44.127(A).

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LTS	☐	☐	☐	☐
The lighting impacts of one single-family residence in an urbanized residential neighborhood are not peculiar to the project or its site and are uniformly mitigated by standard constraints on single-family residences with which the proposed project would comply. The proposed project is consistent with this GPEIR analysis and determination, which remains valid. The GPEIR analyzed that "[i]n addition to applicable provisions of the County Code…the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. These regulations would serve to mitigate potential impacts of new land uses.…Goals and policies of the [2035 County General Plan] would serve to minimize potential impacts related to additional sources of light and glare."[23] The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[24] As to cumulative impacts, the 2035 County General Plan analyzed that "[i]mpacts from glare are generally localized and not cumulative in nature; therefore, a significant cumulative impact related to glare would not occur."[25] The proposed project meets all developmental standards of the County Code and California Building Code and is not inconsistent with any 2035 County General Plan policy relating to light or glare. The project would entail typical, low-intensity leakage of interior lighting through glazing, low-intensity exterior lighting of driveway and entryway, and would not make use of shiny or reflective materials or coatings.					
Agriculture and Forestry Resources					
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	LTS	☐	☐	☐	☐

[23] Source: GPEIR, page 5.1-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[24] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[25] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
The proposed project site is not zoned to permit use for agriculture. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to buildout of the [2035 County General Plan] would be a potentially significant impact in the Antelope Valley Area Planning Area and Santa Monica Mountains Planning Area. In the remaining nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is located], impacts would be less than significant."[26]					
Conflict with existing zoning for agricultural use, or a Williamson Act contract	LTS	☐	☐	☐	☐
The proposed project site is not zoned to permit use for agriculture. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "implementation of the [2035 County General Plan] would not involve rezoning of farmland and impacts regarding conversion of mapped farmland to non-agricultural uses would be less than significant."[27]					
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))	LTS	☐	☐	☐	☐
The proposed project site is not zoned to permit use for forestry or timber harvest. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "[t]he Los Angeles County Zoning Code does not contain zones specifically for forest use or production of forest resources….As the County has no existing zoning specifically designating forest use, implementation of the [2035 County General Plan] would not conflict with existing zoning for forest land or timberland. No impact would occur."[28]					

[26] Source: GPEIR, page 5.2-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[27] Source: GPEIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[28] Source: GPEIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Result in the loss of forest land or conversion of forest land to non-forest use	LTSM	☐	☐	☐	☐

While no forest land exists on the project parcel, the impacts of one site-sensitive single-family residence on oak woodlands are not peculiar to the project or its site, as every one of the 52 surrounding single-family residences within 500 feet also impacts oak woodlands. In many instances, these other residences make use of extensive hardscape, grading, irrigated yards, pools, and other impacts that are more severe in kind or greater in extent than would be characteristic of the proposed project.

The GPEIR analyzed that "[f]orests in Los Angeles County are limited to narrow formations along creeks and other watercourses and the highest elevations of the San Gabriel Mountains….These plant communities would be protected by existing regulations, including Sections 1600 *et seq.* of the California Fish and Game Code. Mitigation measures set forth in Section 5.4 of this DEIR would reduce impacts to these natural communities from projects approved under the [2035 County General Plan]."[29] The GPEIR concluded that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[30] As to cumulative impacts, the GPEIR analyzed that "substantial adverse cumulative impacts to forest land, or zoning for forest use, are unlikely. Almost all of the forests in Los Angeles County are in the high-elevation parts of the [County]."[31]

While mitigation measures in Section 5.4 were formulated to encompass a range of more impactful subsequent activities, standard compensatory provisions of the Oak Tree Ordinance are sufficient to ensure that no reduction in oak resources will occur because of the project.

Nevertheless, the project has been conditioned with those applicable measures of Section 5.4 of the GPEIR as the standard approach to feasible avoidance and minimization, which has included a reconnaissance level survey (which found no designated species or communities), a required pre-construction sweep, and constraints on additional sweeps should vegetation disturbance or removal occur during designated species nesting or breeding seasons. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance

[29] Source: GPEIR, page 5.2-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[30] Source: GPEIR, page 5.2-37. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[31] Source: 2035 County General Plan EIR, page 5.2-36. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, and were analyzed as such by the GPEIR.					
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	LTS	☐	☐	☐	☐
The proposed project site is not zoned to permit use for agriculture, forestry, or timber harvest. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "[b]uildout of the [2035 County General Plan] based on the existing Antelope Valley Area Plan in the Antelope Valley Planning Area and on the existing Santa Clarita Valley Area Plan in the Santa Clarita Planning Area would have a significant indirect impact on conversion of mapped Important Farmland to nonagricultural use due to pressure to convert farmland to non-agricultural uses and related incompatibilities between agricultural and urban uses. Such indirect impacts would be less than significant in the other nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is sited.]"[32]					
Air Quality					
Conflict with or obstruct implementation of the applicable air quality plan.	LTS	☐	☐	☐	☐
The GPEIR analyzed that "SCAQMD consider(s) a project consistent with the air quality management plan if it is consistent with the existing land use plan."[33] The proposed project is consistent with the applicable land use plan – the Altadena Community Plan – which designates the project parcel for one single-family residence. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid.					
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment	SU	☐	☐	☐	☐

[32] Source: GPEIR, page 5.2-35. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[33] Source: GPEIR, page 5.3-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
under an applicable federal or state ambient air quality standard					
The air quality impacts of the construction or operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated General Plan Mitigation Measure ("GPMM")-AQ-1 with several Best Management Practices for incorporation in projects that "have the potential to exceed the applicable Air Quality Management District (AQMD) adopted thresholds of significance,"[34] though the effect was found to be significant and unavoidable because "due to the magnitude of emissions generated by future construction activities associated with the buildout of the [2035 County General Plan], no mitigation measures are available that would reduce impacts below SCAQMD's…thresholds."[35] Because project-specific thresholds are inherently aligned with cumulative considerability, and because the finding of unavoidable significance concerns only those projects that are unable to meet the SCAQMD's significance thresholds, a project that does not exceed them is not subject to any mitigation and would be expected to have a less than cumulatively considerable or significant effect. A project therefore transcends this finding of unavoidable significance if it does not exceed any air quality significance threshold. For purposes of analysis in this screening checklist, and in accordance with the provisions of the Southern California AQMD ("SCAQMD") CEQA Air Quality Handbook,[36] "[i]f a proposed project is five acres or less and does not require additional construction activities such as major cut-and-fill, or excavation for sub-grade levels or parking, or demolition of a structure taller than 50 feet, the Lead Agency can use the applicable sample construction scenario to represent the emissions and impacts from the proposed project instead of preparing a project-specific construction air quality analysis."[37] The sample 1-acre project does not exceed regional or localized thresholds, and the project would be expected to be uniformly less impactful than the sample, which is a structure of 40,000 square feet (approximately one acre) with associated mechanized demolition, grading and paving that are not required of the project, and which are substantially larger than the class of conforming single-family residences.					
Expose sensitive receptors to substantial pollutant concentrations	SU	☐	☐	☐	☐

[34] Source: GPEIR, page 5.3-47. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[35] Source: GPEIR, page 5.3-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[36] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993).
[37] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/docs/default-source/default-document-library/templates/finalreport.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
The air quality impacts of the construction or operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-AQ-2 and GPMM-AQ-3 to limit exposure of sensitive receptors, though the effect was found to be significant and unavoidable because "localized emissions of criteria air pollutants could exceed the SCAQMD…regional significance thresholds because of the scale of development activity associated with buildout of the [2035 County General Plan]."[38] As attributed above, the SCAQMD sample 1-acre project, which bounds the expected impact of the proposed project, does not exceed any localized significance threshold, and so transcends the finding of unavoidable significance. GPMM-AQ-2 levies requirements on new industrial or warehousing land uses, and GPMM-AQ-3 requires applicants for sensitive land uses to submit a health risk assessment prior to any discretionary project approvals where the project was sited within proximity to certain sources of hazardous materials, such as industrial facilities, dry cleaners, gas stations, etc. The proposed project is not an industrial or warehouse facility and is not located in proximity to any hazardous materials facilities.					
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people	LTSM	☐	☐	☐	☐
The air quality impacts of the construction or operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[i]f it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required… Facilities that have the potential to generate nuisance odors include but are not limited to: Wastewater treatment plant; Composting, greenwaste, or recycling facilities; Fiberglass manufacturing facilities; Painting/coating operations; Large-capacity coffee roaster; Food-processing facilities."[39] The GPEIR formulated GPMM-AQ-4 to constrain certain classes of project known to generate odors, concluding that "[GPMM-AQ-4] would ensure that odor impacts are minimized and facilities would comply with SCAQMD…Rule 402. [This impact] would be less than significant."[40]					

[38] Source: GPEIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[39] Source: GPEIR, page 5.3-50. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[40] Source: GPEIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
The project is a single-family home that does not share the potential of the example projects cited in the GPEIR to generate intense or objectionable odors, or distribute those odors to a substantial number of people. All projects in the SCAQMD are required to comply with Rule 402, prohibiting the emission of contaminants that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public. Architectural coatings would be expected to be low VOC, in accordance with SCAQMD and California Green Building Code requirements. Waste disposal during construction would be expected to adhere to typical protocols.					
Biological Resources					
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service	SU/LTSM	☐	☐	☐	☐
Impacts from grading and clearing of vegetation where no designated species or communities have been identified in the footprint of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-BIO-2 requiring pre-construction surveys against the take of designated species, concluding that "[m]itigation measure BIO–2 would ensure that no direct mortality to special-status species would occur with implementation of construction activities by requiring pre-construction surveys (and construction monitoring where warranted) for special-status species as necessary; thus, with implementation of this mitigation measure, direct impacts to special-status species would be considered less than significant. "[41] The GPEIR also formulated a requirement for a reconnaissance level survey to prepare feasible measures that could be formulated a priori, analyzing that "[m]itigation measure BIO–1 would ensure that, on a project-specific level, necessary surveys are conducted and a biological resources assessment is prepared to analyze project-specific impacts and propose appropriate mitigation measures to offset those impacts."[42]					

[41] Source: GPEIR, page 5.4-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[42] Source: GPEIR, page 5.4-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?

While GPMM-BIO-1 and GPMM-BIO-2 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures under the Fish and Game Code and the California and Federal Endangered Species Acts may not ensure less than significant avoidance rates for larger projects and/or projects sited in higher quality habitat with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas affecting no identified designated resources. Two plant communities exist on the project parcel. Coast Live Oak Woodlands has a state rarity of S4,[43] indicating apparent security. California Sagebrush Scrub has a state rarity rank of S5, indicating security. According to the CDFW, "Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA."[44]

Nevertheless, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization, which has included a reconnaissance level survey (which found no designated species or communities), a required pre-construction sweep, and constraints on additional sweeps should vegetation disturbance or removal occur during designated species nesting or breeding seasons. Because GPMM-BIO-1 establishes general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

The GPEIR analyzed that indirect effects on sensitive species from the loss of common habitat expected at the scale of buildout of all future development governed by the 2035 County General Plan was cumulatively significant and unavoidable because "[a]lthough direct impacts to special status species would be mitigated, there is no mitigation provided for the indirect impacts to special status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the [2035 County General Plan] would result in the overall reduction of habitat and resources to support special status species. Thus, due to the loss of common habitats capable of supporting special status species and diminished resource availability, impacts to special status species and associated habitat remain significant and unavoidable at the general plan level."[45] While the impact of the loss of common habitat is significant at the scale of the 358,931 additional

[43] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[44] Source: California Department of Fish and Wildlife. Available at: https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive%20natural%20communities.
[45] Source: GPEIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf..

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it would not be cumulatively considerable at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance.					
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service	LTSM	☐	☐	☐	☐
The proposed project footprint of development does not impact sensitive or riparian habitats or communities,[46] and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[t]he mitigation measures identified above [GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain."[47] As attributed above, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization.					
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	LTSM	☐	☐	☐	☐

[46] Note: the alliance of coast live oak and California sagebrush that characterize the project site is designated by the California Department of Fish and Wildlife ("CDFW") as "S4" – "apparently secure" and "not sensitive." See CDFW Natural Communities List at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline. Pursuant to the United States Fish and Wildlife Service ("USFWS") National Wetlands Inventory, Millard canyon bottom contains the only feature or riparian habitat on the project parcel, more than 100 feet distant from the project footprint of development. See USFWS map at https://www.fws.gov/wetlands/Data/Mapper.html.

[47] Source: GPEIR, page 5.4-124. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
The proposed project footprint of development does not impact state or federally protected wetlands,[48] and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[t]he mitigation measures identified above [GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain."[49] As attributed above, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization.					
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	LTS	☐	☐	☐	☐
The proposed project does not conflict with any local policies or ordinances, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this] impact would be less than significant."[50] The proposed project satisfies all required CUP findings, including those required for issuance of an Oak Tree Permit, and is not inconsistent with any 2035 County General Plan policy relating to biological resources. The proposed project, which removes one tree and includes long-term care for four replacement trees in superior habitat than the one tree removed, is designed and constrained to minimize impacts to trees and other biological resources on the project site, in accordance with the intent of these policies and ordinances. While variances to regulatory requirements or CUP findings may be sought where they would frustrate a permitted use, the project belongs to the class of conforming single-family residences that do not seek such relief. As such, these uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Interfere substantially with the movement of any native resident or	SU	☐	☐	☐	☐

[48] Note: Pursuant to the United States Fish and Wildlife Service ("USFWS") National Wetlands Inventory, Millard canyon bottom contains the only feature or riparian habitat on the project parcel, more than 100 feet distant from the project footprint of development. See USFWS map at https://www.fws.gov/wetlands/Data/Mapper.html.
[49] Source: GPEIR, page 5.4-124. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[50] Source: GPEIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites					
The GPEIR analyzed that "buildout of the [2035 County General Plan] will impact regional wildlife linkages and may impact nursery sites."[51] Notwithstanding this finding of significance where development occurred in wildlife linkages and nursery sites, the 2035 County General Plan EIR formulated GPMM-BIO-3 as feasible mitigation to reduce impacts to less than significant where the interaction of development with these resources could be mediated. GPMM-BIO-3 stipulates that "[wildlife] corridors shall not be entirely closed by any development" and where "wildlife corridors and wildlife nursery sites" are impacted, mitigation may include "native landscaping to provide cover on the corridor" or "preservation by deed in perpetuity for another comparable…site."[52] While the GPEIR contemplated development in wildlife linkages and nursery sites, the proposed project footprint of development is not located in a wildlife corridor or nursery site at a regional, sub-regional or landscape scale and therefore transcends this mitigation measure and the finding of unavoidable significance. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan	LTS	☐	☐	☐	☐
The proposed project is not sited within the boundary of any conservation plan, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this] impact would be less than significant.: [5.4-5]"[53] Within the County, the three adopted habitat conservation plans are the Desert Renewable Energy					

[51] Source: 2035 County General Plan EIR, page 5.4-124. n Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[52] Source: 2035 County General Plan EIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[53] Source: GPEIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Conservation Plan Natural Communities Conservation Plan/Habitat Conservation Plan ("NCCP"/"HCP"), the Palos Verdes Peninsula NCCP/HCP, and the West Mojave Plan HCP.[54] In addition, the USFWS Conservation Plan and Agreements Database[55] also includes the Newhall Farm Seasonal Crossings Habitat Conservation Plan. There are no California Regional Conservation Plans in the County.[56]					
Cultural and Tribal Cultural Resources					
Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5	SU	☐	☐	☐	☐
The project parcel contains no historic structures or other known historic or cultural resources, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-CUL-1, GPMM-CUL-2 and GPMM-CUL-3 to mitigate for impacts to historical resources, though the effect was found to be significant and unavoidable at the scale of all permitted future development in the County because "limited protection to historic structures…would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible."[57] The project therefore transcends this finding of unavoidable significance, and the scope of applicability of these measures.					
Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5	LTSM	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any					

[54] Source: GPEIR, pages 5.10-4 - 5.10-5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[55] Source: Source: United States Fish and Wildlife Service: Conservation Plans by Type and U.S. FWS Region. Available at: https://ecos.fws.gov/ecp/report/conservation-plans-type-region/.
[56] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.
[57] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
development activity."[58] The GPEIR also formulated GPMM-CUL-4 and GPMM-CUL-5 to establish performance standards in the event an unanticipated archaeological/tribal cultural or paleontological discovery was made, concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level,"[59] both for individual projects and cumulatively. While GPMM-CUL-4 and GPMM-CUL-5 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance rates for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas with no known resources. Also, the project does not entail excavation in volumes with substantial potential for archaeological discovery, with modest grading and drilling occurring in previously disturbed fill and in plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was to be encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Disturb any human remains, including those interred outside of formal cemeteries	LTS	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "compliance with [] regulations would ensure impacts to human burial grounds remain less than significant."[60] Specifically, "Public Resources Code Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts."					

[58] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[59] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[60] Source: GPEIR, page 5.5-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a.) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b.) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.	LTSM	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any					

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
development activity."[61] The GPEIR also formulated GPMM-CUL-4 and GPMM-CUL-5 to establish performance standards in the event an unanticipated archaeological/tribal cultural or paleontological discovery was made, concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level,"[62] both for individual projects and cumulatively. While GPMM-CUL-4 and GPMM-CUL-5 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance rates for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas with no known resources. Also, the project does not entail excavation in volumes with substantial potential for archaeological discovery, with modest grading and drilling occurring in disturbed fill and plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Geology and Soils					
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i.) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	LTS	☐	☐	☐	☐

[61] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[62] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
ii.) Strong seismic ground shaking iii.) Seismic-related ground failure, including liquefaction iv.) Landslides					

Expected and potential impacts of hillside grading and construction of a pile-and-grade-beam foundation for one single-family residence, where analyzed to be technically sound in a geotechnical report, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.

Fault Rupture

The GPEIR analyzed that "[a]dherence to [the Alquist-Priolo Earthquake Fault Zoning Map], and the associated setbacks from active fault traces, would help would reduce the hazards associated with earthquake fault rupture to a less than significant level." While the Alquist-Priolo Earthquake Fault Zones Act levies no jurisdictional setback requirement, Title 14, California Code of Regulations, Section 3603(a) states that "the area within 50 feet of such active faults shall be presumed to be underlain by active fault branches of that fault unless proven otherwise[,]" establishing a *de facto* zone of further required investigation to determine an appropriate setback that would extend no further than 50 feet. The nearest Alquist-Priolo Earthquake Fault Zone ("APEFZ") is more than six miles to the northwest.[63] The nearest County-designated active fault trace is approximately 1,000 feet to the southeast of the project.[64] As attributed in a geotechnical report for the project, as is required of any hillside structure, the nearest surface trace of a mapped fault is approximately 150 feet south of the proposed home. As a constituent of the class of residentially zoned single-family residences not sited on any fault, the proposed project site is not at risk of fault rupture. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not sited on a fault, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.

As to cumulative impacts of fault rupture or any other geologic effect discussed below, the GPEIR analyzed that "[d]ue to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology and soils impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis….Future cumulative development under the Proposed Project and the surrounding area would be subject to the same local, state, and federal regulations pertaining to geology and soils, including CBC and Los Angeles County Building Code requirements (or city building code requirements, as appropriate).

[63] Source: California Geological Survey. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/.
[64] Source: 2035 County General Plan: Figure 12-1. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/12.2_Chapter12_Figures.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Therefore, cumulative development in the region would not result in a significant cumulative impact."[65] *Ground Shaking* The GPEIR analyzed that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to the provisions of the [California Building Code], which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements, and would include foundation and structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level."[66] The project has been analyzed in a site-specific geotechnical investigation that conforms to these criteria, completed a geotechnical plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Ground Failure* The GPEIR analyzed that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to existing building and grading codes, and construction-related grading requires the preparation and submittal of site-specific grading plans and geotechnical reports that must be reviewed and approved by the County beforehand. Each future development project would be required to comply with the recommendations in the geotechnical investigation report and comply with the CBC, thereby reducing such hazards to a less than significant level."[67] The project has completed a geotechnical plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Landslides* The GPEIR analyzed that "[c]ompliance with existing state and county regulations, as well as goals and policies included as part of the [2035 County General Plan] would ensure that the impacts associated with exposure to strong seismic ground shaking, seismic-related ground					

[65] Source: 2035 County General Plan EIR, page 5.6-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[66] Source: GPEIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[67] Source: GPEIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
failure including liquefaction, and landslides are reduced to a less than significant level."[68] The project has been analyzed with a typical geotechnical investigation that conforms to these criteria. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Result in substantial soil erosion or the loss of topsoil	LTS	☐	☐	☐	☐
Expected and potential impacts soil erosion associated with grading for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[a]dherence to the requirements of the County Code and the CBC, together with the safeguards afforded by the County's building plan check and development review process, would help ensure that appropriate erosion controls are devised and implemented during construction,"[69] concluding that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss…are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[70] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
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	LTS	☐	☐	☐	☐
Expected and potential impacts of hillside grading and construction of a pile-and-grade-beam foundation for one single-family residence, where analyzed to be technically sound in a geotechnical report, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.					

[68] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[69] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[70] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
The GPEIR analyzed that "[i]ndividual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[71] The GPEIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[72] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	LTS	☐	☐	☐	☐
Expected and potential impacts of placing one single-family residence on soils, where analyzed to be technically sound in a geotechnical report, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[i]ndividual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[73] The GPEIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts					

[71] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[72] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[73] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[74] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[m]ost new development that is anticipated in the Project Area would not require the use of septic tanks or alternative wastewater disposal systems…In addition, all on-site wastewater treatment systems (OWTS) will be required to comply with County Code, Titles 11 and 28 and other regulations applicable to OWTS, including requirements for preparation and submittal of feasibility reports in order to obtain the Department of Public Health - Environmental Health approval for construction and installation of OWTS. As such, there would be no impact…" As a constituent of the class of residentially zoned single-family residences with ready sewer access to dispose wastewater, the proposed project site is not at risk of impacts associated with soil deficiencies in the treatment of wastewater. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not sited on a fault, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	LTSM	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any					

[74] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
development activity."[75] The GPEIR also formulated GPMM-CUL-5 to establish performance standards in the event an unanticipated paleontological discovery was made, concluding that "[GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level."[76] While GPMM-CUL-5 was formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance rates for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas. Also, the project does not entail excavation in volumes with substantial potential for paleontological discovery, with modest grading and drilling occurring in disturbed fill and plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was to be encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Greenhouse Gas Emissions and Energy					
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the					

[75] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[76] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[77] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[78] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate					

[77] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[78] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[79] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[80] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance					

[79] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[80] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[81] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[82] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance					

[81] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[82] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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Hazards and Hazardous Materials					
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	LTS	☐	☐	☐	☐
The use of materials that could be hazardous if misused, such as fuel oil, associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these					

[83] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[84] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[85] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all hazards and hazardous materials effects discussed herein, the GPEIR analyzed that "analyzed that "[a]ny future development would be required to comply with applicable federal, state and local regulations related to hazardous materials, emergency response, wildland fires, and public airports, private airstrips, and heliports. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, would be less than significant. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, emergency response, wildland fires, and airports would be less than significant. Therefore, impacts related to hazards and hazardous materials would not be cumulatively considerable."[86] In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	LTS	☐	☐	☐	☐
The use of materials that could be hazardous if misused, such as fuel oil, associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[87] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					

[85] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[86] Source: 2035 County General Plan EIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[87] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LTS	☐	☐	☐	☐
The use of materials that could be hazardous if misused, such as fuel oil, associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[88] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code. The proposed project is also not sited within one-quarter mile of an existing or proposed school.					
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	LTS	☐	☐	☐	☐
The GPEIR analyzed that "compliance with applicable existing regulations and processes would ensure that the [2035 County General Plan] would not result in a significant hazard to the public or the environment from future development on existing hazardous materials sites. Therefore, the [2035 County General Plan] would have a less than significant impact					

[88] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
associated with existing hazardous materials sites."[89] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[90] However, the proposed project is not located within the vicinity of an airport or within the boundary of an airport land use compatibility plan. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not located in proximity to an airport, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[91] These include public response infrastructure planning and provisioning, support for emergency personnel, public awareness, and other centralized approaches to avoiding impairment of emergency response. These uniformly applicable development standards mitigate against a potentially significant effect,					

[89] Source: GPEIR, page 5.8-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[90] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[91] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Directly or indirectly cause a significant risk of loss, injury or death involving wildland fires	LTS	☐	☐	☐	☐
The addition of some quantum of wildfire risk associated with human activities during construction and operation of one single-family residence, and with a new residential electricity drop and wiring, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[2035 County General Plan] policies and conditions of approval for future development projects within the [County], in addition to compliance with applicable regulations, would minimize [2035 County General Plan] impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[92] Cited policies aligned with standard conditions of approval for projects sited in VHFSZs, which include fire-rated wall and roof assemblies and windows, landscape management, adequate service and site location for fire suppression infrastructure, and low intensity, are characteristic of the proposed project. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Hydrology and Water Quality					
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality	LTS	☐	☐	☐	☐
Hydrology and water quality impacts during construction and operation of one single-family residence, such as the additiona of impervious surfaces, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[i]mpacts would be less than significant upon compliance with regulatory requirements and [2035 County General Plan] policies."[93] Cited policies aligned with standard conditions of approval include Low Impact Development standards facilitating buffering and/or infiltration of stormwater, and Best Management Practices limiting the					

[92] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[93] Source: GPEIR, page 5.9-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
contamination of stormwater. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all hydrology and water quality effects discussed herein, the GPEIR analyzed that "[a]s cumulative projects would be required to comply with [applicable] water-quality, drainage, and flood safety requirements, significant cumulative impacts would not occur. Therefore, the [2035 County General Plan] would not contribute to significant cumulative hydrology and water-quality impacts."[94]					
Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	LTS	☐	☐	☐	☐
Hydrology and water quality impacts during construction and operation of one single-family residence, such as the addition of impervious surfaces, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be less than significant."[95] Like other residential projects, the proposed project would result in a relatively minor increase in impervious surface area of approximately 1,159 square feet. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i.) Result in substantial erosion or siltation on- or off-site ii.) Substantially increase the rate or amount of surface runoff in a	LTS	☐	☐	☐	☐

[94] Source: GPEIR, page 5.9-41. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[95] Source: GPEIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
manner which would result in flooding on- or offsite iii.) 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 iv.) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation v.) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan					
Hydrology and water quality impacts during construction and operation of one single-family residence, such as new flow from downspouts, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be less than significant."[96] Like other single residential projects, the proposed project would result in a relatively minor increase in impervious surface area of approximately 1,159 square feet, and would not divert a waters. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Land Use and Planning					
Physically divide an established community	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]nlike the roadways proposed for the more rural areas of Los Angeles County, those proposed for the heavily urbanized portions of Los Angeles County (the East San Gabriel Valley, Gateway, Metro, San Fernando Valley, West San Gabriel Valley, and Westside Planning Areas) would traverse existing communities. These highways include roadways proposed to be widened (or otherwise improved) and roadways that would be built where no current roadway exists. Although such projects would involve the displacement of existing land uses, they would generally be constructed to increase access and					

[96] Source: GPEIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
connectivity in established communities, not divide them."[97] Like other single residential projects, the proposed project would not divide an established community. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	LTS	☐	☐	☐	☐
The GPEIR analyzed that "the Proposed Project would not conflict with goals contained within SCAG's 2012–2035 RTP/SCS or other land use plans. Therefore, impacts related to compatibility between the Proposed Project and applicable plans adopted for the purpose of avoiding or mitigating environmental effects would be less than significant."[98] These policies and regulations were considered in the context of specific environmental effects in other impact areas of analysis, as attributed in this Checklist. The proposed project, which seeks no variance from any applicable regulation or standard, was analyzed as such by the prior EIR, and would not have any effects that are more significant than what the prior EIR analyzed.					
Mineral Resources					
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[99] in all Planning Areas except portions of the Antelope Valley. As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for mining. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for mining use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Result in the loss of availability of a locally- important mineral resource	LTS	☐	☐	☐	☐

[97] Source: GPEIR, pages 5.10-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[98] Source: GPEIR, pages 5.10-42. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[99] Source: GPEIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
recovery site delineated on a local general plan, specific plan or other land use plan					
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[100] in all Planning Areas except portions of the Antelope Valley. As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for mining. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for mining use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Noise					
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	SU	☐	☐	☐	☐
Noise impacts during construction and operation of one single-family residence, such as that associated with equipment and personnel characteristic of light-framing, and added vehicular traffic, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-NOI-1 to mitigate for an increase in construction-related noise levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[101] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. While the impact of new noise is significant at the scale of the 358,931 additional residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it would not be cumulatively considerable at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance.					

[100] Source: GPEIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[101] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Compliance with the County Noise Control Ordinance would be sufficient to mitigate against a significant effect from noise in the class of single-family residential projects. The County Noise Control Ordinance considered and formulated context-specific thresholds and exceptions that are different for the construction and period of occupancy of one single-family residence in a residential neighborhood, in consideration of the times of day, duration, intermittency and magnitude of noise impacts, and of the existing condition. Nevertheless, the project has been conditioned to satisfy GPMM-NOI-1 of the GPEIR as the standard approach to contingency noise mitigation. GPMM-NOI-1 stipulates that "[m]itigation measures such as installation of temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive structures, equipping construction equipment with mufflers, and reducing non-essential idling of construction equipment to no more than five minutes shall be incorporated into the construction operations to reduce construction-related noise to the extent feasible."[102] Because GPMM-NOI-1 establishes general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all noise effects, the GPEIR analyzed that "[c]umulative projects in the Los Angeles County region would have the potential to result in a cumulative noise impact if they would, in combination with regional growth in the immediate area, create excessive community noise levels. The traffic noise levels predicted for buildout conditions…are based on cumulative traffic conditions that take into account cumulative development in the region. Therefore, these impact discussions inherently incorporate the cumulative scenario by default. Further, cumulative projects under the buildout of the Proposed Project within Los Angeles County would be required to comply with the applicable land use compatibility classification or they would not be approved without a general plan amendment. Therefore, the Proposed Project would not contribute to a significant cumulative noise impact above and beyond [the non-cumulative noise analysis]."[103]					
Generation of excessive ground-borne vibration or ground-borne noise levels	SU	☐	☐	☐	☐
Vibration impacts during construction and operation of one single-family residence, such as operation of internal combustion engine vehicles to ingress and egress from the project site,					

[102] Source: GPEIR, pages 5.12-106. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[103] Source: 2035 County General Plan EIR, page 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?

are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.

The GPEIR formulated GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 to mitigate for an increase in or unacceptable exposure to vibration levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[104] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. While the impact of new vibration is significant for projects requiring vibration-intensive equipment used for extended duration adjacent to sensitive uses, it would not be cumulatively considerable for typical residential impacts, which do not use vibration-intensive equipment. The project therefore transcends this finding of unavoidable significance.

Compliance with the County Noise Control Ordinance would be sufficient to mitigate against a significant effect from vibration in the class of single-family residential projects.

Nevertheless, GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 have been considered for their potential applicability to the project. GPMM-NOI-3 stipulates that "[n]ew development that occurs within 200 feet of a railroad track…shall be evaluated for potential vibration impacts."[105] However, the proposed project is not sited within 200 feet of a railroad track. GPMM-NOI-4 stipulates that "[i]ndividual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses…additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g. drilled piles to eliminate use of vibration-intensive pile driver)."[106] The proposed project would not make use of vibration-intensive equipment and therefore transcends this mitigation measure. GPMM-NOI-5 stipulates that "heavy industrial projects are required to provide evidence that vibration due to the operation of machinery would not adversely affect nearby vibration sensitive uses."[107] The proposed project is not a heavy industrial project and does not require the use of any vibration-intensive equipment. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.

[104] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[105] Source: GPEIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[106] Source: GPEIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[107] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels	LTS	☐	☐	☐	☐
The GPEIR analyzed that "with the application of Policy LU 7.6 and Policy N 1.12 and review by the Los Angeles County ALUC, future development under the Proposed Project would be consistent with adopted ALUCPs and there would be no significant noise exposure impacts relative to airport or airstrip noise levels."[108] However, the proposed project is not located within the vicinity of a private airstrip or within the boundary of an airport land use compatibility plan, and effects on occupants of the class of single-family residences do not affect a sufficient number to constitute an environmental effect. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not located in proximity to an airport, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Population and Housing					
Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[t]he Proposed Project accommodates up to 659,409 housing units, and although buildout is not expected to occur by 2035, the opportunities for housing development provided in the Proposed Project are consistent with SCAG growth projections for 405,500 units by 2035. The housing and population growth allowed under the Proposed Project is consistent with SCAG projections and do not constitute a significant adverse environmental impact."[109] Resulting ratios of jobs to housing were acceptable in all planning areas but the Antelope Valley Planning Area, resulting in central planning mitigation for that area. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation and associated central planning					

[108] Source: GPEIR, pages 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[109] Source: GPEIR, pages 5.13-6. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
strategies, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[w]ithout mitigation, [this impact] would be less than significant."[110] Because standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation and associated central planning strategies, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Public Services					
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: i. Fire protection ii. Police protection iii. Schools iv. Parks v. Other Public Facilities	LTS	☐	☐	☐	☐
Public service impacts of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. *Fire protection* The GPEIR formulated GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3 to mitigate for provisioning new fire protection infrastructure and personnel, analyzing that "existing regulatory programs and [GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3] would reduce					

[110] Source: GPEIR, pages 5.13-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
potential impacts associated with fire protection to a level that is less than significant."[111] GPMM-PS-2 and GPMM-PS-3 are not applicable, and the project would comply with the applicable "fair share" mitigation measure GPMM-PS-1 by paying the applicable Fire Department Developer Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Police protection* The GPEIR formulated GPMM-PS-4 to mitigate for provisioning new police protection infrastructure and personnel in the high-growth Antelope Valley area, analyzing that ""[GPMM-PS-4] would reduce potential impacts associated with law enforcement to a level that is less than significant."[112] However, the project is not located in the Antelope Valley area. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Schools* The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[113] These include payment of a Schools Developer Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Parks and other public facilities* The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[114] These include payment of a Library Impact Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Recreation					

[111] Source: GPEIR, pages 5.14-11. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[112] Source: GPEIR, pages 5.14-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[113] Source: GPEIR, pages 5.14-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[114] Source: GPEIR, pages 5.14-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[115] These include centralized strategies and funding sources for provisioning and upkeep of parkland with buildout. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[116] These include centralized strategies and funding sources for provisioning and upkeep of parkland with buildout. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Transportation					
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	SU	☐	☐	☐	☐
Traffic flow impacts during construction and operation of one single-family residence permitted to encroach with a standard process during utility connection and not otherwise are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.					

[115] Source: GPEIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[116] Source: GPEIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
The GPEIR found impacts to the circulation system to be significant and unavoidable because certain "impacted locations are still considered to be significantly impacted with mitigation," represented by significant increases in the level of service at some intersections and on some already-congested freeways, and because "completing certain improvements located within cities lies with agencies other than the County," with "potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the County's control."[117] Notwithstanding this finding of cumulative significance under some circumstances, the GPEIR formulated GPMM-T-1, GPMM-T-2, GPMM-T-3, GPMM-T-4 and GPMM-T-5 as feasible mitigation to reduce impacts to less than significant under other circumstances. GPMM-T-1 stipulates that "[t]he County shall continue to monitor potential impacts on roadway segments and intersections on a project by project basis as buildout occurs by requiring traffic studies for all projects that could significantly impact traffic and circulation patterns. Future projects shall be evaluated and traffic improvements shall be identified to maintain minimum levels of service in accordance with the County's Traffic Impact Analysis ("TIA") Guidelines, where feasible mitigation is available."[118] In accordance with the County's TIA Report Guidelines, use of the 10th edition of the Institute of Transportation Engineers ("ITE") Trip Generation Manual[119] results in an expected trip generation rate for a single-family residence of approximately 10 trips/day during the period of occupancy, including one trip at the peak hour. During construction, the same source expects six to seven trips per day, including one trip at the peak hour. These amounts do not exceed the screening criteria for performance of traffic modeling in a TIA. GPMM-T-2 stipulates that the County "shall implement over time objectives and policies contained within the General Plan Mobility Element."[120] Mobility Element policies relate to the design, construction, operation and maintenance of the transportation system, which are not pertinent to a single-family home. GPMM-T-3, GPMM-T-4 and GPMM-T-5 are conditional requirements of the County that are not triggered by the construction of a single-family home. As the project would not change Level of Service criteria on any roadway or intersection and is entirely within the County's jurisdiction, it transcends the finding of unavoidable significance. In complying by non-applicability with all relevant mitigation established by the					

[117] Source: GPEIR, page 5.16-83. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[118] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[119] Source: Institute of Transportation Engineers. Available at: http://www.ite.org/tripgeneration.
[120] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)	LTS	☐	☐	☐	☐
While State CEQA Guidelines Section 15064.3(b) came into effect on 12/28/18 pursuant to Government Code section 11343.4(b)(3), after the adoption of the 2035 County General Plan and its EIR, the 2035 County General Plan advanced polices aligned with State CEQA Guidelines Section 15064.3(b) to reduce per-capita VMT, including Policy M 4.16 and LU 5.3. The project would provide housing in the Pasadena Regional Statistical Area, which has had and is projected to continue to have a high ratio of jobs to housing,[121] corresponding to an expectation of reduced per capita VMT for non-specific residents. Additionally, the Applicant and his wife propose to walk to and from work at the major jobs center (of nearly 6,000 workers) in the area, a distance of less than a mile by foot, or less than two miles by vehicle, and so would be expected to further reduce VMT (which is dominated by distance of vehicular commute) for the foreseeable future, compared to other residents commuting to job centers in central Pasadena or elsewhere. Cumulative impacts would be expected to be less than significant because the GPEIR analyzed that "buildout of the [2035 County General Plan] would slightly reduce per capita VMT."[122] This impact is also subject to a screening threshold for "land use projects" as recommended by the Office of Planning and Research in its Technical Advisory in Evaluating Transportation Impacts in CEQA,[123] of more than 110 trips per day generated or attracted. This is the standard approach to managing cumulative impacts, such as air quality and greenhouse gas emissions, and with the SCAG's 2012 RTP/SCS, as analyzed by the GPEIR. As documented above, single-family residences would be expected to result in an order of magnitude lower trips than this screening threshold. Because standards are uniformly unnecessary to mitigate against this effect in the class of single-family residences, and because the project would be consistent with state and 2035 County General Plan policy to reduce VMT, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Substantially increase hazards due to a geometric design feature (e.g.,	LTS	☐	☐	☐	☐

[121] Source: Southern California Association of Governments. The New Economy and Jobs/Housing Balance in Southern California. Available at: https://scag.ca.gov/sites/default/files/old/file-attachments/neweconomyjobshousingbalance.pdf.
[122] Source: GPEIR, page 5.3-29. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[123] Source: California Office of Planning and Research, Technical Advisory in Evaluating Transportation Impacts in CEQA, page 10. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)					
Traffic flow impacts during construction and operation of one single-family residence permitted to encroach with a standard process during utility connection and not otherwise are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[124] These include common standards for the design of the circulation system and required visibility regions around driveways edges at their intersection with the roadway. Nevertheless, the GPEIR anticipated that project-specific analysis may occur where a dangerous design feature is created or pre-exists the project. While a single-family residence could create a hazard by seeking a variance from visibility requirements mediating merging into the flow of traffic around a driveway, or sited in the flow of an intersection with known safety issues, the proposed project would have adequate visibility along sight lines of more than 450 feet north (the incoming, project-side lane of traffic) and 150 feet south, on a roadway with a posted speed limit of 25mph, with no nearby intersections. Compliance with driveway visibility requirements in the County Code and standard flagging as needed for larger vehicles or obstructions during construction would ensure that hazards are avoided in the interaction of project-related traffic with future traffic on the roadway. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Result in inadequate emergency access	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[125] These include common standards for maintaining access on the circulation system during construction. Nevertheless, the GPEIR anticipated that project-specific analysis may occur where a project could result in functional compromise of an emergency evacuation route that was not mediated by standard construction provisions, such as landsliding on, subsidence below, or other non-transient destruction of a roadway surface.					

[124] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[125] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
While a single-family residence could block an emergency route during an emergency if it resulted in non-transient functional failure of the roadway, the proposed project does not involve activities that could reasonably cause such damage. Like all single-family residences, the proposed project would result in some obstruction of the fronting roadway for connection of below-grade utilities that are routed under that roadway. This construction would entail trenching in the roadway at depths up to 8ft. Pursuant to standard conditions, at most a single lane of Canyon Crest Road would be blocked at any given time, during standard daylight working hours for a number of days, with proper signage and flagging of traffic. Pursuant to standard conditions, steel roadway channel and asphalt to restore uncompromised flow of traffic in both lanes must be kept on hand for installation at the end of permitted working hours and in the event of an emergency. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Utilities and Service Systems					
Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects	LTS	☐	☐	☐	☐
Impacts from the provision of utilities for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR discussed various approaches in section 5.17 to centralized planning and provisioning of utility infrastructure, finding all approaches adequate and no residually significant cumulative effects. As a constituent of the class of residentially zoned single-family residences, the proposed project does not impose marginal demand on any utility or service system sufficient in magnitude to induce any new infrastructure. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Have sufficient water supplies available to serve the project and reasonably foreseeable future	LTS	☐	☐	☐	☐

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
development during normal, dry and multiple dry years					
Impacts from the provision of utilities for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR forecast that in the West San Gabriel Valley Planning Area, "[t]here is adequate forecasted residual water supply at buildout to serve [complete buildout], and impacts on water supplies would be less than significant,"[126] weighing residual supply capacity of 176mgd against projected added demand of 4.69mgd in nine planning areas that include the West San Gabriel Valley Planning Area. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	LTS	☐	☐	☐	☐
Impacts from the provision of utilities for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR forecast that in all planning areas, "[t]here is adequate water treatment capacity in the region for the net increase in water [treatment] demands from [complete buildout], and impacts would be less than significant."[127] Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair	LTS	☐	☐	☐	☐

[126] Source: GPEIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[127] Source: GPEIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
the attainment of solid waste reduction goals					
Generation of solid waste created by one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant." These include construction and demolition debris recycling requirements for single-family residences and provisions of the County's Integrated Waste Management Plan. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste	LTS	☐	☐	☐	☐
Generation of solid waste created by one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[128] These include construction and demolition debris recycling requirements for single-family residences and provisions of the County's Integrated Waste Management Plan. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Wildfire					
Substantially impair an adopted emergency response plan or emergency evacuation plan	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or					

[128] Source: GPEIR, page 5.17-60. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
emergency evacuation plan is less than significant."[129] These include public response infrastructure planning and provisioning, support for emergency personnel, public awareness, and other central planning approaches to avoiding impairment of emergency response. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrates from a wildfire or the uncontrolled spread of wildfire	LTS	☐	☐	☐	☐
The placement of one single-family residence on a slope in a Very High Fire Hazard Severity Zone is not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. While this threshold was added to the State CEQA Guidelines in 2019, after the adoption of the GPEIR, the GPEIR analyzed the vectors that contribute to wildfire risk, which has long existed as a hazard in the County. The GPEIR analyzed that "the LACoFD has instituted a variety of regulatory programs and standards for vegetation management, pre-fire management and planning, fuel modification, and brush clearance. In addition to these programs, the LACoFD and the County Department of Public Works enforce fire and building codes related to development in VHFHSZs. The Fire Department has access requirements for single family residential uses built in VHFHSZs."[130] "[2035 County General Plan] policies and conditions of approval for future development projects within the Project Area, in addition to compliance with applicable regulations, will minimize Proposed Project impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[131] Cited policies aligned with standard conditions of approval for projects sited in VHFSZs, which include fire-rated wall and roof assemblies and windows, landscape management, adequate service and site location for fire suppression infrastructure, and low intensity, are characteristic of the proposed project. Proximity to a slope vegetated with fire-wise plantings, as opposed to flashy fuels promoting a ladder effect, would not significantly exacerbate risk. The proposed design entails no vented attic or crawlspace to protect against wind-borne embers, which the California Building Code also addresses in its standards. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by					

[129] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[130] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[131] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Substantial Changes to Project or Circumstances?	New or More Severe Significant Effect?	Previously Rejected Mitigation Newly Feasible?	Adopted Mitigation Requires Modification?
the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment	LTS	☐	☐	☐	☐
While this threshold was added to the State CEQA Guidelines in 2019, after the adoption of the GPEIR, the GPEIR analyzed the vectors that contribute to wildfire risk and associated secondary effects, including "the use of fuel breaks, fire fighting equipment, water drops, and other techniques."[132] "[2035 County General Plan] policies and conditions of approval for future development projects within the Project Area, in addition to compliance with applicable regulations, will minimize Proposed Project impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[133] As a constituent of the class of residentially zoned single-family residences, the proposed project does not impose marginal demand on any utility or service system sufficient in magnitude to induce any new infrastructure. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					

[132] Source: GPEIR, page 5.14-2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[133] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

On the basis of this initial valuation:

- ☒ I find that the proposed project WOULD NOT be inconsistent with the analysis of the 2035 County General Plan EIR, that the proposed project is therefore a continuation of the 2035 County General Plan project, and that no new information has been identified that would justify any additional environmental analysis or mitigation beyond that established by the 2035 County General Plan EIR. A Notice of Determination will be filed pursuant to State CEQA Guidelines Section 15094.
- ☐ I find that the proposed project WOULD be inconsistent with the analysis of the 2035 County General Plan project and is therefore not a continuation of that project. This Checklist serves as documentation of this analysis. Another environmental document and track of CEQA compliance will be identified.
- ☐ I find that one or more effects of the proposed project WOULD be subject to new information that would justify additional environmental analysis or mitigation not contained in the 2035 County General Plan EIR. This Checklist serves as documentation of this analysis. Another environmental document and track of CEQA compliance will be identified.

SIGNATURE DATE

J. STATE CEQA GUIDELINES SECTION 15183.3 CHECKLIST

INTRODUCTION

This document is a Consistency Environmental Checklist ("Checklist") to evaluate the conformance of the proposed 3577 Canyon Crest Single-Family Residence project ("project") to the criteria established under CEQA (Public Resources Code Section 21000, et. seq.) and the State CEQA Guidelines ("CEQA") Section 15183 for the provisional exemption[1] from CEQA of projects or of particular project impacts that are consistent with a Community Plan, General Plan, or Zoning.

Pursuant to CEQA Section 21083.3, a certified EIR for a planning or zoning action may be used to eliminate, or to reduce the scope of, environmental review and analysis for later projects that are consistent with the planning or zoning action. Pursuant to CEQA Section 21083.3(b), this applies when an EIR was certified for a general plan, and a development project is consistent with the plan. The applicable certified EIR for a general plan is the 2035 County General Plan EIR (SCH#2011081042) ("GPEIR").[2]

Pursuant to State CEQA Guidelines Section 15183(i)(2), "consistency" means that the project's proposed density is equal to or less than the assumed density for the project parcel in the prior planning or zoning action.

Pursuant to State CEQA Guidelines Section 15183(a), "CEQA mandates that projects which are consistent with the development density established by existing zoning…or general plan policies for which an EIR was certified…shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies." CEQA does not preclude additional analysis, but analysis of any effect to which the provisional exemption applies is unnecessary, as the effect is not subject to CEQA.

Pursuant to State CEQA Guidelines Section 15183(b), the "examination of environmental effects" may be limited to those effects that are not provisionally exempt from further review, which:
"(1) Are peculiar to the project or the parcel on which the project would be located,
(2) Were not analyzed as significant effects in a prior EIR on the…general plan…with which the project is consistent,
(3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan…, or
(4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR."

[1] "Section 21083.3 is worded as a CEQA exemption and not as a procedure for streamlining subsequent environmental review. The exemption is, however, subject to conditions, and its scope is subject to limitations" that are similar to streamlining provisions. (Kostka & Zischke, Practice Under the California Environmental Quality Act (2d ed. Cal CEB) § 10.33, p. 10-36).
[2] Source: GPEIR. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

CEQA Section 21083.3(a) qualifies that "the application of [CEQA] to the approval of any…project that is consistent with the zoning or…plan…shall be limited to effects upon the environment that are peculiar to the parcel or to the project *and* which were not addressed as significant effects[3] in the prior environmental impact report." (emphasis added). Therefore, a project's impact is provisionally exempt where it is not peculiar to the parcel or project *or* was addressed in the GPEIR analysis.

Pursuant to State CEQA Guidelines Section 15183, no new CEQA analysis is required of any project impacts where all of the following findings may be made:

1. The project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.
2. There are no potentially significant off-site and/or cumulative impacts which the prior EIR failed to analyze.
3. There is no substantial new information which results in more severe impacts than were anticipated by the prior EIR.
4. There are no types of project-specific impacts which the prior EIR failed to anticipate or which are peculiar to the project or its site.

Exemption pursuant to State CEQA Guidelines Section 15183 is an "absolute" statutory exemption. *Gregory Lucas v. City of Pomona* (2023) 92 Cal.App.5th 508, FIXME.

CONSISTENCY PROJECT DEFINITION

Project title:

3577 Canyon Crest Road Single-Family Residence Project

Lead agency name and address:

County of Los Angeles
320 W Temple St, Los Angeles, CA 90012

Contact name and address:

Stacy Corea
Regional Planner
Los Angeles County
Department of Regional Planning
320 W Temple Street,

[3] The language "addressed as significant effects in the prior [EIR]" is understood to mean "within the scope of analysis of the prior EIR" – analyzed at the level of detail of an EIR, and not an Initial Study, pursuant to State CEQA Guidelines Section 15128. The GPEIR did not rely on an Initial Study's analysis of any impacts and therefore addressed all of its analyzed impacts. See GPEIR at p. 2-2 ("Since "full-scope" EIR was determined to be necessary, no Initial Study was prepared.").

13th Floor
Los Angeles, CA 90012
E-mail: scorea@planning.lacounty.gov

Project location:

3577 Canyon Crest Road
Altadena, CA 91001

Project sponsor's name and address:

Stephen Kuhn
443 W. Poppyfields Drive
Altadena, CA 91001

General plan designation:

Residential

Zoning:

R1-10000

This designation permits one single-family residence on a minimum 10,000 square foot lot.

Prior environmental document(s) analyzing the effects of the project:

GPEIR (SCH#2011081042)

Location of prior environmental documents analyzing the effects of the project:

Available at: https://planning.lacounty.gov/long-range-planning/general-plan/programmatic-eir/ or upon request at the Department of Regional Planning located at 320 W Temple Street, Room 1356, Los Angeles, CA 90012.

Page numbers quoted in this Checklist refer specifically to the Draft EIR incorporated in the Final EIR, available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Description of project:

The proposed project is the construction and occupancy of a 1,555 square-foot, single-family home with a 397 square-foot attached garage on a vacant residential parcel of 1.02 acres ("project") in Altadena, a census-designated place and urbanized area in the unincorporated area of the County of Los Angeles ("County"). The project parcel is located approximately 1,000 feet south of the Angeles National Forest and approximately 14 miles northeast of the County civic

center, in the West San Gabriel Valley Planning Area. The project would be sited on the eastern portion of the project parcel in an existing residential neighborhood adjacent to other residences in and adjacent to Millard Canyon.

The proposed development footprint would be located more than 150 feet from the nearest waters, as determined by a United States Army Corps of Engineers wetlands delineation – an intermittent, seasonal feature tributary to the Arroyo Seco in the bottom of Millard Canyon. In association with this feature, and like other residential parcels in the vicinity, a portion of the project parcel outside the development footprint is designated by the County as part of the Altadena Foothills and Arroyos Significant Ecological Area ("SEA"), as of December 2019. The project would continue pre-existing exempt fuel modification activities within the SEA, relative to adjacent existing single-family residences. The project parcel contains the California sagebrush scrub and coast live oak woodland plant communities.

The proposed design of the home complies with all applicable land use regulations in effect as of the date of the Notice of Preparation. The proposed design is terraced to complement the natural topography, consistently with the County's Hillside Management Area Sensitive Design Guidelines, and is one or two stories above grade in each building segment. The proposed design places most of its volume below the level of Canyon Crest Road, from which the home would be accessed with a driveway comprised of an open-celled tree root protection system. The total development footprint, comprised of the driveway and building footprint at grade, is approximately 2,000 square feet. The project would incorporate no other hardscape.

A single-family residence is permitted with a Site Plan Review in the County's R-1-10000 (Single-Family Residence, 10,000 Square Feet Minimum Required Lot Area) Zone. However, a Minor Conditional Use Permit ("MCUP") is required in the Altadena Community Standards District in order to construct on a slope greater than 25%. In addition, an Oak Tree Permit ("OTP") is required for the removal of one non-heritage coast live oak (Q. agrifolia) tree and encroachment into the protected zones of 10 non-heritage coast live oak trees on and adjacent to the project parcel, which form a part of a degraded oak woodland that extends through the developed residential area in all directions for hundreds or thousands of feet. Consistent with the standard requirements of the County Oak Tree Ordinance, the project would incorporate replacement plantings for the removed oak tree; oak-compatible landscaping comprising a native understory; and Best Management Practices and design features before, during, and after construction to promote the health of the oak trees on the project parcel. The project would also rehabilitate some of the existing impacts from the surrounding residential development that have degraded the oak trees affected by the project.

Surrounding land uses and setting:

Existing development in the vicinity consists of residential buildings of varying sizes and styles with associated facilities including above- and below-grade utilities, roadways and other hardscape, and residential landscaping. There are 52 residences within 500 feet of the project site.

To the south are single-family residences in the city of Pasadena, many of which are similarly situated at the rim of Millard Canyon or the Arroyo Seco. To the east are single-family residences zoned R1-10000 with low density land use designation (1-6 units/gross acre) in the Altadena Community Plan. To the north are five existing residences along the canyon side of Canyon Crest Road, similarly situated at the rim of Millard Canyon, as well as additional residences to the northeast, zoned R1-10000 with Non-Urban land use designation (up to one unit/gross acre) in the Altadena Community Plan. To the west are the southernmost residences of the Meadows neighborhood of more than 200 homes, zoned predominantly R1-7000 with low density land use designation in the Altadena Community Plan. Farther west is the Arroyo Seco.

The easternmost portion of the project site was graded during the construction of Canyon Crest Road, and most of the frontage of the parcel has been used as a shoulder for street-side parking and as supplementary parking by adjacent residences. In the 1960's, a below-grade sewer siphon main was constructed spanning most of the length of the parcel from east to west, including an above-grade steel trestle structure across the intermittent stream that flows in the bottom of Millard Canyon. An easement exists for maintenance, repair, and eventual replacement of this utility.

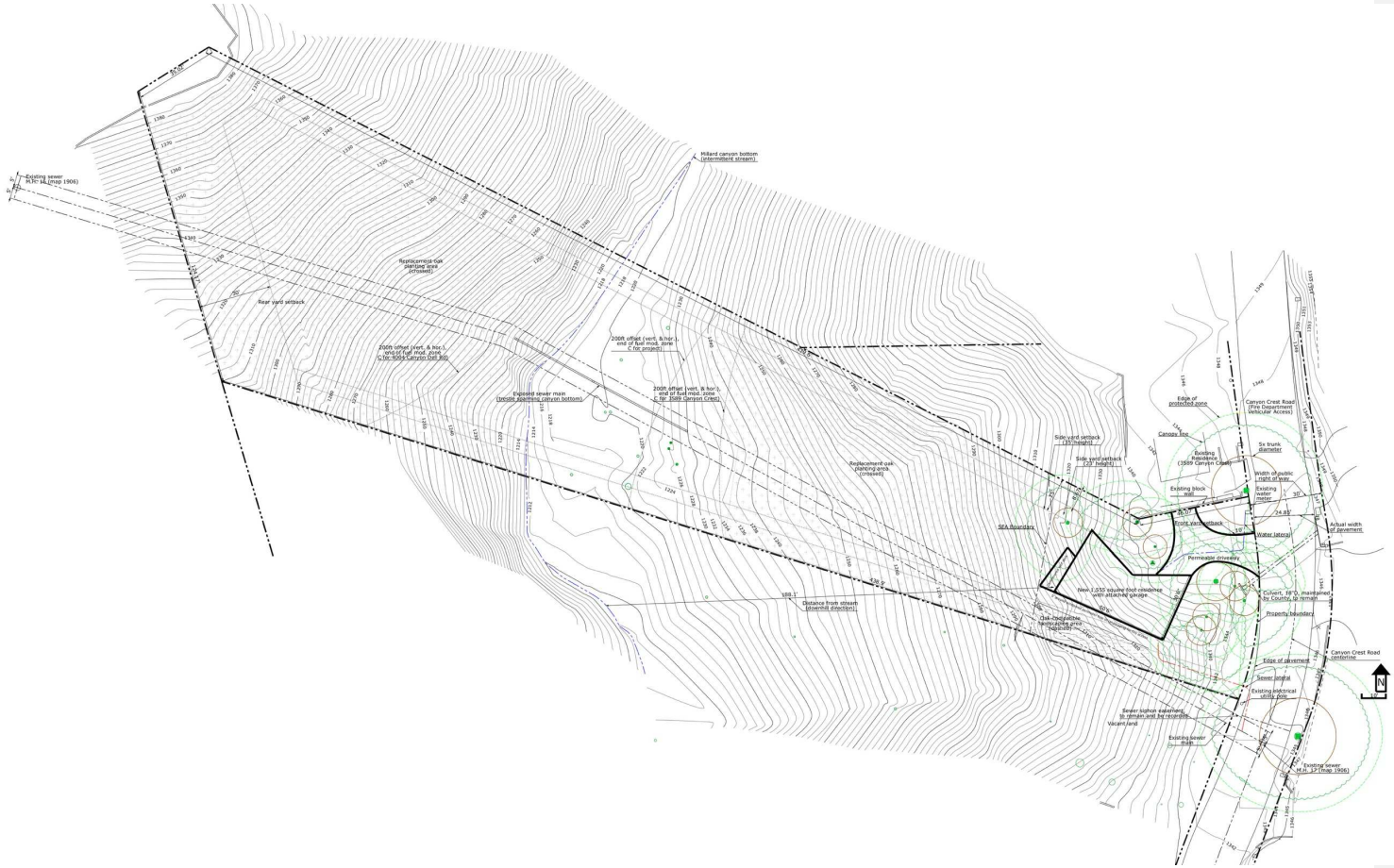

Figure 1: Proposed Project Site Plan

Figure 2: Before and After View of Project Site Driving South on Canyon Crest Road[4]

[4] Source: Applicant

Figure 3: Before and After View of Project Site Driving North on Canyon Crest Road[5]

[5] Source: Applicant

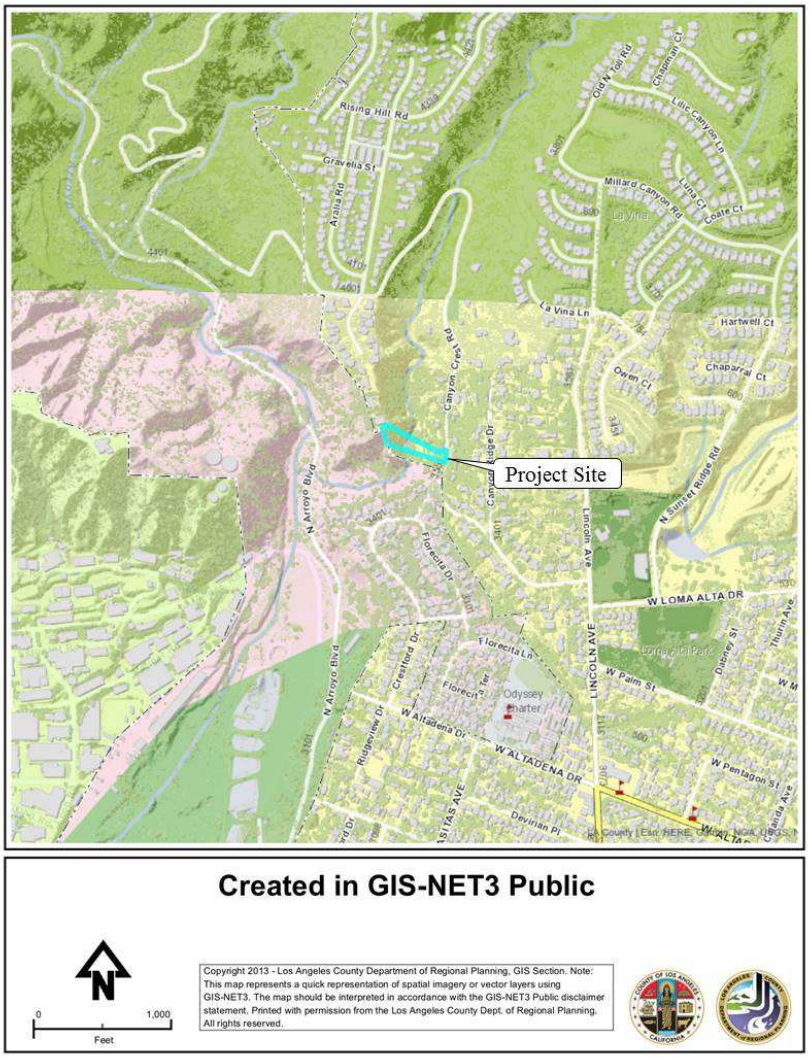

Figure 4: Project Vicinity Map[6]

[6] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

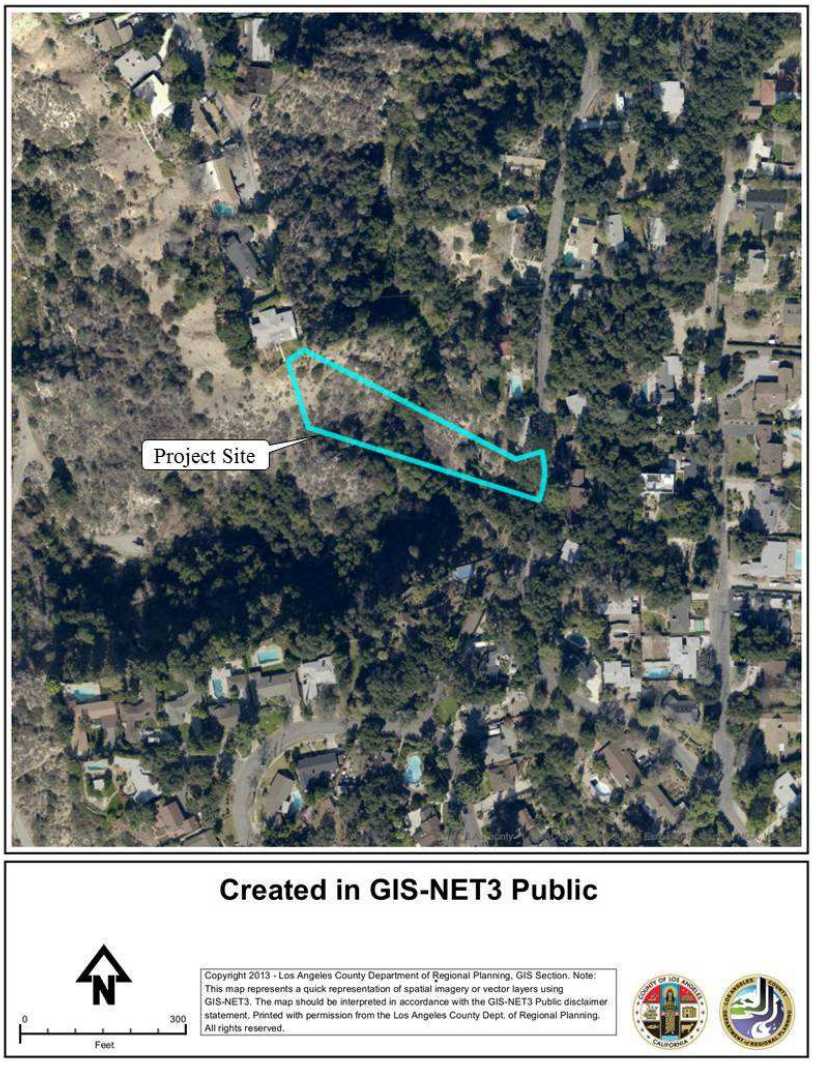

Figure 5: Project Vicinity Aerial Photograph[7]

[7]Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

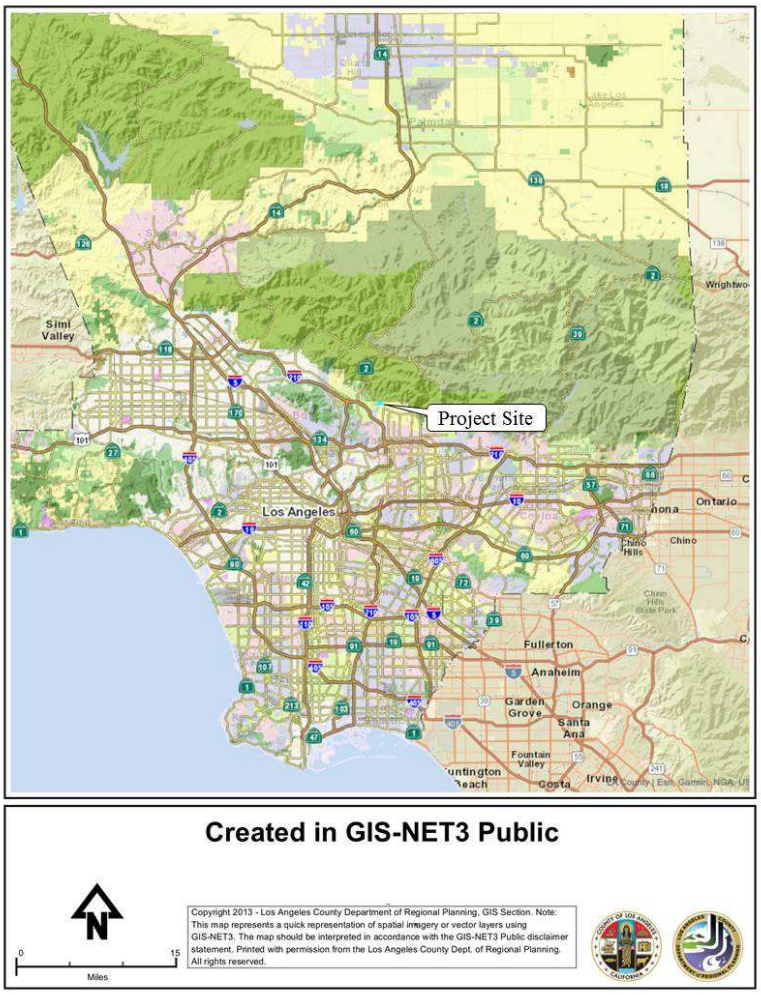

Figure 6: Regional Map[8]

Other public agencies whose approval is required:

[8] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

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Departments of the County of Los Angeles must approve all appurtenant building permits.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Because "a negative declaration, mitigated negative declaration, or environmental impact report" (CEQA Section 21080.3.1(b)) do not accompany this Checklist, which has identified that the project conforms to criteria for provisional exemption from further review of all project impacts, no tribal consultation is required. However, tribes requesting consultation were consulted, and agreed the type and scale of expected impacts from the project did not warrant any mitigation measures.

CONSISTENCY PROJECT DEFINITION CRITERIA

Is the proposed project consistent with developmental density assumed in the planning or zoning action?

Pursuant to State CEQA Guidelines Section 15183(d)(1)(C), the project "is consistent with [a] general plan of a local agency." The project parcel is zoned for one dwelling unit per 10,000 square feet by the designation R1-10000 and designated by the Altadena Community Plan for one dwelling unit per acre.[9] The project, one dwelling unit, is therefore consistent with the density assumed by the GPEIR on the approximately 1.02-acre project parcel, which used the Altadena Community Plan Land Use Designations as input.

Did the prior EIR fail to analyze any potentially significant off-site and/or cumulative impacts?

The GPEIR analyzed every impact that was reasonably foreseeable to the complete buildout of the County through 2035, stating that "all impact categories were found to have at least one potentially significant impact; therefore, all categories have been evaluated in the EIR."[10]

Where a less than significant effect was found before the formulation or application of any mitigation measures, the GPEIR uniformly found compliance with regulatory requirements, standard conditions and/or processes and General Plan policies to be sufficient to prevent or compensate for a potentially significant effect (*see* Section **Error! Reference source not found.**, *in passim*).

[9] Source: GPEIR, Appendix C "Land Use and Zoning," page 55. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir-appendixC.pdf.

[10] Source: GPEIR, page 8-1. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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Pursuant to State CEQA Guidelines Sections 15183(a) and 15183(e), "CEQA…shall not require additional environmental review" of effects for which mitigation measures were formulated in the prior EIR where "a public agency with authority to mitigate any of the significant effects on the environment identified in the EIR on the planning…action undertakes…mitigation measures specified in the EIR which [are] feasible [for the new project,]" provided the "Lead Agency makes a finding at a public hearing as to whether the feasible mitigation measures will be undertaken."

The County as Lead Agency finds that the proposed project conforms with all GPEIR analysis and is conditioned consistently with any mitigation measures adopted by the GPEIR that could be applicable to the proposed project, whether those measures addressed project-specific or cumulatively significant impacts. This Checklist describes how the project implements, transcends, or remains below a threshold of applicability of those measures.

The GPEIR also considered the incremental impact of the project as one small part of the 358,931 remaining new residential units it evaluated. No potentially significant off-site and/or cumulative impacts which the GPEIR failed to evaluate have been identified.

Is there any substantial new information which would result in a finding of greater impact severity in the proposed project than was anticipated by the prior EIR?

No significant effects identified in the GPEIR have been determined by the County to be presently more severe than they were when discussed in that EIR.

The GPEIR was certified as of October 7, 2015.[11] The scope of the GPEIR was to analyze a reasonably foreseeable progression of environmental state through 2035, and to mediate projects that would commence from the date of adoption in 2015, through to 2035. No new information or type of environmental effect has been identified that would invalidate or render insufficient the analysis of the GPEIR as it applies to the proposed project.

Examples of new information that could invalidate prior analysis or the analyzed sufficiency of standard conditions include: interaction with a new environmental accident like a chemical spill that was not anticipated by the prior EIR; failure of a similar project sited on the same geologic unit, due to a newly resolved instability in that unit, and; catastrophic failure of a reservoir, aquifer or other water supply infrastructure analyzed in the GPEIR to contribute to sufficient capacity for future projects, but no longer available.

Though the GPEIR anticipated wildfires in the wildland/urban interface, the Eaton Fire of January 2025 was more severe than reasonable predictions of disaster extent reflected in hazard severity maps and other planning documents. However, the project site is located outside the burn perimeter, and the construction and operation of one single-family residence in the vicinity of the Eaton Fire produces no type of interaction that was unanticipated in the GPEIR. To the extent simultaneous re-construction of much of Altadena was unanticipated by the GPEIR, the

[11] Source: County Department of Regional Planning. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/4.-gp_2035_nod-recorded.pdf.

relative contribution constructing one single-family residence is cumulatively inconsiderable in the context of re-construction of thousands of single-family residences nearby and would therefore produce no unanticipated cumulatively considerable effect interacting with this degraded condition. To the extent the GPEIR considered probabilities of wildfire-related impacts, the Eaton Fire has reasonably reduced the probability of future impact in the vicinity given reasonably expected improvements in fire-hardening re-constructed residences and utilities, changes in vegetation, and changes in disaster response processes and infrastructure.

Are there any effects peculiar to the proposed project that the prior EIR failed to analyze?

"[A] physical change in the environment will be peculiar to the [project] if that physical change belongs exclusively or especially to the [project] or if it is characteristic of only the [project]….The foregoing construction of the terms 'peculiar to' and 'project-specific' promotes efficiency by reducing delay and needless paperwork and, therefore, is consistent with the purpose underlying the streamlined review of Guidelines section 15183." *Wal-Mart Stores, Inc. v. City of Turlock* (2006) 138 Cal.App.4th 273, 294, over-ruled on other grounds in *Hernandez v. City of Hanford* (2007) 41 Cal.4th 279. Pursuant to State CEQA Guidelines Section 15358, "effects" must relate to physical change and are categorized as either direct (primary) or indirect (secondary). Pursuant to State CEQA Guidelines Section 15064(d)(3), "[a]n indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable."

Examples of effects that would be peculiar to a project or parcel include: impacts to a historic structure sited on that parcel; impacts associated with a project-specific disposal strategy for toxic material, and; impacts associated with unmediated grading of a catalogued archeological find.

Effects that are characteristic of a class of project are not considered to be peculiar to the project or parcel. Examples of effects that are characteristic of the construction and operation of a single-family residence include: the noise of light-framed construction and HVAC equipment; vehicular traffic by occupants, and; the clearing, grading, impervious surfaces and above-grade volume characteristic of a new building envelope.

Pursuant to State CEQA Guidelines Section 15183(f), "[a]n effect of a project on the environment shall not be considered peculiar to the project or the parcel…if uniformly applied development policies or standards have been previously adopted by the…county with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects." Such a finding may be expressed in the policy itself or in its ascribed purpose.

Pursuant to State CEQA Guidelines Section 15183(g), at a minimum, the following uniformly applied development policies relevant to the project satisfy these criteria.

Altadena Community Standards Ordinance (County Code Section 22.306)

Compliance with the Ordinance, and in particular with its development standards, "ensure[s] that new and expanded structures are compatible in size and scale with the characteristics of surrounding residential neighborhoods, protecting the light, air, and privacy of existing single-family residences from negative impacts while providing certain flexibility within residential areas [and] minimiz[ing] the visual and environmental impacts of development in hillside management areas."[12]

Hillside Management Area Ordinance (County Code Section 22.104)

Compliance with the Ordinance, and in particular with its Sensitive Design Guidelines "ensure[s] that development preserves the physical integrity and scenic values of HMAs, provides open space, and enhances community character" and "would serve to minimize…potential impacts [to scenic vistas]" and "provide[s] protection against substantial soil erosion…together with the safeguards afforded by the County's building plan check and development review process."[13]

Low Impact Development Ordinance (County Code Section 12.84)

Compliance with the Ordinance, and in particular with the implementation of its prescribed BMPs "[l]essen[s] the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters and other water bodies"; "[m]inimize[s] pollutant loadings from impervious surfaces"; and "[m]inimize[s] erosion and other hydrologic impacts on natural drainage systems[.]"[14]

Stormwater and Runoff Pollution Control Ordinance (County Code Section 12.80)

Compliance with the Ordinance, and in particular with its prohibition on the discharge of a variety of substances, "protect[s] 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 nonstormwater discharges."[15]

Noise Control Ordinance (County Code Section 12.08)

Compliance with the Ordinance, and in particular with its noise level restrictions, "control[s] unnecessary, excessive and annoying noise and vibration[.]"[16]

Building Code and Residential Code Ordinances (County Code Titles 26 and 30)

Compliance with the building provisions of these Ordinances, including with fire resistance provisions in Chapter 7A "Materials and Construction Methods for Exterior Wildfire Exposure" and with hillside seismic design provisions in Section 1613.8, "provide[s] minimum standards to

[12] Source: County Code Section 22.44.127(A)
[13] Source: CEQA Findings of Fact…For the Final EIR for the County General Plan Update, pages 3, 17, 26. Available at: http://file.lacounty.gov/SDSInter/bos/supdocs/92422.pdf.
[14] Source: County Code Section 12.84.410
[15] Source: County Code Section 12.80.380
[16] Source: County Code Section 12.08.020

preserve the public health, safety, and general welfare by regulating the design, construction, installation, quality of materials, use, occupancy, location, and maintenance of all buildings, structures, grading, and certain equipment"[17] and "establish[es] minimum standards for seismic force resistance to reduce the risk of injury or loss of life in the event of earthquakes."[18]

Green Building Standards Ordinance (County Code Title 31)

Compliance with the Ordinance, and in particular with its mandatory green building measures, "improve[s] public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact, or positive environmental impact, and encouraging sustainable construction practices in the following categories: 1. Planning and design. 2. Energy efficiency. 3. Water efficiency and conservation. 4. Material conservation and resource efficiency. 5. Environmental air quality."[19]

This list of Ordinances is not intended to be exhaustive or to forestall the assertion of any other ordinance, plan or policy as applicable pursuant to State CEQA Guidelines Section 15183(f). In addition, pursuant to State CEQA Guidelines Section 15183(h), an "environmental effect shall not be considered peculiar to the project or parcel solely because no uniformly applied development policy or standard is applicable to it." Thus, the existence of uniformly applied development policies with language addressing the effect of those policies is sufficient, but not necessary, support for the conclusion that the effect is not peculiar to the project.

The proposed project parcel does not possess any features that materially distinguish it from other residential parcels in the neighborhood. The project parcel is located in an area developed with similarly sized residential lots with associated accessory uses. The GPEIR anticipated all of the proposed project's impacts, in analyzing the reasonably foreseeable environmental impacts characteristic across the class of 358,931 additional residential units (and millions of square feet of new commercial, industrial, and public-sector facilities). After conceiving mitigation measures as appropriate across these classes of projects, the GPEIR analyzed the level of significance as:

- Less than Significant Impact ("LTS")
- Less than Significant Impact with Mitigation Measures Incorporated ("LTSM")
- Significant and Unavoidable ("SU")

In some instances, the GPEIR reached different conclusions in different Planning Areas. This Checklist will use the GPEIR Determination for the West San Gabriel Valley Planning Area, in which the proposed project is sited.

Where an effect was analyzed to be significant and unavoidable, this Checklist will attribute how the proposed project transcends the finding of significance. However, the provisional exemption also applies to unavoidably significant effects of subordinate projects, where they remain consistent with the analysis of the GPEIR and do not result in new types of effects, or more severe effects premised on materially new information.

[17] Source: County Code Title 26, Section 101.2
[18] Source: County Code Title 26, Section 1613.8.1
[19] Source: County Code Title 31, Section 101.2

Consistency of the proposed project with the analysis of the GPEIR is attributed in the following checklist.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Aesthetics					
Have a substantial adverse effect on a scenic vista	LTS	☐	☐	☐	☐
The aesthetic impacts of one single-family residence in an urbanized residential neighborhood are not peculiar to the project or its site and are uniformly mitigated by standard constraints on single-family residences with which the proposed project would comply. The proposed project is consistent with this GPEIR analysis and determination, which remains valid. The GPEIR analyzed that "[r]equirements relating to CUPs would ensure that development projects that would be accommodated by the [2035 County General Plan] would be held to appropriate development standards of the County Code. Regulations outlined in the County Code relating to HMAs would ensure that the physical character and scenic value of areas of the County with a natural slope gradient of steeper than 25 percent are preserved. Since hillsides and ridgelines are some of the primary resources related to scenic vistas in Los Angeles County, the provisions of the County Code would significantly reduce impacts to these areas….The existing regulatory setting, as well as the goals and policies contained in the [2035 County General Plan], would serve to lessen potential impacts to scenic vistas associated with implementation of the [2035 County General Plan]."[20] The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[21] As to cumulative impacts, the 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on scenic resources to a less than significant level, the Proposed Project's contribution to County-wide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed Project related to scenic vistas and scenic resources are therefore considered less than significant."[22] A project that satisfies relevant CUP findings, and which is compliant with development standards in the County Code, would be expected to have less than significant aesthetic effects in an urbanized area. The proposed project satisfies all CUP findings relevant to aesthetics,					

[20] Source: GPEIR, pages 5.1-19 and 5.1.20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[21] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[22] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
complies with the County Code, and is not inconsistent with any 2035 County General Plan policy relating to aesthetics.					
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	LTS	☐	☐	☐	☐
The proposed project would not be visible from any state scenic highway or County-designated or eligible scenic highway, the nearest of which is more than 1.3 miles distant (a portion of the I-210 freeway), with sightlines to the project site obscured by topography and vegetation. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "future discretionary projects accommodated by the [2035 County General Plan] would be subject to a separate project-level environmental review in accordance with CEQA, wherein the individual project's contribution to the degradation of scenic highways would be assessed at the time formal development plans/applications are submitted to the County for review and approval. In addition, a number of goals and policies of the [2035 County General Plan] would also serve to minimize potential impacts to scenic highways by preventing degradation of existing vistas, as well as by promoting actions that would make existing scenic vistas more accessible to individuals."[23] Because the proposed project is not visible from a scenic highway, no additional project-level review would be warranted.					
Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, …conflict with applicable zoning and other regulations governing scenic quality.	LTS	☐	☐	☐	☐
The aesthetic impacts of one single-family residence in an urbanized residential neighborhood are not peculiar to the project or its site and are uniformly mitigated by standard constraints on single-family residences with which the proposed project would comply. The proposed project is consistent with this GPEIR analysis and determination, which remains valid.					

[23] Source: GPEIR, page 5.1-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
The GPEIR analyzed that "[e]xisting regulations, including provisions contained in the County's Zoning Ordinance relating to the regulation of building form, massing, subdivisions, signs, architectural features, CUPs, design, and oak tree preservation would serve to lessen the impact of the [2035 County General Plan] on the visual character of [Los Angeles County]….Additionally, several of the guiding principles, goals, policies, and implementation programs contained in the [2035 County General Plan] would serve to lessen or mitigate potential impacts of the [2035 County General Plan] by providing direction for future decision making….[A]pplicable portions of the County Code, and relevant goals and policies of the [2035 County General Plan] would reduce these impacts to a less than significant level." The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[24] As to cumulative impacts, the 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on visual and character to a less than significant level, the [2035 County General Plan's] contribution to Countywide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed Project related to visual character and quality are therefore considered less than significant."[25] The proposed design of the home meets all developmental standards of the County Code, including those tightened in the Altadena Community Standards District, which "ensure[s] that new and expanded structures are compatible in size and scale with the characteristics of surrounding residential neighborhoods, protecting the light, air, and privacy of existing single-family residences from negative impacts while providing certain flexibility within residential areas."[26] The proposed project is consistent with the zoning of the project parcel, which anticipates the aesthetic effects of one code-compliant residence. The proposed project satisfies relevant CUP findings and is not inconsistent with any 2035 County General Plan policy relating to aesthetics.					
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LTS	☐	☐	☐	☐
The lighting impacts of one single-family residence in an urbanized residential neighborhood are not peculiar to the project or its site and are uniformly mitigated by standard constraints on single-family residences with which the proposed project would comply. The proposed project is consistent with this GPEIR analysis and determination, which remains valid.					

[24] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[25] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[26] Source: County Code Section 22.44.127(A).

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
The GPEIR analyzed that "[i]n addition to applicable provisions of the County Code…the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. These regulations would serve to mitigate potential impacts of new land uses.…Goals and policies of the [2035 County General Plan] would serve to minimize potential impacts related to additional sources of light and glare."[27] The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[28] As to cumulative impacts, the 2035 County General Plan analyzed that "[i]mpacts from glare are generally localized and not cumulative in nature; therefore, a significant cumulative impact related to glare would not occur."[29] The proposed project meets all developmental standards of the County Code and California Building Code and is not inconsistent with any 2035 County General Plan policy relating to light or glare. The project would entail typical, low-intensity leakage of interior lighting through glazing, low-intensity exterior lighting of driveway and entryway, and would not make use of shiny or reflective materials or coatings.					
Agriculture and Forestry Resources					
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	LTS	☐	☐	☐	☐
The proposed project site is not zoned to permit use for agriculture. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to buildout of the [2035 County General Plan] would be a potentially significant impact in the Antelope Valley Area Planning Area and Santa Monica Mountains Planning Area. In the remaining nine Planning Areas [including the					

[27] Source: GPEIR, page 5.1-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[28] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[29] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
West San Gabriel Valley Planning Area in which the project is located], impacts would be less than significant."[30]					
Conflict with existing zoning for agricultural use, or a Williamson Act contract	LTS	☐	☐	☐	☐
The proposed project site is not zoned to permit use for agriculture. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "implementation of the [2035 County General Plan] would not involve rezoning of farmland and impacts regarding conversion of mapped farmland to non-agricultural uses would be less than significant."[31]					
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))	LTS	☐	☐	☐	☐
The proposed project site is not zoned to permit use for forestry or timber harvest. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "[t]he Los Angeles County Zoning Code does not contain zones specifically for forest use or production of forest resources….As the County has no existing zoning specifically designating forest use, implementation of the [2035 County General Plan] would not conflict with existing zoning for forest land or timberland. No impact would occur."[32]					
Result in the loss of forest land or conversion of forest land to non-forest use	LTSM	☐	☐	☐	☐
While no forest land exists on the project parcel, the impacts of one site-sensitive single-family residence on oak woodlands are not peculiar to the project or its site, as every one of the 52 surrounding single-family residences within 500 feet also impacts oak woodlands. In					

[30] Source: GPEIR, page 5.2-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[31] Source: GPEIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[32] Source: GPEIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
many instances, these other residences make use of extensive hardscape, grading, irrigated yards, pools, and other impacts that are more severe in kind or greater in extent than would be characteristic of the proposed project. The GPEIR analyzed that "[f]orests in Los Angeles County are limited to narrow formations along creeks and other watercourses and the highest elevations of the San Gabriel Mountains….These plant communities would be protected by existing regulations, including Sections 1600 *et seq.* of the California Fish and Game Code. Mitigation measures set forth in Section 5.4 of this DEIR would reduce impacts to these natural communities from projects approved under the [2035 County General Plan]."[33] The GPEIR concluded that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[34] As to cumulative impacts, the GPEIR analyzed that "substantial adverse cumulative impacts to forest land, or zoning for forest use, are unlikely. Almost all of the forests in Los Angeles County are in the high-elevation parts of the [County]."[35] While mitigation measures in Section 5.4 were formulated to encompass a range of more impactful subsequent activities, standard compensatory provisions of the Oak Tree Ordinance are sufficient to ensure that no reduction in oak resources will occur because of the project. Nevertheless, the project has been conditioned with those applicable measures of Section 5.4 of the GPEIR as the standard approach to feasible avoidance and minimization, which has included a reconnaissance level survey (which found no designated species or communities), a required pre-construction sweep, and constraints on additional sweeps should vegetation disturbance or removal occur during designated species nesting or breeding seasons. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, and were analyzed as such by the GPEIR.					
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-	LTS	☐	☐	☐	☐

[33] Source: GPEIR, page 5.2-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[34] Source: GPEIR, page 5.2-37. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[35] Source: 2035 County General Plan EIR, page 5.2-36. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
agricultural use or conversion of forest land to non-forest use					
The proposed project site is not zoned to permit use for agriculture, forestry, or timber harvest. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid. The GPEIR analyzed that "[b]uildout of the [2035 County General Plan] based on the existing Antelope Valley Area Plan in the Antelope Valley Planning Area and on the existing Santa Clarita Valley Area Plan in the Santa Clarita Planning Area would have a significant indirect impact on conversion of mapped Important Farmland to nonagricultural use due to pressure to convert farmland to non-agricultural uses and related incompatibilities between agricultural and urban uses. Such indirect impacts would be less than significant in the other nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is sited.]"[36]					
Air Quality					
Conflict with or obstruct implementation of the applicable air quality plan.	LTS	☐	☐	☐	☐
The GPEIR analyzed that "SCAQMD consider(s) a project consistent with the air quality management plan if it is consistent with the existing land use plan."[37] The proposed project is consistent with the applicable land use plan – the Altadena Community Plan – which designates the project parcel for one single-family residence. Therefore, the proposed project is consistent with the GPEIR determination, which remains valid.					
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	SU	☐	☐	☐	☐
The air quality impacts of the construction or operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated General Plan Mitigation Measure ("GPMM")-AQ-1 with several Best Management Practices for incorporation in projects that "have the potential to exceed the					

[36] Source: GPEIR, page 5.2-35. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[37] Source: GPEIR, page 5.3-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
applicable Air Quality Management District (AQMD) adopted thresholds of significance,"[38] though the effect was found to be significant and unavoidable because "due to the magnitude of emissions generated by future construction activities associated with the buildout of the [2035 County General Plan], no mitigation measures are available that would reduce impacts below SCAQMD's…thresholds."[39] Because project-specific thresholds are inherently aligned with cumulative considerability, and because the finding of unavoidable significance concerns only those projects that are unable to meet the SCAQMD's significance thresholds, a project that does not exceed them is not subject to any mitigation and would be expected to have a less than cumulatively considerable or significant effect. A project therefore transcends this finding of unavoidable significance if it does not exceed any air quality significance threshold. For purposes of analysis in this screening checklist, and in accordance with the provisions of the Southern California AQMD ("SCAQMD") CEQA Air Quality Handbook,[40] "[i]f a proposed project is five acres or less and does not require additional construction activities such as major cut-and-fill, or excavation for sub-grade levels or parking, or demolition of a structure taller than 50 feet, the Lead Agency can use the applicable sample construction scenario to represent the emissions and impacts from the proposed project instead of preparing a project-specific construction air quality analysis."[41] The sample 1-acre project does not exceed regional or localized thresholds, and the project would be expected to be uniformly less impactful than the sample, which is a structure of 40,000 square feet (approximately one acre) with associated mechanized demolition, grading and paving that are not required of the project, and which are substantially larger than the class of conforming single-family residences.					
Expose sensitive receptors to substantial pollutant concentrations	SU	☐	☐	☐	☐
The air quality impacts of the construction or operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-AQ-2 and GPMM-AQ-3 to limit exposure of sensitive receptors, though the effect was found to be significant and unavoidable because "localized emissions of criteria air pollutants could exceed the SCAQMD…regional significance thresholds because of the scale of development activity associated with buildout of the [2035					

[38] Source: GPEIR, page 5.3-47. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[39] Source: GPEIR, page 5.3-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[40] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993).
[41] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/docs/default-source/default-document-library/templates/finalreport.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
County General Plan].”[42] As attributed above, the SCAQMD sample 1-acre project, which bounds the expected impact of the proposed project, does not exceed any localized significance threshold, and so transcends the finding of unavoidable significance. GPMM-AQ-2 levies requirements on new industrial or warehousing land uses, and GPMM-AQ-3 requires applicants for sensitive land uses to submit a health risk assessment prior to any discretionary project approvals where the project was sited within proximity to certain sources of hazardous materials, such as industrial facilities, dry cleaners, gas stations, etc. The proposed project is not an industrial or warehouse facility and is not located in proximity to any hazardous materials facilities.					
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people	LTSM	☐	☐	☐	☐
The air quality impacts of the construction or operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that “[i]f it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required… Facilities that have the potential to generate nuisance odors include but are not limited to: Wastewater treatment plant; Composting, greenwaste, or recycling facilities; Fiberglass manufacturing facilities; Painting/coating operations; Large-capacity coffee roaster; Food-processing facilities.”[43] The GPEIR formulated GPMM-AQ-4 to constrain certain classes of project known to generate odors, concluding that “[GPMM-AQ-4] would ensure that odor impacts are minimized and facilities would comply with SCAQMD…Rule 402. [This impact] would be less than significant.”[44] The project is a single-family home that does not share the potential of the example projects cited in the GPEIR to generate intense or objectionable odors, or distribute those odors to a substantial number of people. All projects in the SCAQMD are required to comply with Rule 402, prohibiting the emission of contaminants that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public. Architectural coatings would be expected to be low VOC, in accordance with SCAQMD and California Green					

[42] Source: GPEIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[43] Source: GPEIR, page 5.3-50. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[44] Source: GPEIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Building Code requirements. Waste disposal during construction would be expected to adhere to typical protocols..					
Biological Resources					
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service	SU/LTSM	☐	☐	☐	☐
Impacts from grading and clearing of vegetation where no designated species or communities have been identified in the footprint of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-BIO-2 requiring pre-construction surveys against the take of designated species, concluding that "[m]itigation measure BIO–2 would ensure that no direct mortality to special-status species would occur with implementation of construction activities by requiring pre-construction surveys (and construction monitoring where warranted) for special-status species as necessary; thus, with implementation of this mitigation measure, direct impacts to special-status species would be considered less than significant. "[45] The GPEIR also formulated a requirement for a reconnaissance level survey to prepare feasible measures that could be formulated a priori, analyzing that "[m]itigation measure BIO–1 would ensure that, on a project-specific level, necessary surveys are conducted and a biological resources assessment is prepared to analyze project-specific impacts and propose appropriate mitigation measures to offset those impacts."[46] While GPMM-BIO-1 and GPMM-BIO-2 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures under the Fish and Game Code and the California and Federal Endangered Species Acts may not ensure less than significant avoidance rates for larger projects and/or projects sited in higher quality habitat with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas affecting no identified designated resources. Two plant					

[45] Source: GPEIR, page 5.4-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[46] Source: GPEIR, page 5.4-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?

communities exist on the project parcel. Coast Live Oak Woodlands has a state rarity of S4,[47] indicating apparent security. California Sagebrush Scrub has a state rarity rank of S5, indicating security. According to the CDFW, "Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA."[48]

Nevertheless, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization, which has included a reconnaissance level survey (which found no designated species or communities), a required pre-construction sweep, and constraints on additional sweeps should vegetation disturbance or removal occur during designated species nesting or breeding seasons. Because GPMM-BIO-1 establishes general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

The GPEIR analyzed that indirect effects on sensitive species from the loss of common habitat expected at the scale of buildout of all future development governed by the 2035 County General Plan was cumulatively significant and unavoidable because "[a]lthough direct impacts to special status species would be mitigated, there is no mitigation provided for the indirect impacts to special status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the [2035 County General Plan] would result in the overall reduction of habitat and resources to support special status species. Thus, due to the loss of common habitats capable of supporting special status species and diminished resource availability, impacts to special status species and associated habitat remain significant and unavoidable at the general plan level."[49] While the impact of the loss of common habitat is significant at the scale of the 358,931 additional residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it would not be cumulatively considerable at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance.

[47] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[48] Source: California Department of Fish and Wildlife. Available at: https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive%20natural%20communities.
[49] Source: GPEIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service	LTSM	☐	☐	☐	☐
The proposed project footprint of development does not impact sensitive or riparian habitats or communities,[50] and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[t]he mitigation measures identified above [GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain."[51] As attributed above, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization.					
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	LTSM	☐	☐	☐	☐
The proposed project footprint of development does not impact state or federally protected wetlands,[52] and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[t]he mitigation measures identified above [GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and					

[50] Note: the alliance of coast live oak and California sagebrush that characterize the project site is designated by the California Department of Fish and Wildlife ("CDFW") as "S4" – "apparently secure" and "not sensitive." See CDFW Natural Communities List at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline. Pursuant to the United States Fish and Wildlife Service ("USFWS") National Wetlands Inventory, Millard canyon bottom contains the only feature or riparian habitat on the project parcel, more than 100 feet distant from the project footprint of development. See USFWS map at https://www.fws.gov/wetlands/Data/Mapper.html.

[51] Source: GPEIR, page 5.4-124. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

[52] Note: Pursuant to the United States Fish and Wildlife Service ("USFWS") National Wetlands Inventory, Millard canyon bottom contains the only feature or riparian habitat on the project parcel, more than 100 feet distant from the project footprint of development. See USFWS map at https://www.fws.gov/wetlands/Data/Mapper.html.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain."[53] As attributed above, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization.					
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	LTS	☐	☐	☐	☐
The proposed project does not conflict with any local policies or ordinances, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this] impact would be less than significant."[54] The proposed project satisfies all required CUP findings, including those required for issuance of an Oak Tree Permit, and is not inconsistent with any 2035 County General Plan policy relating to biological resources. The proposed project, which removes one tree and includes long-term care for four replacement trees in superior habitat than the one tree removed, is designed and constrained to minimize impacts to trees and other biological resources on the project site, in accordance with the intent of these policies and ordinances. While variances to regulatory requirements or CUP findings may be sought where they would frustrate a permitted use, the project belongs to the class of conforming single-family residences that do not seek such relief. As such, these uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
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	SU	☐	☐	☐	☐
The GPEIR analyzed that "buildout of the [2035 County General Plan] will impact regional wildlife linkages and may impact nursery sites."[55] Notwithstanding this finding of significance where development occurred in wildlife linkages and nursery sites, the 2035 County General					

[53] Source: GPEIR, page 5.4-124. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[54] Source: GPEIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[55] Source: 2035 County General Plan EIR, page 5.4-124. n Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Plan EIR formulated GPMM-BIO-3 as feasible mitigation to reduce impacts to less than significant where the interaction of development with these resources could be mediated. GPMM-BIO-3 stipulates that "[wildlife] corridors shall not be entirely closed by any development" and where "wildlife corridors and wildlife nursery sites" are impacted, mitigation may include "native landscaping to provide cover on the corridor" or "preservation by deed in perpetuity for another comparable…site."[56] While the GPEIR contemplated development in wildlife linkages and nursery sites, the proposed project footprint of development is not located in a wildlife corridor or nursery site at a regional, sub-regional or landscape scale and therefore transcends this mitigation measure and the finding of unavoidable significance. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan	LTS	☐	☐	☐	☐
The proposed project is not sited within the boundary of any conservation plan, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this] impact would be less than significant.: [5.4-5]"[57] Within the County, the three adopted habitat conservation plans are the Desert Renewable Energy Conservation Plan Natural Communities Conservation Plan/Habitat Conservation Plan ("NCCP"/"HCP"), the Palos Verdes Peninsula NCCP/HCP, and the West Mojave Plan HCP.[58] In addition, the USFWS Conservation Plan and Agreements Database[59] also includes the Newhall Farm Seasonal Crossings Habitat Conservation Plan. There are no California Regional Conservation Plans in the County.[60]					

[56] Source: 2035 County General Plan EIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[57] Source: GPEIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[58] Source: GPEIR, pages 5.10-4 - 5.10-5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[59] Source: United States Fish and Wildlife Service. Available at: https://ecos.fws.gov/ecp0/conservationPlan/.
[60] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Cultural and Tribal Cultural Resources					
Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5	SU	☐	☐	☐	☐
The project parcel contains no historic structures or other known historic or cultural resources, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-CUL-1, GPMM-CUL-2 and GPMM-CUL-3 to mitigate for impacts to historical resources, though the effect was found to be significant and unavoidable at the scale of all permitted future development in the County because "limited protection to historic structures…would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible."[61] The project therefore transcends this finding of unavoidable significance, and the scope of applicability of these measures.					
Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5	LTSM	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity."[62] The GPEIR also formulated GPMM-CUL-4 and GPMM-CUL-5 to establish performance standards in the event an unanticipated archaeological/tribal cultural or paleontological discovery was made, concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level,"[63] both for individual projects and cumulatively. While GPMM-CUL-4 and GPMM-CUL-5 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance rates for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are					

[61] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[62] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[63] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
deemed sufficient for the class of single-family residence in urbanized areas with no known resources. Also, the project does not entail excavation in volumes with substantial potential for archaeological discovery, with modest grading and drilling occurring in previously disturbed fill and in plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was to be encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Disturb any human remains, including those interred outside of formal cemeteries	LTS	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "compliance with [] regulations would ensure impacts to human burial grounds remain less than significant."[64] Specifically, "Public Resources Code Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts."					
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a.) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in	LTSM	☐	☐	☐	☐

[64] Source: GPEIR, page 5.5-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Public Resources Code section 5020.1(k), or b.) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.					

Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.

The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity."[65] The GPEIR also formulated GPMM-CUL-4 and GPMM-CUL-5 to establish performance standards in the event an unanticipated archaeological/tribal cultural or paleontological discovery was made, concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level,"[66] both for individual projects and cumulatively.

While GPMM-CUL-4 and GPMM-CUL-5 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance rates for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas with no known resources. Also, the project does not entail excavation in volumes with substantial potential for

[65] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[66] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
archaeological discovery, with modest grading and drilling occurring in disturbed fill and plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Geology and Soils					
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i.) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii.) Strong seismic ground shaking iii.) Seismic-related ground failure, including liquefaction iv.) Landslides	LTS	☐	☐	☐	☐
Expected and potential impacts of hillside grading and construction of a pile-and-grade-beam foundation for one single-family residence, where analyzed to be technically sound in a geotechnical report, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. *Fault Rupture* The GPEIR analyzed that "[a]dherence to [the Alquist-Priolo Earthquake Fault Zoning Map], and the associated setbacks from active fault traces, would help would reduce the hazards associated with earthquake fault rupture to a less than significant level." While the Alquist-Priolo Earthquake Fault Zones Act levies no jurisdictional setback requirement, Title 14, California Code of Regulations, Section 3603(a) states that "the area within 50 feet of such active faults shall be presumed to be underlain by active fault branches of that fault unless					

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?

proven otherwise[,]" establishing a *de facto* zone of further required investigation to determine an appropriate setback that would extend no further than 50 feet. The nearest Alquist-Priolo Earthquake Fault Zone ("APEFZ") is more than six miles to the northwest.[67] The nearest County-designated active fault trace is approximately 1,000 feet to the southeast of the project.[68] As attributed in a geotechnical report for the project, as is required of any hillside structure, the nearest surface trace of a mapped fault is approximately 150 feet south of the proposed home. As a constituent of the class of residentially zoned single-family residences not sited on any fault, the proposed project site is not at risk of fault rupture. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not sited on a fault, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.

As to cumulative impacts of fault rupture or any other geologic effect discussed below, the GPEIR analyzed that "[d]ue to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology and soils impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis….Future cumulative development under the Proposed Project and the surrounding area would be subject to the same local, state, and federal regulations pertaining to geology and soils, including CBC and Los Angeles County Building Code requirements (or city building code requirements, as appropriate). Therefore, cumulative development in the region would not result in a significant cumulative impact."[69]

Ground Shaking
The GPEIR analyzed that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to the provisions of the [California Building Code], which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements, and would include foundation and structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level."[70] The project has been analyzed in a site-specific geotechnical investigation that conforms to these criteria, completed a geotechnical plan check review process and has been designed in compliance with the CBC. These uniformly applicable

[67] Source: California Geological Survey. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SUNLAND_EZRIM.pdf.
[68] Source: 2035 County General Plan: Figure 12-1. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/12.2_Chapter12_Figures.pdf.
[69] Source: 2035 County General Plan EIR, page 5.6-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[70] Source: GPEIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Ground Failure* The GPEIR analyzed that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to existing building and grading codes, and construction-related grading requires the preparation and submittal of site-specific grading plans and geotechnical reports that must be reviewed and approved by the County beforehand. Each future development project would be required to comply with the recommendations in the geotechnical investigation report and comply with the CBC, thereby reducing such hazards to a less than significant level."[71] The project has completed a geotechnical plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Landslides* The GPEIR analyzed that "[c]ompliance with existing state and county regulations, as well as goals and policies included as part of the [2035 County General Plan] would ensure that the impacts associated with exposure to strong seismic ground shaking, seismic-related ground failure including liquefaction, and landslides are reduced to a less than significant level."[72] The project has been analyzed with a typical geotechnical investigation that conforms to these criteria. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Result in substantial soil erosion or the loss of topsoil	LTS	☐	☐	☐	☐
Expected and potential impacts soil erosion associated with grading for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[a]dherence to the requirements of the County Code and the CBC, together with the safeguards afforded by the County's building plan check and development review process, would help ensure that appropriate erosion controls are devised and implemented during construction,"[73] concluding that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County					

[71] Source: GPEIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[72] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[73] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
General Plan], would ensure that the impacts associated with erosion and topsoil loss…are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[74] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
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	LTS	☐	☐	☐	☐
Expected and potential impacts of hillside grading and construction of a pile-and-grade-beam foundation for one single-family residence, where analyzed to be technically sound in a geotechnical report, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[i]ndividual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[75] The GPEIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[76] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					

[74] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[75] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[76] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	LTS	☐	☐	☐	☐
Expected and potential impacts of placing one single-family residence on soils, where analyzed to be technically sound in a geotechnical report, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[i]ndividual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[77] The GPEIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[78] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[m]ost new development that is anticipated in the Project Area would not require the use of septic tanks or alternative wastewater disposal systems…In addition, all on-site wastewater treatment systems (OWTS) will be required to comply with County Code, Titles 11 and 28 and other regulations applicable to OWTS, including requirements for preparation and submittal of feasibility reports in order to obtain the					

[77] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[78] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Department of Public Health - Environmental Health approval for construction and installation of OWTS. As such, there would be no impact…" As a constituent of the class of residentially zoned single-family residences with ready sewer access to dispose wastewater, the proposed project site is not at risk of impacts associated with soil deficiencies in the treatment of wastewater. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not sited on a fault, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	LTSM	☐	☐	☐	☐
Expected and potential impacts of subsurface grading of a foundation for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity."[79] The GPEIR also formulated GPMM-CUL-5 to establish performance standards in the event an unanticipated paleontological discovery was made, concluding that "[GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level."[80] While GPMM-CUL-5 was formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance rates for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas. Also, the project does not entail excavation in volumes with substantial potential for paleontological discovery, with modest grading and drilling occurring in disturbed fill and plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was to be encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of					

[79] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[80] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Greenhouse Gas Emissions and Energy					
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[81] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[82] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home					

[81] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[82] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[83] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[84] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home					

[83] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[84] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[85] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[86] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting					

[85] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[86] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	SU	☐	☐	☐	☐
Greenhouse gas emissions associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[87] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[88] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or					

[87] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[88] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Hazards and Hazardous Materials					
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	LTS	☐	☐	☐	☐
The use of materials that could be hazardous if misused, such as fuel oil, associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant." [89] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all hazards and hazardous materials effects discussed herein, the GPEIR analyzed that "analyzed that "[a]ny future development would be required to comply with applicable federal, state and local regulations related to hazardous materials, emergency response, wildland fires, and public airports, private airstrips, and heliports. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, would be less than significant. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, emergency response, wildland fires, and airports would be less than significant. Therefore, impacts related to hazards and hazardous materials would not be cumulatively considerable."[90] In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
Create a significant hazard to the public or the environment through	LTS	☐	☐	☐	☐

[89] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[90] Source: 2035 County General Plan EIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment					
The use of materials that could be hazardous if misused, such as fuel oil, associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant." [91] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LTS	☐	☐	☐	☐
The use of materials that could be hazardous if misused, such as fuel oil, associated with construction and operation of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[92] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					

[91] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[92] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code. The proposed project is also not sited within one-quarter mile of an existing or proposed school.					
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	LTS	☐	☐	☐	☐
The GPEIR analyzed that "compliance with applicable existing regulations and processes would ensure that the [2035 County General Plan] would not result in a significant hazard to the public or the environment from future development on existing hazardous materials sites. Therefore, the [2035 County General Plan] would have a less than significant impact associated with existing hazardous materials sites."[93] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[94] However, the proposed project is not located within the vicinity of an airport or within the boundary of an airport land use					

[93] Source: GPEIR, page 5.8-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[94] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
compatibility plan. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not located in proximity to an airport, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[95] These include public response infrastructure planning and provisioning, support for emergency personnel, public awareness, and other centralized approaches to avoiding impairment of emergency response. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Directly or indirectly cause a significant risk of loss, injury or death involving wildland fires	LTS	☐	☐	☐	☐
The addition of some quantum of wildfire risk associated with human activities during construction and operation of one single-family residence, and with a new residential electricity drop and wiring, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[2035 County General Plan] policies and conditions of approval for future development projects within the [County], in addition to compliance with applicable regulations, would minimize [2035 County General Plan] impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[96] Cited policies aligned with standard conditions of approval for projects sited in VHFSZs, which include fire-rated wall and roof assemblies and windows, landscape management, adequate service and site location for fire suppression infrastructure, and low intensity, are characteristic of the proposed project. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Hydrology and Water Quality					

[95] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[96] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality	LTS	☐	☐	☐	☐
Hydrology and water quality impacts during construction and operation of one single-family residence, such as the additiona of impervious surfaces, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[i]mpacts would be less than significant upon compliance with regulatory requirements and [2035 County General Plan] policies."[97] Cited policies aligned with standard conditions of approval include Low Impact Development standards facilitating buffering and/or infiltration of stormwater, and Best Management Practices limiting the contamination of stormwater. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all hydrology and water quality effects discussed herein, the GPEIR analyzed that "[a]s cumulative projects would be required to comply with [applicable] water-quality, drainage, and flood safety requirements, significant cumulative impacts would not occur. Therefore, the [2035 County General Plan] would not contribute to significant cumulative hydrology and water-quality impacts."[98]					
Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	LTS	☐	☐	☐	☐
Hydrology and water quality impacts during construction and operation of one single-family residence, such as the addition of impervious surfaces, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts					

[97] Source: GPEIR, page 5.9-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[98] Source: GPEIR, page 5.9-41. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
on groundwater recharge would be less than significant."[99] Like other residential projects, the proposed project would result in a relatively minor increase in impervious surface area of approximately 1,159 square feet. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i.) Result in substantial erosion or siltation on- or off-site ii.) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite iii.) 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 iv.) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation v.) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	LTS	☐	☐	☐	☐
Hydrology and water quality impacts during construction and operation of one single-family residence, such as new flow from downspouts, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts					

[99] Source: GPEIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
on groundwater recharge would be less than significant."[100] Like other single residential projects, the proposed project would result in a relatively minor increase in impervious surface area of approximately 1,159 square feet, and would not divert a waters. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Land Use and Planning					
Physically divide an established community	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]nlike the roadways proposed for the more rural areas of Los Angeles County, those proposed for the heavily urbanized portions of Los Angeles County (the East San Gabriel Valley, Gateway, Metro, San Fernando Valley, West San Gabriel Valley, and Westside Planning Areas) would traverse existing communities. These highways include roadways proposed to be widened (or otherwise improved) and roadways that would be built where no current roadway exists. Although such projects would involve the displacement of existing land uses, they would generally be constructed to increase access and connectivity in established communities, not divide them."[101] Like other single residential projects, the proposed project would not divide an established community. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	LTS	☐	☐	☐	☐
The GPEIR analyzed that "the Proposed Project would not conflict with goals contained within SCAG's 2012–2035 RTP/SCS or other land use plans. Therefore, impacts related to compatibility between the Proposed Project and applicable plans adopted for the purpose of avoiding or mitigating environmental effects would be less than significant."[102] These policies and regulations were considered in the context of specific environmental effects in other impact areas of analysis, as attributed in this Checklist. The proposed project, which seeks no variance from any applicable regulation or standard, was analyzed as such by the prior EIR, and would not have any effects that are more significant than what the prior EIR analyzed.					
Mineral Resources					

[100] Source: GPEIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[101] Source: GPEIR, pages 5.10-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[102] Source: GPEIR, pages 5.10-42. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[103] in all Planning Areas except portions of the Antelope Valley. As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for mining. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for mining use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[104] in all Planning Areas except portions of the Antelope Valley. As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for mining. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for mining use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Noise					
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	SU	☐	☐	☐	☐

[103] Source: GPEIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[104] Source: GPEIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?

Noise impacts during construction and operation of one single-family residence, such as that associated with equipment and personnel characteristic of light-framing, and added vehicular traffic, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.

The GPEIR formulated GPMM-NOI-1 to mitigate for an increase in construction-related noise levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[105] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. While the impact of new noise is significant at the scale of the 358,931 additional residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it would not be cumulatively considerable at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance.

Compliance with the County Noise Control Ordinance would be sufficient to mitigate against a significant effect from noise in the class of single-family residential projects. The County Noise Control Ordinance considered and formulated context-specific thresholds and exceptions that are different for the construction and period of occupancy of one single-family residence in a residential neighborhood, in consideration of the times of day, duration, intermittency and magnitude of noise impacts, and of the existing condition.

Nevertheless, the project has been conditioned to satisfy GPMM-NOI-1 of the GPEIR as the standard approach to contingency noise mitigation. GPMM-NOI-1 stipulates that "[m]itigation measures such as installation of temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive structures, equipping construction equipment with mufflers, and reducing non-essential idling of construction equipment to no more than five minutes shall be incorporated into the construction operations to reduce construction-related noise to the extent feasible."[106] Because GPMM-NOI-1 establishes general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

As to cumulative impacts of all noise effects, the GPEIR analyzed that "[c]umulative projects in the Los Angeles County region would have the potential to result in a cumulative noise

[105] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[106] Source: GPEIR, pages 5.12-106. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
impact if they would, in combination with regional growth in the immediate area, create excessive community noise levels. The traffic noise levels predicted for buildout conditions…are based on cumulative traffic conditions that take into account cumulative development in the region. Therefore, these impact discussions inherently incorporate the cumulative scenario by default. Further, cumulative projects under the buildout of the Proposed Project within Los Angeles County would be required to comply with the applicable land use compatibility classification or they would not be approved without a general plan amendment. Therefore, the Proposed Project would not contribute to a significant cumulative noise impact above and beyond [the non-cumulative noise analysis]."[107]					
Generation of excessive ground-borne vibration or ground-borne noise levels	SU	☐	☐	☐	☐
Vibration impacts during construction and operation of one single-family residence, such as operation of internal combustion engine vehicles to ingress and egress from the project site, are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR formulated GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 to mitigate for an increase in or unacceptable exposure to vibration levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[108] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. While the impact of new vibration is significant for projects requiring vibration-intensive equipment used for extended duration adjacent to sensitive uses, it would not be cumulatively considerable for typical residential impacts, which do not use vibration-intensive equipment. The project therefore transcends this finding of unavoidable significance. Compliance with the County Noise Control Ordinance would be sufficient to mitigate against a significant effect from vibration in the class of single-family residential projects. Nevertheless, GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 have been considered for their potential applicability to the project. GPMM-NOI-3 stipulates that "[n]ew development that occurs within 200 feet of a railroad track…shall be evaluated for potential vibration impacts."[109] However, the proposed project is not sited within 200 feet of a railroad track. GPMM-NOI-4 stipulates that "[i]ndividual projects that use vibration-intensive construction					

[107] Source: 2035 County General Plan EIR, page 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[108] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[109] Source: GPEIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses…additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g. drilled piles to eliminate use of vibration-intensive pile driver)."[110] The proposed project would not make use of vibration-intensive equipment and therefore transcends this mitigation measure. GPMM-NOI-5 stipulates that "heavy industrial projects are required to provide evidence that vibration due to the operation of machinery would not adversely affect nearby vibration sensitive uses."[111] The proposed project is not a heavy industrial project and does not require the use of any vibration-intensive equipment. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels	LTS	☐	☐	☐	☐
The GPEIR analyzed that "with the application of Policy LU 7.6 and Policy N 1.12 and review by the Los Angeles County ALUC, future development under the Proposed Project would be consistent with adopted ALUCPs and there would be no significant noise exposure impacts relative to airport or airstrip noise levels."[112] However, the proposed project is not located within the vicinity of a private airstrip or within the boundary of an airport land use compatibility plan, and effects on occupants of the class of single-family residences do not affect a sufficient number to constitute an environmental effect. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not located in proximity to an airport, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Population and Housing					
Induce substantial unplanned population growth in an area, either	LTS	☐	☐	☐	☐

[110] Source: GPEIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[111] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[112] Source: GPEIR, pages 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)					
The GPEIR analyzed that "[t]he Proposed Project accommodates up to 659,409 housing units, and although buildout is not expected to occur by 2035, the opportunities for housing development provided in the Proposed Project are consistent with SCAG growth projections for 405,500 units by 2035. The housing and population growth allowed under the Proposed Project is consistent with SCAG projections and do not constitute a significant adverse environmental impact."[113] Resulting ratios of jobs to housing were acceptable in all planning areas but the Antelope Valley Planning Area, resulting in central planning mitigation for that area. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation and associated central planning strategies, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[w]ithout mitigation, [this impact] would be less than significant."[114] Because standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation and associated central planning strategies, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Public Services					
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance	LTS	☐	☐	☐	☐

[113] Source: GPEIR, pages 5.13-6. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[114] Source: GPEIR, pages 5.13-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
objectives for any of the public services: i. Fire protection ii. Police protection iii. Schools iv. Parks v. Other Public Facilities					

Public service impacts of one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.

Fire protection
The GPEIR formulated GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3 to mitigate for provisioning new fire protection infrastructure and personnel, analyzing that "existing regulatory programs and [GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3] would reduce potential impacts associated with fire protection to a level that is less than significant."[115] GPMM-PS-2 and GPMM-PS-3 are not applicable, and the project would comply with the applicable "fair share" mitigation measure GPMM-PS-1 by paying the applicable Fire Department Developer Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

Police protection
The GPEIR formulated GPMM-PS-4 to mitigate for provisioning new police protection infrastructure and personnel in the high-growth Antelope Valley area, analyzing that ""[GPMM-PS-4] would reduce potential impacts associated with law enforcement to a level that is less than significant."[116] However, the project is not located in the Antelope Valley area. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

Schools
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[117] These include payment of a Schools Developer Fee as required by ordinance. These uniformly applicable

[115] Source: GPEIR, pages 5.14-11. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[116] Source: GPEIR, pages 5.14-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[117] Source: GPEIR, pages 5.14-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Parks and other public facilities* The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[118] These include payment of a Library Impact Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Recreation					
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[119] These include centralized strategies and funding sources for provisioning and upkeep of parkland with buildout. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[120] These include centralized strategies and funding sources for provisioning and upkeep of parkland with buildout. These uniformly applicable development					

[118] Source: GPEIR, pages 5.14-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[119] Source: GPEIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[120] Source: GPEIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Transportation					
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	SU	☐	☐	☐	☐
Traffic flow impacts during construction and operation of one single-family residence permitted to encroach with a standard process during utility connection and not otherwise are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR found impacts to the circulation system to be significant and unavoidable because certain "impacted locations are still considered to be significantly impacted with mitigation," represented by significant increases in the level of service at some intersections and on some already-congested freeways, and because "completing certain improvements located within cities lies with agencies other than the County," with "potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the County's control."[121] Notwithstanding this finding of cumulative significance under some circumstances, the GPEIR formulated GPMM-T-1, GPMM-T-2, GPMM-T-3, GPMM-T-4 and GPMM-T-5 as feasible mitigation to reduce impacts to less than significant under other circumstances. GPMM-T-1 stipulates that "[t]he County shall continue to monitor potential impacts on roadway segments and intersections on a project by project basis as buildout occurs by requiring traffic studies for all projects that could significantly impact traffic and circulation patterns. Future projects shall be evaluated and traffic improvements shall be identified to maintain minimum levels of service in accordance with the County's Traffic Impact Analysis ("TIA") Guidelines, where feasible mitigation is available."[122] In accordance with the County's TIA Report Guidelines, use of the 10th edition of the Institute of Transportation Engineers ("ITE") Trip Generation Manual[123] results in an expected trip generation rate for a single-family residence of approximately 10 trips/day during the period of occupancy, including one trip at the peak hour. During construction, the same source expects six to seven trips per day, including one trip at the peak hour. These amounts do not exceed the screening criteria for performance of traffic modeling in a TIA.					

[121] Source: GPEIR, page 5.16-83. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[122] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[123] Source: Institute of Transportation Engineers. Available at: http://www.ite.org/tripgeneration.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
GPMM-T-2 stipulates that the County "shall implement over time objectives and policies contained within the General Plan Mobility Element."[124] Mobility Element policies relate to the design, construction, operation and maintenance of the transportation system, which are not pertinent to a single-family home. GPMM-T-3, GPMM-T-4 and GPMM-T-5 are conditional requirements of the County that are not triggered by the construction of a single-family home. As the project would not change Level of Service criteria on any roadway or intersection and is entirely within the County's jurisdiction, it transcends the finding of unavoidable significance. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)	LTS	☐	☐	☐	☐
While State CEQA Guidelines Section 15064.3(b) came into effect on 12/28/18 pursuant to Government Code section 11343.4(b)(3), after the adoption of the 2035 County General Plan and its EIR, the 2035 County General Plan advanced polices aligned with State CEQA Guidelines Section 15064.3(b) to reduce per-capita VMT, including Policy M 4.16 and LU 5.3. The project would provide housing in the Pasadena Regional Statistical Area, which has had and is projected to continue to have a high ratio of jobs to housing,[125] corresponding to an expectation of reduced per capita VMT for non-specific residents. Additionally, the Applicant and his wife propose to walk to and from work at the major jobs center (of nearly 6,000 workers) in the area, a distance of less than a mile by foot, or less than two miles by vehicle, and so would be expected to further reduce VMT (which is dominated by distance of vehicular commute) for the foreseeable future, compared to other residents commuting to job centers in central Pasadena or elsewhere. Cumulative impacts would be expected to be less than significant because the GPEIR analyzed that "buildout of the [2035 County General Plan] would slightly reduce per capita VMT."[126] This impact is also subject to a screening threshold for "land use projects" as recommended by the Office of Planning and Research in its Technical Advisory in Evaluating Transportation					

[124] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[125] Source: Southern California Association of Governments. The New Economy and Jobs/Housing Balance in Southern California. Available at: http://www.scag.ca.gov/Documents/NewEconomyJobsHousingBalance.pdf.
[126] Source: GPEIR, page 5.3-29. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Impacts in CEQA,[127] of more than 110 trips per day generated or attracted. This is the standard approach to managing cumulative impacts, such as air quality and greenhouse gas emissions, and with the SCAG's 2012 RTP/SCS, as analyzed by the GPEIR. As documented above, single-family residences would be expected to result in an order of magnitude lower trips than this screening threshold. Because standards are uniformly unnecessary to mitigate against this effect in the class of single-family residences, and because the project would be consistent with state and 2035 County General Plan policy to reduce VMT, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	LTS	☐	☐	☐	☐
Traffic flow impacts during construction and operation of one single-family residence permitted to encroach with a standard process during utility connection and not otherwise are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[128] These include common standards for the design of the circulation system and required visibility regions around driveways edges at their intersection with the roadway. Nevertheless, the GPEIR anticipated that project-specific analysis may occur where a dangerous design feature is created or pre-exists the project. While a single-family residence could create a hazard by seeking a variance from visibility requirements mediating merging into the flow of traffic around a driveway, or sited in the flow of an intersection with known safety issues, the proposed project would have adequate visibility along sight lines of more than 450 feet north (the incoming, project-side lane of traffic) and 150 feet south, on a roadway with a posted speed limit of 25mph, with no nearby intersections. Compliance with driveway visibility requirements in the County Code and standard flagging as needed for larger vehicles or obstructions during construction would ensure that hazards are avoided in the interaction of project-related traffic with future traffic on the roadway. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					

[127] Source: California Office of Planning and Research, Technical Advisory in Evaluating Transportation Impacts in CEQA, page 10. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
[128] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Result in inadequate emergency access	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[129] These include common standards for maintaining access on the circulation system during construction. Nevertheless, the GPEIR anticipated that project-specific analysis may occur where a project could result in functional compromise of an emergency evacuation route that was not mediated by standard construction provisions, such as landsliding on, subsidence below, or other non-transient destruction of a roadway surface. While a single-family residence could block an emergency route during an emergency if it resulted in non-transient functional failure of the roadway, the proposed project does not involve activities that could reasonably cause such damage. Like all single-family residences, the proposed project would result in some obstruction of the fronting roadway for connection of below-grade utilities that are routed under that roadway. This construction would entail trenching in the roadway at depths up to 8ft. Pursuant to standard conditions, at most a single lane of Canyon Crest Road would be blocked at any given time, during standard daylight working hours for a number of days, with proper signage and flagging of traffic. Pursuant to standard conditions, steel roadway channel and asphalt to restore uncompromised flow of traffic in both lanes must be kept on hand for installation at the end of permitted working hours and in the event of an emergency. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Utilities and Service Systems					
Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects	LTS	☐	☐	☐	☐
Impacts from the provision of utilities for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.					

[129] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
The GPEIR discussed various approaches in section 5.17 to centralized planning and provisioning of utility infrastructure, finding all approaches adequate and no residually significant cumulative effects. As a constituent of the class of residentially zoned single-family residences, the proposed project does not impose marginal demand on any utility or service system sufficient in magnitude to induce any new infrastructure. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years	LTS	☐	☐	☐	☐
Impacts from the provision of utilities for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR forecast that in the West San Gabriel Valley Planning Area, "[t]here is adequate forecasted residual water supply at buildout to serve [complete buildout], and impacts on water supplies would be less than significant,"[130] weighing residual supply capacity of 176mgd against projected added demand of 4.69mgd in nine planning areas that include the West San Gabriel Valley Planning Area. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	LTS	☐	☐	☐	☐
Impacts from the provision of utilities for one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid.					

[130] Source: GPEIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
The GPEIR forecast that in all planning areas, "[t]here is adequate water treatment capacity in the region for the net increase in water [treatment] demands from [complete buildout], and impacts would be less than significant."[131] Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals	LTS	☐	☐	☐	☐
Generation of solid waste created by one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant." These include construction and demolition debris recycling requirements for single-family residences and provisions of the County's Integrated Waste Management Plan. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste	LTS	☐	☐	☐	☐
Generation of solid waste created by one single-family residence are not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. The GPEIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[132] These include construction and demolition debris recycling requirements for single-family residences and provisions of the County's Integrated Waste Management Plan. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such					

[131] Source: GPEIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[132] Source: GPEIR, page 5.17-60. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Wildfire					
Substantially impair an adopted emergency response plan or emergency evacuation plan	LTS	☐	☐	☐	☐
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[133] These include public response infrastructure planning and provisioning, support for emergency personnel, public awareness, and other centralized approaches to avoiding impairment of emergency response. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrates from a wildfire or the uncontrolled spread of wildfire	LTS	☐	☐	☐	☐
The placement of one single-family residence on a slope in a Very High Fire Hazard Severity Zone is not peculiar to the project or its site, and the proposed project is consistent with the analysis of the GPEIR, which remains valid. While this threshold was added to the State CEQA Guidelines in 2019, after the adoption of the GPEIR, the GPEIR analyzed the vectors that contribute to wildfire risk, which has long existed as a hazard in the County. The GPEIR analyzed that "the LACoFD has instituted a variety of regulatory programs and standards for vegetation management, pre-fire management and planning, fuel modification, and brush clearance. In addition to these programs, the LACoFD and the County Department of Public Works enforce fire and building codes related to development in VHFHSZs. The Fire Department has access requirements for single family residential uses built in VHFHSZs."[134] "[2035 County General Plan] policies and conditions of approval for future development projects within the Project Area, in addition to compliance with applicable regulations, will minimize Proposed Project impacts related to wildland fires.					

[133] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[134] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

	GPEIR Determination	Effect Peculiar to Project or Site, No Uniformly Applicable Mitigating Standards?	New Significant Effect?	New Significant Off-site, Cumulative Impact?	New Information, More Severe Adverse Impact?
Consequently, the overall associated impacts would be less than significant."[135] Cited policies aligned with standard conditions of approval for projects sited in VHFSZs, which include fire-rated wall and roof assemblies and windows, landscape management, adequate service and site location for fire suppression infrastructure, and low intensity, are characteristic of the proposed project. Proximity to a slope vegetated with fire-wise plantings, as opposed to flashy fuels promoting a ladder effect, would not significantly exacerbate risk. The proposed design entails no vented attic or crawlspace to protect against wind-borne embers, which the California Building Code also addresses in its standards. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment	LTS	☐	☐	☐	☐
While this threshold was added to the State CEQA Guidelines in 2019, after the adoption of the GPEIR, the GPEIR analyzed the vectors that contribute to wildfire risk and associated secondary effects, including "the use of fuel breaks, fire fighting equipment, water drops, and other techniques."[136] "[2035 County General Plan] policies and conditions of approval for future development projects within the Project Area, in addition to compliance with applicable regulations, will minimize Proposed Project impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[137] As a constituent of the class of residentially zoned single-family residences, the proposed project site does not impose marginal demand on any utility or service system sufficient in magnitude to induce any new infrastructure. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					

[135] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[136] Source: GPEIR, page 5.14-2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf
[137] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf

On the basis of this initial valuation:

- ☒ I find that all effects of the proposed project WOULD NOT be inconsistent with the analysis of the 2035 County General Plan EIR, that all effects of the proposed project are therefore provisionally exempt from CEQA, and that no new information has been identified that would justify any additional environmental analysis or mitigation beyond that established by the 2035 County General Plan EIR. A Notice of Exemption will be filed pursuant to State CEQA Guidelines Section 15062.
- ☐ I find that one or more effects of the proposed project WOULD be inconsistent with the analysis of the 2035 County General Plan EIR. Only those project effects analyzed to be consistent with the analysis of the 2035 County General Plan EIR, as identified in this Checklist, are deemed provisionally exempt from CEQA. Another environmental document and track of CEQA compliance will be identified for those effects that remain subject to CEQA.
- ☐ I find that one or more effects of the proposed project WOULD be subject to new information that would justify additional environmental analysis or mitigation not contained in the 2035 County General Plan EIR. Only those project effects for which the analysis of the 2035 County General Plan EIR remains sufficient, as identified in this Checklist, are provisionally exempt from CEQA. Another environmental document and track of CEQA compliance will be identified for those effects that remain subject to CEQA.

SIGNATURE DATE

K. STATE CEQA GUIDELINES SECTION 15183.3/APPENDIX N CHECKLIST

INTRODUCTION

This document is an Infill Environmental Checklist ("Checklist") to evaluate the conformance of the proposed 3577 Canyon Crest Single-Family Residence project ("project") to the criteria established under CEQA (Public Resources Code Section 21000, et. seq.) and the State CEQA Guidelines ("CEQA") Section 15183.3 for streamlining of infill projects.

Senate Bill 226 (SB 226), signed into law in 2011, made changes to the CEQA review process for infill projects, establishing criteria and provisions for streamlining. These provisions are implemented through CEQA Guidelines Section 15183.3, which states that to be eligible for streamlining procedures, an infill project must:

1) Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75% of the site's perimeter;
2) Satisfy performance standards in Appendix M of the CEQA Guidelines; and
3) Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy.

For eligible infill projects, State CEQA Guidelines Section 15183.3 states that:

"CEQA does not apply to the effects of an eligible infill project under two circumstances. First, if an effect was addressed as a significant effect in a prior EIR for a planning level decision[1], then, with some exceptions, that effect need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR. Second, an effect need not be analyzed, even if it was not analyzed in a prior EIR or is more significant than previously analyzed, if the lead agency makes a finding that uniformly applicable development policies or standards, adopted by the lead agency or a city or county, apply to the infill project and would substantially mitigate that effect. Depending on the effects addressed in the prior EIR and the availability of uniformly applicable development policies or standards that apply to the eligible infill project, streamlining under this section will range from a complete exemption to an obligation to prepare a narrowed, project-specific environmental document."

Uniformity of an applied development policy or standard, as well as the sufficiency of regulation to constrain certain impacts, may be assessed across the same class of project. A regulation that applies to all projects of any class may be sufficient for some classes of project, but not others. This Checklist assesses the sufficiency of development policies and standards to the class of project described as "one conforming single-family residence on a vacant residentially zoned parcel in an urbanized area," without addressing the sufficiency of these policies or standards to constrain against significance in the numerous other classes of projects. If an effect cannot be characteristic of this class of project (like demand for a new utility facility, or conversion of a substantial amount of common habitat), it is deemed substantially mitigated by those uniformly applicable development standards that constrain the size and scope of impact of the class. If an

[1] "Planning level decision" means the enactment or amendment of a general plan or any general plan element, community plan, specific plan, or zoning code.

effect could be characteristic of this class of project (like significantly degrading a view from a scenic highway), it is not deemed substantially mitigated by a uniformly applicable development standard, and this Checklist attributes consistency of the proposed project with the analysis of the 2035 County General Plan EIR ("GPEIR"), including imposition of any generally applicable mitigation that could apply to the proposed project.

All determinations in this Checklist are governed by the "substantial evidence" standard of review. (See State CEQA Guidelines Section 15183.3(d) [in determining whether, in light of the prior EIR, the infill project will cause effects requiring additional CEQA review, such determinations "are questions of fact to be resolved by the lead agency" and "must be supported with enough relevant information and reasonable inferences from this information to support a conclusion, even though other conclusions might also be reached."]). Effects of a qualifying infill project that are exempt from CEQA are not subject to any exceptions.

As substantiated herein, the project is an infill project that qualifies for the CEQA streamlining provisions set forth in Section 15158.3 of the State CEQA Guidelines. Therefore, pursuant to CEQA, these streamlining provisions, and Appendix N of the State CEQA Guidelines, the County of Los Angeles has prepared this Infill Environmental Checklist which demonstrates that the project's environmental effects were analyzed in the County's previously adopted 2035 Los Angeles County General Plan Environmental Impact Report (SCH#2011081042) and/or are constrained to a level that is not significant by uniformly applicable development policies and standards. All the project's effects have been analyzed to conform to one or both of these criteria, and the project is therefore completely exempt from CEQA. As such, this Checklist does not further categorize or analyze the sections of the Appendix N template that address the level of significance, which apply only to non-exempt effects.

This Checklist addresses all environmental issues listed in Appendix N of the State CEQA Guidelines. The Appendix N template contains the thresholds of significance developed by the Office of Planning and Research in State CEQA Guidelines Appendix G, and these are deemed to be sufficient and appropriate.

INFILL PROJECT DEFINITION

Project title:

3577 Canyon Crest Road Single-Family Residence Project

Lead agency name and address:

County of Los Angeles
320 W Temple St, Los Angeles, CA 90012

Contact name and address:

Stacy Corea
Regional Planner
Los Angeles County
Department of Regional Planning
320 W Temple Street,
13th Floor
Los Angeles, CA 90012
E-mail: scorea@planning.lacounty.gov

Project location:

3577 Canyon Crest Road
Altadena, CA 91001

See also Section 1.4 of EIR.

Project sponsor's name and address:

Stephen Kuhn
443 W. Poppyfields Drive
Altadena, CA 91001

General plan designation:

Residential

Zoning:

R1-10000

This designation permits one single-family residence on a minimum 10,000 square foot lot.

Prior environmental document(s) analyzing the effects of the project:

GPEIR (SCH#2011081042)

Location of prior environmental documents analyzing the effects of the project:

Available at: https://planning.lacounty.gov/long-range-planning/general-plan/programmatic-eir/ or upon request at the Department of Regional Planning located at 320 W Temple Street, Room 1356, Los Angeles, CA 90012.

GPEIR page numbers quoted in this Checklist refer specifically to the Draft EIR incorporated in the Final EIR, available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

Description of project:

The proposed project is a 1,555 square-foot, single-family home with a 397 square-foot attached garage on a vacant residential parcel of 1.02 acres in Altadena, a census-designated place and urbanized area in the unincorporated area of the County of Los Angeles ("County"). The project parcel is located approximately 1,000 feet south of the Angeles National Forest and approximately 14 miles northeast of the County civic center, in the West San Gabriel Valley Planning Area. The project would be sited on the eastern portion of the project parcel, in an existing residential neighborhood adjacent to other residences that have also been constructed in and adjacent to Millard Canyon. The project footprint of development would be located more than 150 feet distant from the nearest delineated waters, an intermittent, seasonal feature tributary to the Arroyo Seco in the bottom of Millard Canyon.

The proposed design of the home complies with all applicable land use regulations in effect as of the date of the Notice of Preparation. The proposed design is terraced to complement the natural topography, in accordance with the County's Hillside Management Area Sensitive Design Guidelines, and is at most two stories above grade in each building segment. The proposed design places most of its volume below the level of Canyon Crest Road, from which the home would be accessed with a driveway comprised of an open-celled tree root protection system. The total footprint of development of the proposed design, including the driveway and building footprint, is less than approximately 2,000 square feet. The proposed design entails no hardscape or appreciable grading outside the building footprint at grade of approximately 1,159 square feet.

A single-family residence is permitted by right in the County's R1-10000 Zone. However, a Minor Conditional Use Permit ("MCUP") is required in the Altadena Community Standards District, in order to construct on a slope greater than 25%. In addition, an Oak Tree Permit ("OTP") is required for the removal of one non-heritage oak tree and encroachment of the protected zones of 10 non-heritage oak trees on or adjacent to the project parcel that are governed by the County's Oak Tree Ordinance, forming a part of a degraded oak woodlands that extends through the developed residential area in all directions. Pursuant to standard compensatory provisions of the County Oak Tree Ordinance, the project would incorporate replacement plantings for the single removed oak tree; oak-compatible landscaping comprising a native understory; and Best Management Practices and design features before, during, and after

construction to promote the health of the oak trees on the project parcel. The project would also rehabilitate some of the existing impacts from the surrounding residential development that have degraded the oak trees affected by the project.

Surrounding land uses and setting:

Existing development in the vicinity consists of residential buildings of varying sizes and styles with associated facilities including above- and below-grade utilities, roadways and other hardscape, and residential landscaping. There are 52 residences within 500 feet of the project site.

To the south are single-family residences in the city of Pasadena, many of which are similarly situated at the rim of Millard Canyon or the Arroyo Seco. To the east are single-family residences zoned R1-10000 with low density land use designation (1-6 units/gross acre) in the Altadena Community Plan. To the north are five existing residences along the canyon side of Canyon Crest Road, similarly situated at the rim of Millard Canyon, as well as additional residences to the northeast, zoned R1-10000 with Non-Urban land use designation (up to one unit/gross acre) in the Altadena Community Plan. To the west are the southernmost residences of the Meadows neighborhood of more than 200 homes, zoned predominantly R1-7000 with low density land use designation in the Altadena Community Plan. Farther west is the Arroyo Seco.

The easternmost portion of the project site was graded during the construction of Canyon Crest Road, and most of the frontage of the parcel has been used as a shoulder for street-side parking and as supplementary parking by adjacent residences. In the 1960's, a below-grade sewer siphon main was constructed spanning most of the length of the parcel from east to west, including an above-grade steel trestle structure across the intermittent stream that flows in the bottom of Millard Canyon. An easement exists for maintenance, repair, and eventual replacement of this utility. (See EIR Figure 3-6: Project Site Plan).

As portrayed in the site plan, the perimeter of the project site is formed of six line segments and one arc, together totaling:
46.1'+429.8'+34.6'+124.3'+438.9'+68.0'+16.3' = 1157.9'

Of this perimeter:

- 84.3' adjoins Canyon Crest Road, itself adjoining the single-family residences at 3588 Canyon Crest Road and 3566 Canyon Crest Road
- 202.2' adjoins the single-family residence at 3589 Canyon Crest Road
- 273.7' adjoins the single-family residence at 3617 Canyon Crest Road
- 34.6' adjoins the single-family residence at 4001 Canyon Dell Drive
- 124.3' adjoins an open-space parcel owned by the City of Pasadena
- 438.9' adjoins a vacant residential parcel previously developed with the construction of a portion of the sewer main spanning Millard Canyon

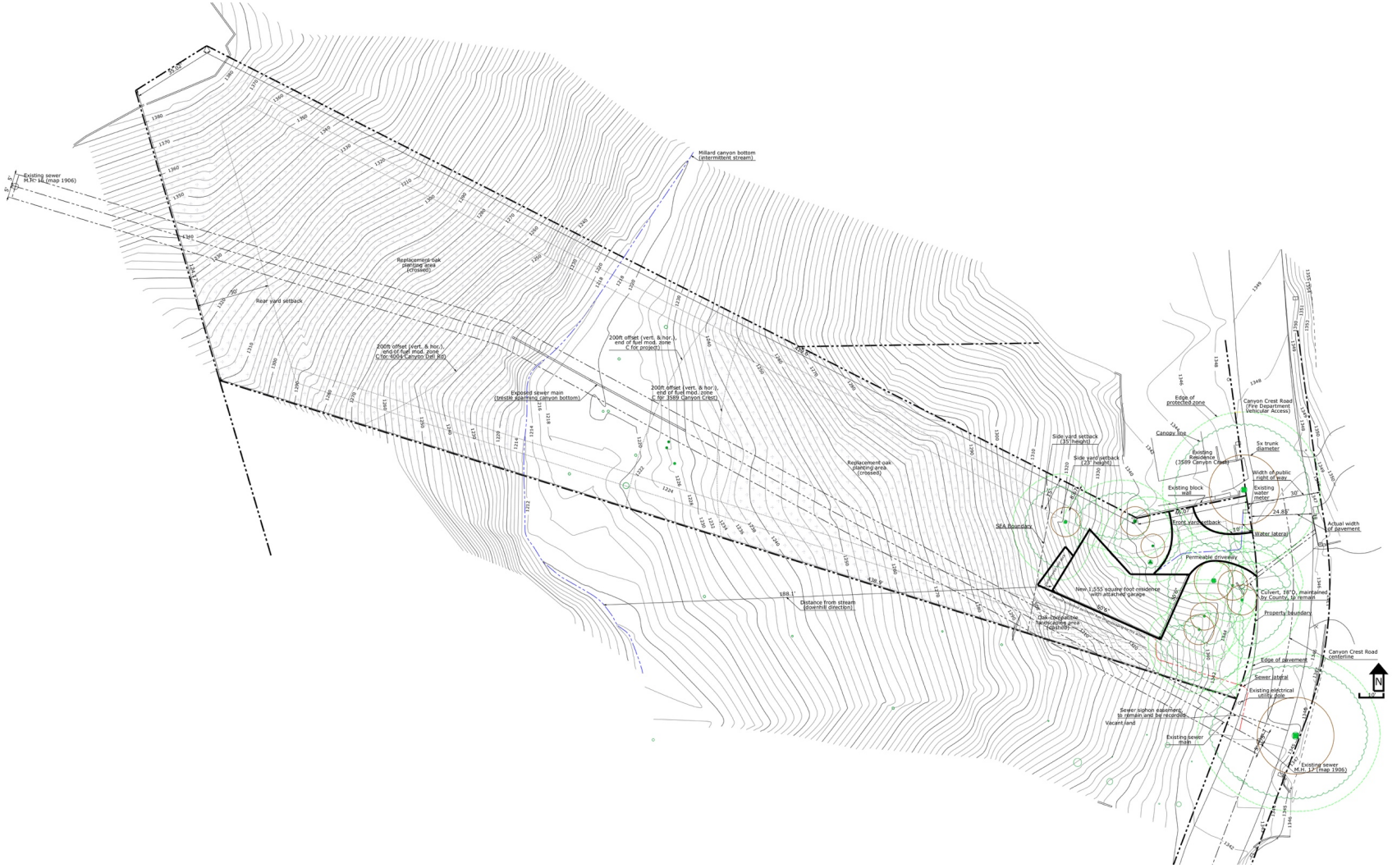


Figure 1: Proposed Project Site Plan

Figure 2: Before and After View of Project Site Driving South on Canyon Crest Road[2]

[2] Source: Applicant

Figure 3: Before and After View of Project Site Driving North on Canyon Crest Road[3]

[3] Source: Applicant

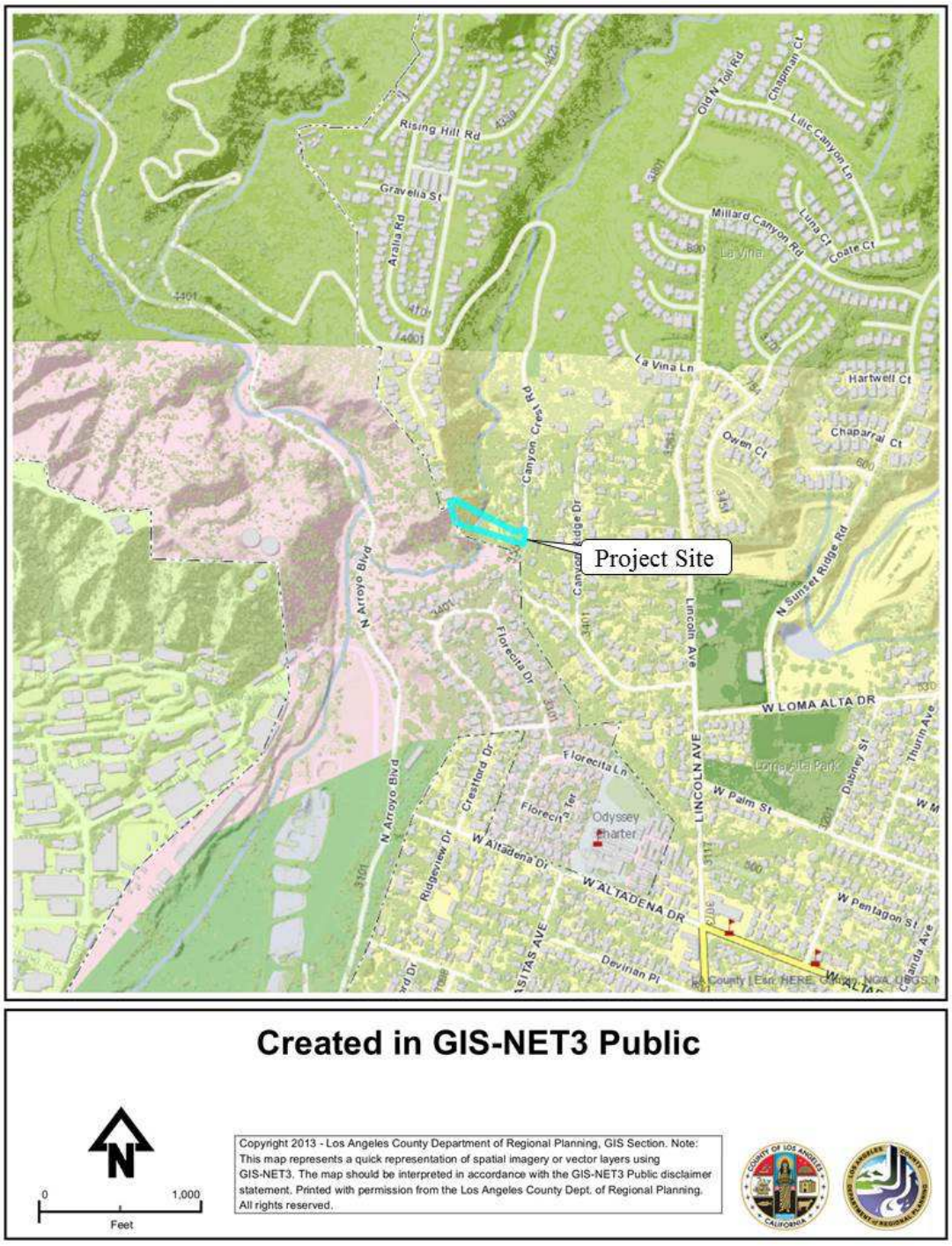


Figure 4: Project Vicinity Map[4]

[4] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

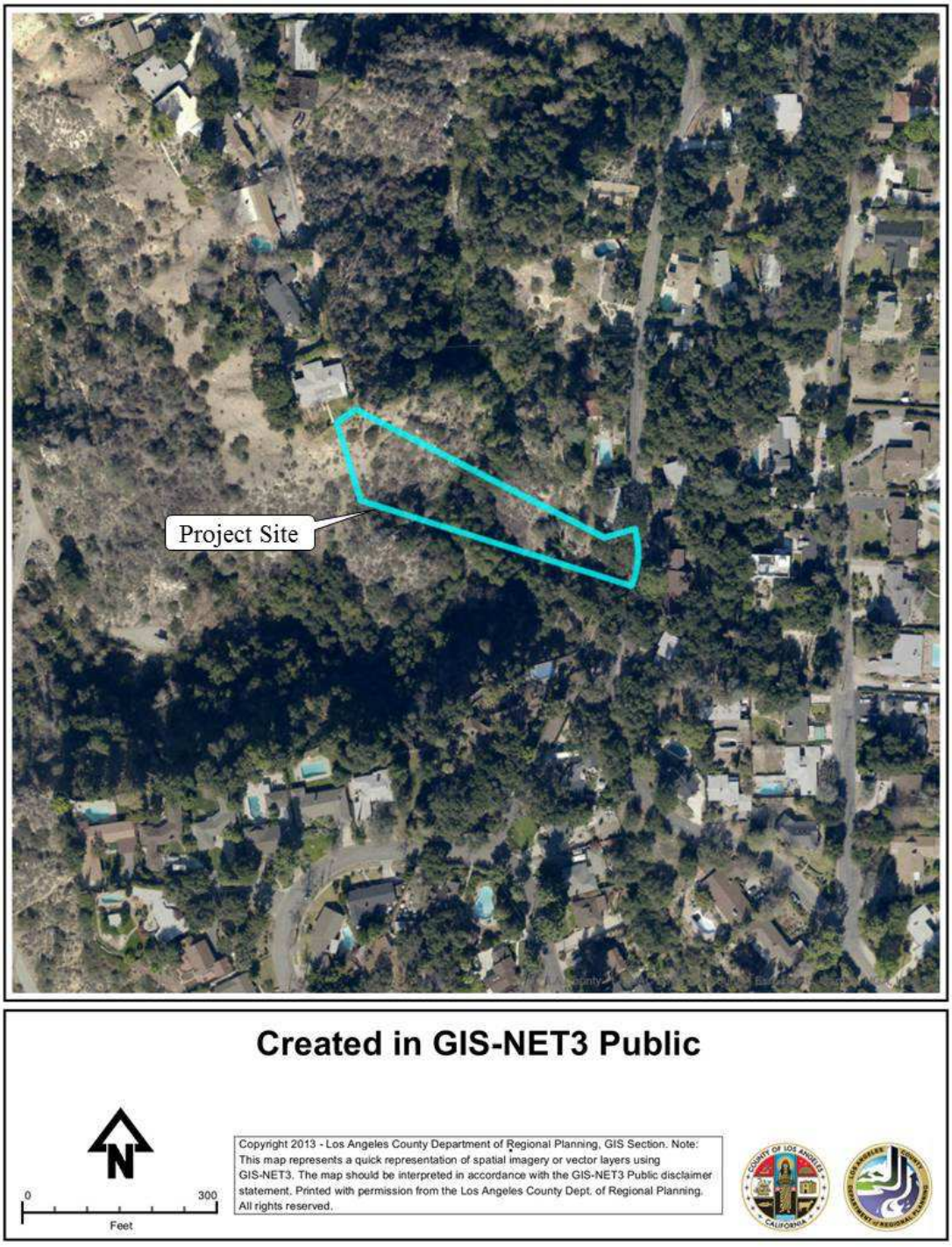


Figure 5: Project Vicinity Aerial Photograph[5]

[5]Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

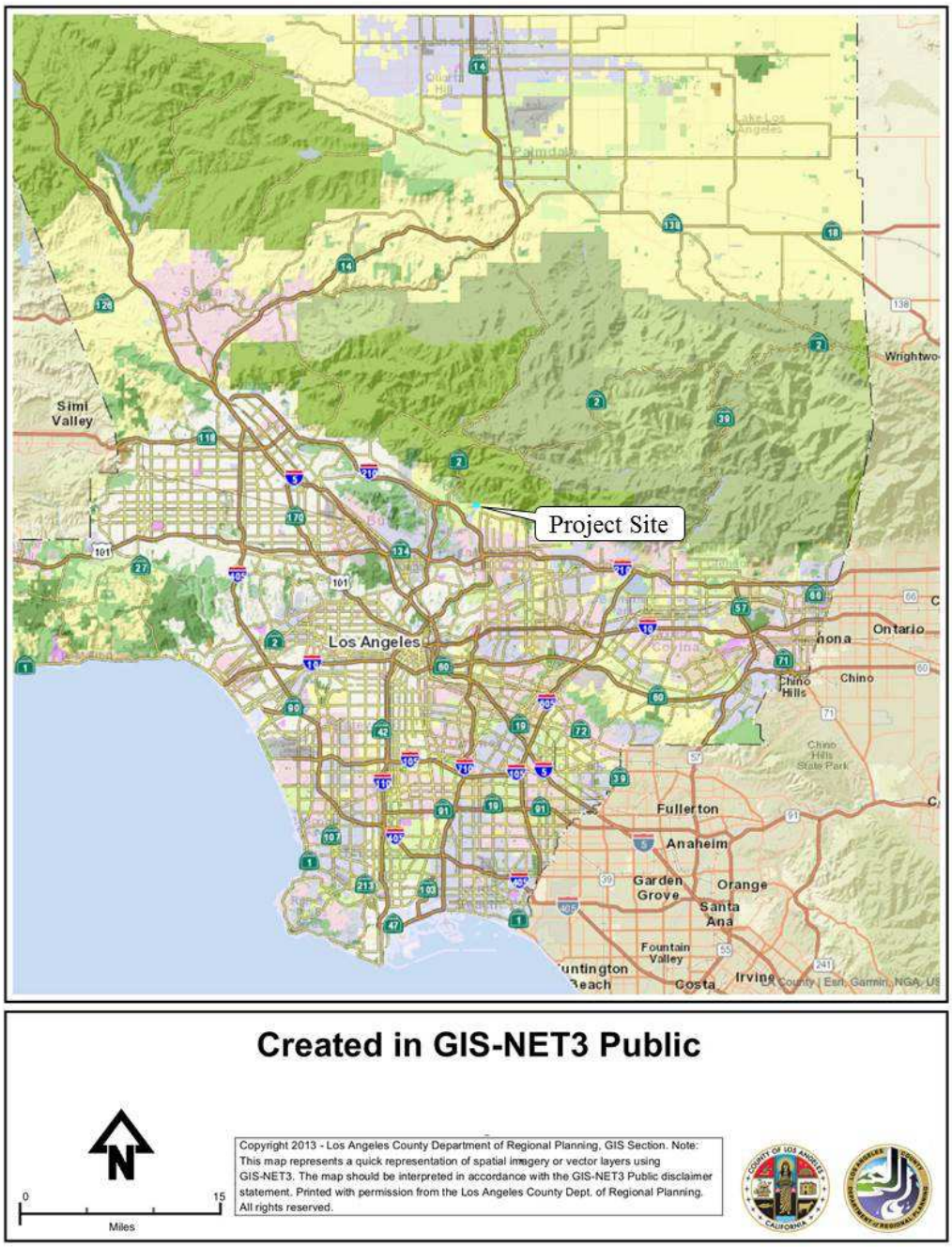


Figure 6: Regional Map[6]

Other public agencies whose approval is required:

Departments of the County of Los Angeles must approve all appurtenant building permits.

[6] Source: Regional Planning Geographical Information Systems. Available at: http://planning.lacounty.gov/gisnet3.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Because "a negative declaration, mitigated negative declaration, or environmental impact report" (CEQA Section 21080.3.1(b)) do not accompany this Checklist, which has identified that the project conforms to criteria for a complete exemption from further review, no tribal consultation is required. However, tribes requesting consultation were consulted, and agreed the type and scale of expected impacts from the project did not warrant any mitigation measures.

INFILL PROJECT DEFINITION CRITERIA

Infill project includes the whole of an action consisting of residential, commercial, retail, transit station, school, or public office building uses, or any combination of such uses that meet the eligibility requirements set forth in subdivision (b) of State CEQA Guidelines Section 15183.3.

Is the project located in an urban area on a site that either has been previously developed[7] or that adjoins existing qualified urban uses[8] on at least 75% of the site's perimeter?

The project is located in an "urbanized area." Pursuant to State CEQA Guidelines Section 15387, an "urbanized area" is "a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. A lead agency shall determine whether a particular area meets the criteria in this section either by examining the area or by referring to a map prepared by the U.S. Bureau of the Census which designates the area as urbanized." The unincorporated census-designated place of Altadena is located adjacent to the city of Pasadena, with a population of more than 137,000 as of the 2010 census, the most recent available.[9] Altadena has a population

[7] Discussion of the term "previously developed" appears in an Addendum of the Final Statement of Reasons to the amendment of the State CEQA Guidelines in response to SB 226: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Addendum_to_Final_Statement_of_Reasons.pdf. The term was not defined in the Public Resources Code or State CEQA Guidelines because it was deemed "unnecessary." As attributed therein: "the term "development" in other contexts "can be broadly interpreted to mean any physical alteration of the land." (Initial Statement of Reasons, at p. 28 of 54.)...[T]he Agency originally proposed a definition of the term "previously developed" that would exclude agricultural production and parkland" but "the common understanding of the term development should suffice in applying Section 15183.3 of the CEQA Guidelines." A sufficient definition of the term "developed" as applied to a parcel is assumed herein to mean "constructed with some residential, commercial, public institutional, transit or transportation passenger facility, or any combination," consistently with the definition of "qualified urban use" in CEQA Section 21072.

[8] The term "qualified urban use" is defined in CEQA Section 21072 as "any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses."

[9] Source: City of Pasadena. Pasadena Census and Population. Available at: https://ww5.cityofpasadena.net/planning/planning-division/community-planning/pasadena-census-and-population/.

density of 4,909 people per square mile as of the 2010 census.[10] The project site is located within the designated urbanized area of the relevant maps prepared by the U.S. Bureau of the Census.[11]

The project site has been previously developed under Community Investment 1978M (C.I.1978M) with the construction of approximately 415 linear feet of below-grade sewer main (a "public institutional" facility) on the project site, spanning it from east to west, and by an above-grade steel trestle structure carrying this main. The parcel has been previously graded in its eastern portion for the construction of Canyon Crest Road and for roadside parking. Approximately 52% of the project parcel perimeter adjoins developed single-family residences. An additional approximately 38% of the project parcel perimeter adjoins a vacant residential parcel that has been previously developed by construction of a portion of the sewer main (see again Figure 1). Therefore, the project parcel is both previously developed and also adjoins qualified urban uses along approximately 90% of its perimeter.

Does the project satisfy the standards in Appendix M of the CEQA guidelines?

1. Does the non-residential infill project include a renewable energy feature?

Because the project is a residential infill project, this standard does not apply.

2. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, either provide documentation of remediation or describe the recommendations provided in a preliminary endangerment assessment or comparable document that will be implemented as part of the project.

The project site does not appear on any list compiled pursuant to Section 65962.5 of the Government Code.

EnviroStor Database

The DTSC EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes federal Superfund sites on the National Priorities List, state response sites, voluntary cleanup sites, school investigation and cleanup sites, corrective action sites, tiered California permit sites, and hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code. It also includes sites that are being investigated for suspected but unconfirmed contamination.

The EnviroStor database shows only two sites within a one-mile radius, both associated with the Jet Propulsion Laboratory. (*See* Figure 7: EnviroStor Hazardous Materials Sites Within One Mile of Project).

[10] Source: United States Census Bureau. Available at: https://www.census.gov/quickfacts/altadenacdpcalifornia.
[11] Source: United States Census Bureau. Bureau of the Census 2010 Census Urban Area Reference Map – Los Angeles-Long Beach-Anaheim, CA. Available at: http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua51445_los_angeles--long_beach--anaheim_ca/DC10UA51445_003.pdf.

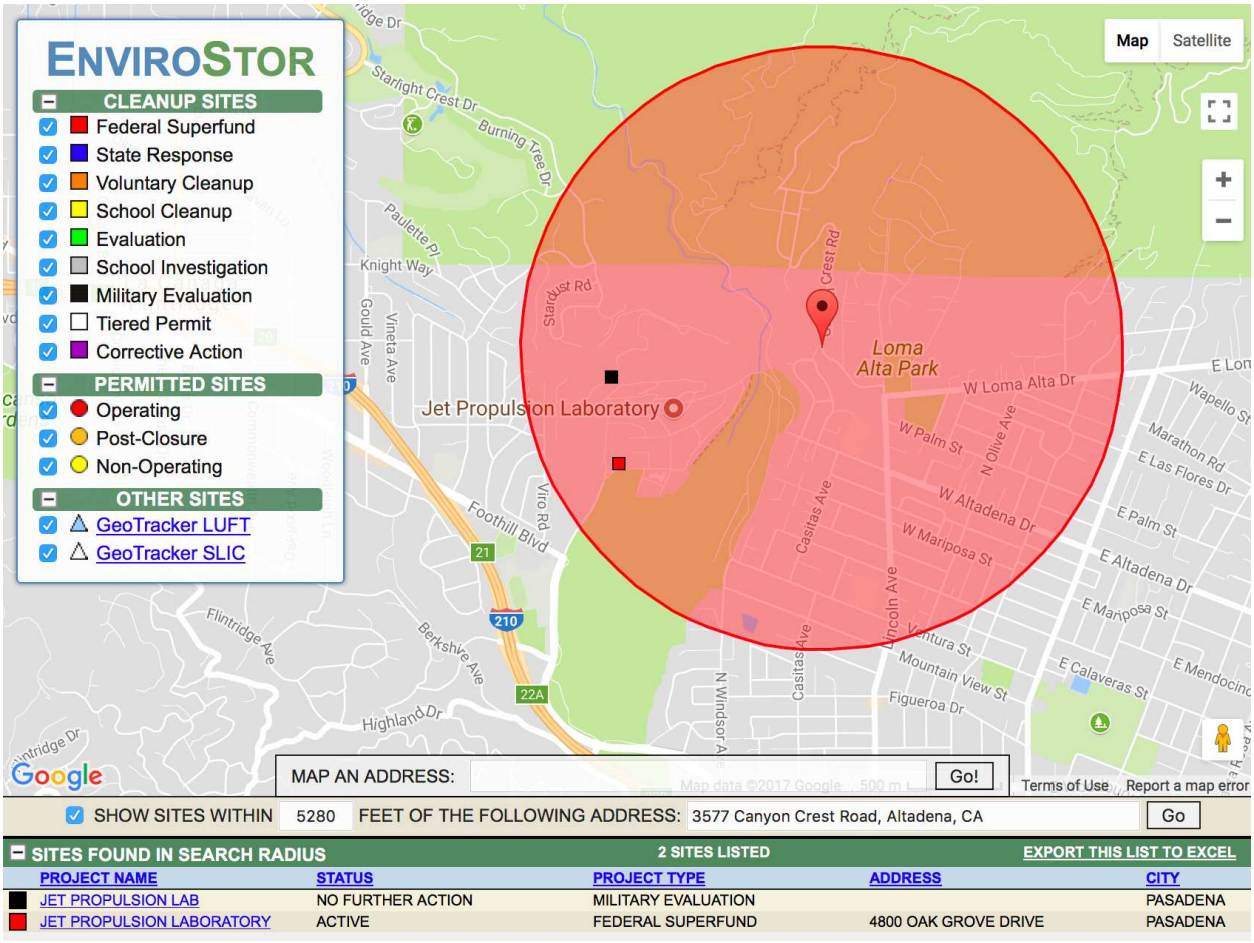


Figure 7: EnviroStor Hazardous Materials Sites Within One Mile of Project[12]

Leaking Underground Storage Sites

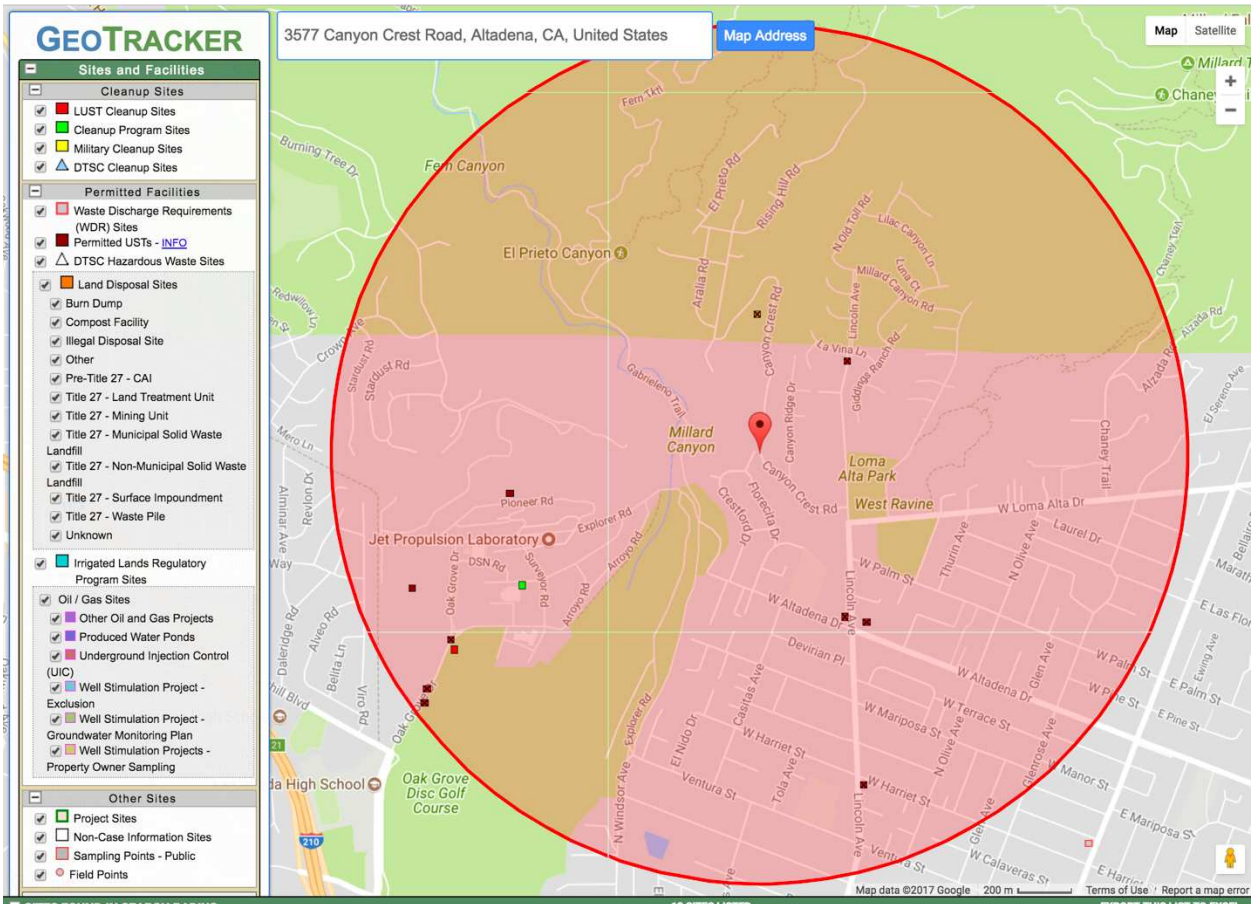
The State Water Resources Control Board ("SWRCB") GeoTracker database is used by the SWRCB, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. It includes regulatory data for the following types of sites:[13]

- Leaking Underground Storage Tanks ("LUST") cleanup sites;
- Cleanup Program Sites also known as Site Cleanups and formerly known as Spills, Leaks, Investigations, and Cleanups sites);
- Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites);
- Land Disposal sites (landfills);

[12] Source: Department of Toxic Substances Control. Available at: http://www.envirostor.dtsc.ca.gov/public.
[13] Source: State Water Resources Control Board. Available at: http://www.swrcb.ca.gov/ust/electronic_submittal/about.shtml.

- Permitted Underground Storage Tank facilities[14];
- Waste Discharge Requirement ("WDR") sites;
- Agricultural Waivers Program (Irrigated Lands Regulatory Program) sites.

The GeoTracker Database shows eight closed sites and four active sites within a one-mile radius of the project parcel. (*See* Figure 8: GeoTracker Hazardous Materials Sites Within One Mile of Project). The Millard Canyon entry (Global ID: T10000009319) was a "land disposal site," cleanup of which was undertaken on APN: 5863006900, a government-owned property, and completed as of 9/1/2016.[15]



SITE NAME	GLOBAL ID	FAC ID	STATUS	ADDRESS	CITY
AT&T CALIFORNIA - K1111		LACOFA0019051		4815 OAK GROVE DR	LA CANADA FLINTRIDGE
CONSCON DAVIDSON HOMES	T0603704500		COMPLETED - CASE CLOSED	3900 LINCOLN AVE N	ALTADENA
E & J ALTADENA PLAZA	T0603789937		COMPLETED - CASE CLOSED	575 W ALTADENA DR	ALTADENA
FLINTRIDGE RIDING CLUB	T0603705109		COMPLETED - CASE CLOSED	4625 OAK GROVE DR	LA CANADA-FLINTRIDGE
JET PROPULSION LABORATORY		LACOFA0019050		4800 OAK GROVE DR	PASADENA
JET PROPULSION LABORATORY	T0603703875		OPEN - SITE ASSESSMENT	4800 OAK GROVE DR	LA CANADA-FLINTRIDGE
JET PROPULSION LABORATRIES (JPL)	SL0603788964		OPEN - REMEDIATION	4800 OAK GROVE	PASADENA
LA CO FIRE STATION #12	T0603799291		COMPLETED - CASE CLOSED	2760 N LINCOLN AVE	ALTADENA
MILLARD CANYON	T10000009319		COMPLETED - CASE CLOSED	3900 CANYON CREST ROAD	ALTADENA
OAK GROVE RANGER STATION	T0603700208		COMPLETED - CASE CLOSED	4600 OAK GROVE DR	LA CANADA-FLINTRIDGE
PACIFIC BELL (K1-111)	T0603703589		COMPLETED - CASE CLOSED	4815 OAK GROVE DR N	LA CANADA-FLINTRIDGE
SZKIBA AUTO (FORMER)	T0603704315		COMPLETED - CASE CLOSED	3081 LINCOLN BLVD N	ALTADENA

[14] Note: Permitted UST information is now being maintained by the California Environmental Reporting System ("CERS") http://cers.calepa.ca.gov/ and GeoTracker's Permitted UST data is no longer up-to-date.
[15] Source: State Water Resources Control Board. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000009319.

Figure 8: GeoTracker Hazardous Materials Sites Within One Mile of Project[16]

Solid Waste Disposal Sites

Only one solid waste disposal site with waste constituents above hazardous waste levels outside the waste management unit is located in the County, in Monterey Park, more than 10 miles south of the project parcel.[17]

SWRCB Cease and Desist Orders

Only 10 SWRCB cease and desist orders are presently in effect in the County.[18] The nearest is the former Excello Plating Company at 4057 Goodwin Avenue in Los Angeles, more than 10 miles southwest of the project parcel.

Hazardous Waste Facilities Subject to Corrective Action

Only two facilities are presently subject to corrective action in the County.[19] The nearest is The Marquardt Company at 16555 Saticoy Street in Van Nuys, more than 15 miles to the west of the project parcel.

DTSC HazNet

A review of the DTSC Hazardous Waste Tracking System manifests returned no transport to or from the project parcel or any address in the vicinity.[20]

EPA Comprehensive Environmental Response, Compensation and Liability Information System ("CERCLIS")

CERCLIS was decommissioned in 2014, following the deployment of the Superfund Enterprise Management System.[21] The County of Los Angeles contains 680 archived CERCLIS sites.[22] The nearest site is Bow Tie Cleaning & Laundry at 458 Foothill Boulevard in the city of La Canada, more than 1.5 miles west of the project parcel.

EPA Resource Conservation and Recovery Act Information System ("RCRIS")

[16] Source: State Water Resources Control Board. Available at: https://geotracker.waterboards.ca.gov.
[17] Source: California Environmental Protection Agency. Available at: http://calepa.ca.gov/wp-content/uploads/sites/34/2016/10/SiteCleanup-CorteseList-CurrentList.pdf.
[18] Source: California Environmental Protection Agency. Available at: http://calepa.ca.gov/wp-content/uploads/sites/34/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx.
[19] Source: California Environmental Protection Agency. Available at: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.
[20] Source: Department of Toxic Substances Control. Available at: http://www.hwts.dtsc.ca.gov/.
[21] Source: United States Environmental Protection Agency. Available at: https://www.epa.gov/superfund/superfund-data-and-reports#cerclis.
[22] Source: United States Environmental Protection Agency. Available at: http://semspub.epa.gov/src/document/11/100000019.

The Resource Conservation and Recovery Act Information System ("RCRIS") is a national management program and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act ("RCRA"), as amended by the Hazardous and Solid Waste Amendments of 1984.[23]

The nearest site included in the RCRIS database is Audubon Elementary School (now Odyssey Charter School), approximately 0.3 miles to the southeast of the project parcel.[24]

3. If the infill project includes residential units located within 500 feet, or such distance that the local agency or local air district has determined is appropriate based on local conditions, a high volume roadway, or other significant source of air pollution, as defined in Appendix M, describe the measures that the project will implement to protect public health.

The project is not located within 500 feet of any high-volume roadway or other significant source of air pollution.

4. For residential projects, the project satisfies which one of the following?

☒ Located within a low vehicle travel area, as defined in Appendix M.
☐ Located within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor.
☐ Consists of 300 or fewer units that are each affordable to low income households.

The proposed project is located within a low vehicle travel area.

"Low vehicle travel area" means a traffic analysis zone that exhibits a below average existing level of travel as determined using a regional travel demand model. For residential projects, travel refers to either home-based or household vehicle miles traveled per capita. A Traffic or Transportation Analysis Zone (TAZ) is an analytical unit used by a travel demand model to estimate vehicle travel within a region.

The most recent average daily Vehicle Miles Traveled ("VMT") per capita in the County of Los Angeles is provided for the baseline 2012 reference year by regional modeling in the current 2016 Southern California Association of Counties (SCAG) RTP/SCS, adopted in April of 2016,[25] at 21.5 daily VMT per capita.

[23] Source: United States Environmental Protection Agency. Available at: https://www.epa.gov/enviro/rcrainfo-overview.
[24] Source: United States Environmental Protection Agency. Available at: https://www3.epa.gov/enviro/facts/rcrainfo/search.html.
[25] Source: Southern California Association of Governments. Available at: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf, page 155.

Similarly, the most recent 2017 model year maintained by Los Angeles County portrays 21.9 daily VMT per capita, and this is deemed the most current and appropriate average figure.[26] This average daily VMT per capita establishes a reference datum against which to project whether the project would be expected to contribute to increased or decreased per capita VMT within the region, for which the County of Los Angeles is deemed a suitable referent for a regional comparison. As previously attributed, the project would, for the foreseeable future, be expected to contribute VMT well below the per capita average due to its close proximity to the Applicant's place of work (also the major local job center in the vicinity), resulting in a substantial reduction of VMT compared to the average residential commute within the vicinity.

Nevertheless, regional traffic demand modeling would also expect a below average VMT for a residence sited at the project site, for non-specific residents. The Caltrans Statewide Travel Demand Model ("CSTDM") "can be used to assess VMT resulting from residential…land use projects" as part of a Lead Agency's analysis under CEQA.[27] The project site is located in CSTDM TAZ Number 4930, a TAZ of approximately 4.5 square miles and 9,999 people.[28] This is deemed sufficiently resolved for a regional analytical comparison against the County of Los Angeles as a whole, with an area of 4,751 square miles and population of over 10 million people.

TAZ Number 4930 has a home-based daily VMT per capita of 19.46, below the average of 21.9 daily VMT per capita.

Is the project consistent with the general land use designation, density, building intensity and policies in SCAG's adopted Sustainable Communities Strategy?

The proposed project is consistent with its residential land use designation, with the density and building intensity of 1 unit per 10,000 square feet of land area, and would be supportive of SCAG's Sustainable Communities Strategy policies, which emphasize densification of existing urbanized areas and the provision of housing in areas with high ratios of jobs to housing, in order to reduce VMT, congestion, and greenhouse gas emissions.

The project would provide housing in the Pasadena Regional Statistical Area which has had and is projected to continue to have a high ratio of jobs to housing,[29] corresponding to an expectation of reduced per capita VMT for non-specific residents. The proposed project is also located less than a mile by foot or approximately two miles by vehicle from the Applicant's place of work – the major jobs center in the vicinity, with approximately 6,000 employees – and would therefore be expected to be consistent with the policy of reducing VMT. One of the project objectives was to site a single-family residence within walking distance of this place of work.

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[26] Source: Los Angeles County. Available at: https://data.lacounty.gov/dataset/Total-and-Average-Daily-per-Capita-Vehicle-Miles-T/ba5z-qxm7.
[27] Source: California Department of Transportation. Available at: https://dot.ca.gov/programs/transportation-planning/multi-modal-system-planning/statewide-modeling/sb-743-vmt-impact-assessment.
[28] Source: California Department of Transportation. "VMT analysis/output file stratified by CSTDM TAZ." Available at: https://dot.ca.gov/programs/transportation-planning/multi-modal-system-planning/statewide-modeling/sb-743-vmt-impact-assessment. Note: because Caltrans does not maintain a publicly accessible mapping interface for this data, the VMT value is simply attributed.
[29] Source: Southern California Association of Governments. The New Economy and Jobs/Housing Balance in Southern California. Available at: http://www.scag.ca.gov/Documents/NewEconomyJobsHousingBalance.pdf.

POTENTIALLY SIGNIFICANT ENVIRONMENTAL FACTORS

- ☐ Aesthetics
- ☐ Agricultural and Forestry Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Energy
- ☐ Geology/Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☐ Tribal Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire
- ☐ Mandatory Findings of Significance

On the basis of this initial valuation:

- ☒ I find that the proposed infill project WOULD NOT have any significant effects on the environment that either have not already been analyzed in a prior EIR or that are more significant than previously analyzed, or that uniformly applicable development policies would not substantially mitigate. Pursuant to Public Resources Code Section 21094.5, CEQA does not apply to such effects. A Notice of Determination (Section 15094) will be filed.
- ☐ I find that the proposed infill project will have effects that either have not been analyzed in a prior EIR or are more significant than described in the prior EIR, and that no uniformly applicable development policies would substantially mitigate such effects. With respect to those effects that are subject to CEQA, I find that such effects WOULD NOT be significant and a NEGATIVE DECLARATION, or if the project is a Transit Priority Project, a SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT, will be prepared.
- ☐ I find that the proposed infill project will have effects that either have not been analyzed in a prior EIR, or are more significant than described, and that no uniformly applicable development policies would substantially mitigate such effects. I find that although those effects could be significant, there will not be a significant effect in this case because revisions in the infill project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION, or if the project is a Transit Priority Project, a SUSTAINABLE COMMUNITIES ENVIRONMENTAL ASSESSMENT, will be prepared.
- ☐ I find that the proposed infill project would have effects that either have not been analyzed by a prior EIR, or are more significant than described in the prior EIR, and that no uniformly

applicable development policies would substantially mitigate such effects. I find that those effects WOULD be significant, and an infill ENVIRONMENTAL IMPACT REPORT is required to analyze those effects that are subject to CEQA.

SIGNATURE DATE

EVALUATION OF THE ENVIRONMENTAL IMPACTS OF INFILL PROJECTS

Appendix N Instructions:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) For the purposes of this checklist, "prior EIR" means the environmental impact report certified for a planning level decision, as supplemented by any subsequent or supplemental environmental impact reports, negative declarations, or addenda to those documents. "Planning level decision" means the enactment or amendment of a general plan, community plan, specific plan, or zoning code (Section 15183.3(e)).

4) Once the lead agency has determined that a particular physical impact may occur as a result of an infill project, then the checklist answers must indicate whether that impact has already been analyzed in a prior EIR. If the effect of the infill project is not more significant than what has already been analyzed, that effect of the infill project is not subject to CEQA. The brief explanation accompanying this determination should include a page and section references to the portions of the prior EIR containing the analysis of that effect. The brief explanation shall also indicate whether the prior EIR included any mitigation measures to substantially lessen that effect and whether those measures have been incorporated into the infill project.

5) If the infill project would cause a significant adverse effect that either is specific to the project site and was not analyzed in a prior EIR, or is more significant than what was analyzed in a prior EIR, the lead agency must determine whether uniformly applicable development policies or standards that have been adopt by the lead agency, or city or county, would substantially mitigate that effect. If so, the checklist shall explain how the infill project's implementation of the uniformly applicable development policies will substantially mitigate that effect. That effect of the infill project is not subject to CEQA if the lead agency makes a finding, based upon substantial evidence, that the development policies or standards will substantially mitigate that effect.

6) If all effects of an infill project were either analyzed in a prior EIR or are substantially mitigated by uniformly applicable development policies or standards, CEQA does not apply to the project, and the lead agency shall file a Notice of Determination.

7) Effects of an infill project that either have not been analyzed in a prior EIR, or that uniformly applicable development policies or standard do not substantially mitigate, are subject to CEQA. With respect to those effects of the infill project that are subject to CEQA, the checklist shall indicate whether those effects are significant, less than significant with mitigation, or less than significant. If there are one or more "Significant Impact" entries when the determination is made, and infill EIR is required. The infill EIR should be limited to analysis of those effects determined to be significant (Section 15128, 15183.3 (d)).

8) "Less Than Significant With Mitigation Incorporated" applies where the incorporation measures will reduce an effect of an infill project that is subject to CEQA from "Significant Impact" to a "Less Than Significant Impact". The lead agency must describe the mitigation measures, and briefly explain how those measures reduce the effect to a less than significant level. If the effects of an infill project that are subject to CEQA are less than significant with mitigation incorporated, the lead agency may prepare a Mitigated Negative Declaration. If all of the effects of the infill project that are subject to CEQA are less than significant, the lead agency may prepare a Negative Declaration.
9) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to an infill project's environmental effects in whatever format is selected.
10) The explanation of each issue should identify:
a) the significance criteria or threshold, if any, used to evaluate each question; and
b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Aesthetics					
Have a substantial adverse effect on a scenic vista				☒	☒
The GPEIR analyzed that "[r]equirements relating to CUPs would ensure that development projects that would be accommodated by the [2035 County General Plan] would be held to appropriate development standards of the County Code. Regulations outlined in the County Code relating to HMAs would ensure that the physical character and scenic value of areas of the County with a natural slope gradient of steeper than 25 percent are preserved. Since hillsides and ridgelines are some of the primary resources related to scenic vistas in Los Angeles County, the provisions of the County Code would significantly reduce impacts to these areas….The existing regulatory setting, as well as the goals and policies contained in the [2035 County General Plan], would serve to lessen potential impacts to scenic vistas associated with implementation of the [2035 County General Plan]."[30] The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[31] As to cumulative impacts, the 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on scenic resources to a less than significant level, the Proposed Project's contribution to County-wide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed					

[30] Source: GPEIR, pages 5.1-19 and 5.1.20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[31] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Project related to scenic vistas and scenic resources are therefore considered less than significant."[32] A project that satisfies relevant CUP findings, and which is compliant with development standards in the County Code, would be expected to have less than significant aesthetic effects in an urbanized area. The proposed project satisfies all CUP findings relevant to aesthetics, complies with the County Code, and is not inconsistent with any 2035 County General Plan policy relating to aesthetics. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway				☒	☐
The GPEIR analyzed that "future discretionary projects accommodated by the [2035 County General Plan] would be subject to a separate project-level environmental review in accordance with CEQA, wherein the individual project's contribution to the degradation of scenic highways would be assessed at the time formal development plans/applications are submitted to the County for review and approval. In addition, a number of goals and policies of the [2035 County General Plan] would also serve to minimize potential impacts to scenic highways by preventing degradation of existing vistas, as well as by promoting actions that would make existing scenic vistas more accessible to individuals."[33] While a single-family residence could significantly impact views from a scenic highway, requiring project-specific analysis, the proposed project would not be visible from any state scenic highway or County-designated or eligible scenic highway, the nearest of which is more than 1.3 miles distant (a portion of the I-210 freeway), with sightlines to the project site obscured by topography and vegetation. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not visible from a scenic highway, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, …conflict with				☒	☒

[32] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[33] Source: GPEIR, page 5.1-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
applicable zoning and other regulations governing scenic quality.					
The GPEIR analyzed that "[e]xisting regulations, including provisions contained in the County's Zoning Ordinance relating to the regulation of building form, massing, subdivisions, signs, architectural features, CUPs, design, and oak tree preservation would serve to lessen the impact of the [2035 County General Plan] on the visual character of [Los Angeles County]….Additionally, several of the guiding principles, goals, policies, and implementation programs contained in the [2035 County General Plan] would serve to lessen or mitigate potential impacts of the [2035 County General Plan] by providing direction for future decision making….[A]pplicable portions of the County Code, and relevant goals and policies of the [2035 County General Plan] would reduce these impacts to a less than significant level." The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[34] As to cumulative impacts, the 2035 County General Plan analyzed that "because development allowed under the [2035 County General Plan] would be subject to goals, policies, and regulations that reduce impacts of the [2035 County General Plan] on visual and character to a less than significant level, the [2035 County General Plan's] contribution to Countywide impacts would not be cumulatively considerable. Cumulative impacts of the Proposed Project related to visual character and quality are therefore considered less than significant."[35] The proposed design of the home meets all developmental standards of the County Code, including those tightened in the Altadena Community Standards District, which "ensure[s] that new and expanded structures are compatible in size and scale with the characteristics of surrounding residential neighborhoods, protecting the light, air, and privacy of existing single-family residences from negative impacts while providing certain flexibility within residential areas."[36] The proposed project is consistent with the zoning of the project parcel, which anticipates the aesthetic effects of one code-compliant residence. The proposed project satisfies relevant CUP findings and is not inconsistent with any 2035 County General Plan policy relating to aesthetics. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.				☒	☒

[34] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[35] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[36] Source: County Code Section 22.44.127(A).

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
The GPEIR analyzed that "[i]n addition to applicable provisions of the County Code…the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. These regulations would serve to mitigate potential impacts of new land uses.…Goals and policies of the [2035 County General Plan] would serve to minimize potential impacts related to additional sources of light and glare."[37] The GPEIR concluded that "[u]pon implementation of regulatory requirements, [all aesthetic impacts] would be less than significant."[38] As to cumulative impacts, the 2035 County General Plan analyzed that "[i]mpacts from glare are generally localized and not cumulative in nature; therefore, a significant cumulative impact related to glare would not occur."[39] The proposed project meets all developmental standards of the County Code and California Building Code and is not inconsistent with any 2035 County General Plan policy relating to light or glare. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Agriculture and Forestry Resources					
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				☒	☒
The GPEIR analyzed that "conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to buildout of the [2035 County General Plan] would be a potentially significant impact in the Antelope Valley Area Planning Area and Santa Monica Mountains Planning Area. In the remaining nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is located], impacts would be less than significant."[40] As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for agriculture. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for					

[37] Source: GPEIR, page 5.1-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[38] Source: GPEIR, pages 5.1-33. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[39] Source: 2035 County General Plan EIR, page 5.1-32. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[40] Source: GPEIR, page 5.2-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
agricultural use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Conflict with existing zoning for agricultural use, or a Williamson Act contract				☒	☒
The GPEIR analyzed that "implementation of the [2035 County General Plan] would not involve rezoning of farmland and impacts regarding conversion of mapped farmland to non-agricultural uses would be less than significant."[41] As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for agriculture. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for agricultural use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
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))				☒	☒
The GPEIR analyzed that "[t]he Los Angeles County Zoning Code does not contain zones specifically for forest use or production of forest resources….As the County has no existing zoning specifically designating forest use, implementation of the [2035 County General Plan] would not conflict with existing zoning for forest land or timberland. No impact would occur."[42] As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for forestry or timber harvest. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for forestry or timber harvest use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Result in the loss of forest land or conversion of forest land to non-forest use				☒	☒
The GPEIR analyzed that "[f]orests in Los Angeles County are limited to narrow formations along creeks and other watercourses and the highest elevations of the San Gabriel Mountains….These plant communities would be protected by existing regulations,					

[41] Source: GPEIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[42] Source: GPEIR, page 5.2-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
including Sections 1600 *et seq.* of the California Fish and Game Code. Mitigation measures set forth in Section 5.4 of this DEIR would reduce impacts to these natural communities from projects approved under the [2035 County General Plan]."[43] The GPEIR concluded that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[44] As to cumulative impacts, the GPEIR analyzed that "substantial adverse cumulative impacts to forest land, or zoning for forest use, are unlikely. Almost all of the forests in Los Angeles County are in the high-elevation parts of the [County]."[45] While mitigation measures in Section 5.4 were formulated to encompass a range of more impactful subsequent activities, standard compensatory provisions of the Oak Tree Ordinance are sufficient to ensure that no reduction in oak resources will occur because of the project. Nevertheless, the project has been conditioned with those applicable measures of Section 5.4 of the GPEIR as the standard approach to feasible avoidance and minimization, which has included a reconnaissance level survey (which found no designated species or communities), a required pre-construction sweep, and constraints on additional sweeps should vegetation disturbance or removal occur during designated species nesting or breeding seasons. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use				☒	☒
The GPEIR analyzed that "[b]uildout of the [2035 County General Plan] based on the existing Antelope Valley Area Plan in the Antelope Valley Planning Area and on the existing Santa Clarita Valley Area Plan in the Santa Clarita Planning Area would have a significant indirect impact on conversion of mapped Important Farmland to nonagricultural use due to pressure to convert farmland to non-agricultural uses and related incompatibilities between agricultural and urban uses. Such indirect impacts would be less					

[43] Source: GPEIR, page 5.2-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[44] Source: GPEIR, page 5.2-37. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[45] Source: 2035 County General Plan EIR, page 5.2-36. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
than significant in the other nine Planning Areas [including the West San Gabriel Valley Planning Area in which the project is sited.]"[46] As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for agriculture, forestry, or timber harvest. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for agriculture, forestry or timber harvest use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Air Quality					
Conflict with or obstruct implementation of the applicable air quality plan.				☒	☒
The GPEIR analyzed that "SCAQMD consider(s) a project consistent with the air quality management plan if it is consistent with the existing land use plan."[47] The proposed project is consistent with the applicable land use plan – the Altadena Community Plan – which designates the project parcel for one single-family residence. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
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				☒	☒
The GPEIR formulated General Plan Mitigation Measure ("GPMM")-AQ-1 with several Best Management Practices for incorporation in projects that "have the potential to exceed the applicable Air Quality Management District (AQMD) adopted thresholds of significance,"[48] though the effect was found to be significant and unavoidable because "due to the magnitude of emissions generated by future construction activities associated with the buildout of the [2035 County General Plan], no mitigation measures are available that would reduce impacts below SCAQMD's…thresholds."[49] Because project-specific thresholds are inherently aligned with cumulative considerability, and because the finding					

[46] Source: GPEIR, page 5.2-35. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[47] Source: GPEIR, page 5.3-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[48] Source: GPEIR, page 5.3-47. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[49] Source: GPEIR, page 5.3-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
of unavoidable significance concerns only those projects that are unable to meet the SCAQMD's significance thresholds, a project that does not exceed them is not subject to any mitigation and would be expected to have a less than cumulatively considerable or cumulatively significant effect. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR." For purposes of analysis in this screening checklist, and in accordance with the provisions of the Southern California AQMD ("SCAQMD") CEQA Air Quality Handbook,[50] "[i]f a proposed project is five acres or less and does not require additional construction activities such as major cut-and-fill, or excavation for sub-grade levels or parking, or demolition of a structure taller than 50 feet, the Lead Agency can use the applicable sample construction scenario to represent the emissions and impacts from the proposed project instead of preparing a project-specific construction air quality analysis."[51] The sample 1-acre project does not exceed regional or localized thresholds, and the project would be expected to be uniformly less impactful than the sample, which is a structure of 40,000 square feet (approximately one acre) with associated mechanized demolition, grading and paving that are not required of the project – substantially larger than the class of conforming single-family residences. Therefore, the project would not be expected to exceed any air quality significance threshold. These uniformly applicable development standards mitigate against a cumulatively considerable effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Expose sensitive receptors to substantial pollutant concentrations				☒	☒
The GPEIR formulated GPMM-AQ-2 and GPMM-AQ-3 to limit exposure of sensitive receptors, though the effect was found to be significant and unavoidable because "localized emissions of criteria air pollutants could exceed the SCAQMD…regional significance thresholds because of the scale of development activity associated with buildout of the [2035 County General Plan]."[52] As attributed above, the SCAQMD sample 1-acre project, which bounds the expected impact of the proposed project, does not exceed any localized significance threshold, and so transcends the finding of unavoidable significance. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR."					

[50] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993).
[51] Source: South Coast Air Quality Management District. Available at: http://www.aqmd.gov/docs/default-source/default-document-library/templates/finalreport.pdf.
[52] Source: GPEIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
GPMM-AQ-2 levies requirements on new industrial or warehousing land uses, and GPMM-AQ-3 requires applicants for sensitive land uses to submit a health risk assessment prior to any discretionary project approvals where the project was sited within proximity to certain sources of hazardous materials, such as industrial facilities, dry cleaners, gas stations, etc. The proposed project is not an industrial or warehouse facility and is not located in proximity to any hazardous materials facilities. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people				☒	☒
The GPEIR analyzed that "[i]f it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required… Facilities that have the potential to generate nuisance odors include but are not limited to: Wastewater treatment plant; Composting, greenwaste, or recycling facilities; Fiberglass manufacturing facilities; Painting/coating operations; Large-capacity coffee roaster; Food-processing facilities."[53] The GPEIR formulated GPMM-AQ-4 to constrain certain classes of project known to generate odors, concluding that "[GPMM-AQ-4] would ensure that odor impacts are minimized and facilities would comply with SCAQMD…Rule 402. [This impact] would be less than significant."[54] The project is a single-family home that does not share the potential of the example projects cited in the prior EIR to generate intense or objectionable odors, or distribute those odors to a substantial number of people. All projects in the SCAQMD are required to comply with Rule 402, prohibiting the emission of contaminants that may cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Biological Resources					
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				☒	☒

[53] Source: GPEIR, page 5.3-50. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[54] Source: GPEIR, page 5.3-52. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service					

The GPEIR formulated GPMM-BIO-2 requiring pre-construction surveys against the take of designated species, concluding that "[m]itigation measure BIO–2 would ensure that no direct mortality to special-status species would occur with implementation of construction activities by requiring pre-construction surveys (and construction monitoring where warranted) for special-status species as necessary; thus, with implementation of this mitigation measure, direct impacts to special-status species would be considered less than significant. "[55] The GPEIR also formulated a requirement for a reconnaissance level survey to prepare feasible measures that could be formulated a priori, analyzing that "[m]itigation measure BIO–1 would ensure that, on a project-specific level, necessary surveys are conducted and a biological resources assessment is prepared to analyze project-specific impacts and propose appropriate mitigation measures to offset those impacts."[56]

While GPMM-BIO-1 and GPMM-BIO-2 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures under the Fish and Game Code and the California and Federal Endangered Species Acts may not ensure less than significant avoidance for larger projects and/or projects sited in higher quality habitat with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas affecting no identified designated resources. Two plant communities exist on the project parcel. Coast Live Oak Woodlands has a state rarity of S4[57], indicating apparent security. California Sagebrush Scrub has a state rarity rank of S5, indicating security. According to the CDFW, "Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA."[58]

Nevertheless, the project has been conditioned with these generally applicable measures of the GPEIR as the standard approach to feasible avoidance and minimization, which has included a reconnaissance level survey (which found no designated species or communities), a required pre-construction sweep, and constraints on additional sweeps should vegetation disturbance or removal occur during designated species nesting or breeding seasons. Because GPMM-BIO-1 establishes general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any

[55] Source: GPEIR, page 5.4-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[56] Source: GPEIR, page 5.4-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[57] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[58] Source: California Department of Fish and Wildlife. Available at: https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive%20natural%20communities.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. The GPEIR analyzed that indirect effects on sensitive species from the loss of common habitat expected at the scale of buildout of all future development governed by the 2035 County General Plan was cumulatively significant and unavoidable because "[a]lthough direct impacts to special status species would be mitigated, there is no mitigation provided for the indirect impacts to special status species through the loss of common (i.e., non-sensitive) habitats. Special-status species are dependent on a variety of habitat types (comprised of both common and sensitive habitats), and the conversion of common habitat types with the buildout of the [2035 County General Plan] would result in the overall reduction of habitat and resources to support special status species. Thus, due to the loss of common habitats capable of supporting special status species and diminished resource availability, impacts to special status species and associated habitat remain significant and unavoidable at the general plan level."[59] While the impact of the loss of common habitat is significant at the scale of the 358,931 additional residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it would not be significant at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR." In complying by implementation with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service				☒	☐
The GPEIR analyzed that "[t]he mitigation measures identified above [GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and					

[59] Source: GPEIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain."[60] While the GPEIR contemplated development in riparian habitat, wetlands, and other sensitive natural communities, and a single-family residence could seek relief to do so, the proposed project footprint of development does not impact these habitats or communities.[61] Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects that do not affect riparian resources or waters, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means				☒	☐
The GPEIR analyzed that "[t]he mitigation measures identified above [GPMM-BIO-1 and GPMM-BIO-2] and existing regulatory programs would reduce potential impacts associated with biological resources to a level that is less than significant for riparian habitat and wetlands. Therefore, no significant unavoidable adverse impacts relating to these biological resources remain." While the GPEIR contemplated development in riparian habitat, wetlands, and other sensitive natural communities, and a single-family residence could seek relief to do so, the proposed project footprint of development does not impact these habitats or communities.[62] Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects that do not affect riparian resources or waters, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					

[60] Source: GPEIR, page 5.4-124. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

[61] Note: the alliance of coast live oak and California sagebrush that characterize the project site is designated by the California Department of Fish and Wildlife ("CDFW") as "S4" – "apparently secure" and "not sensitive." See CDFW Natural Communities List at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline. Pursuant to the United States Fish and Wildlife Service ("USFWS") National Wetlands Inventory, Millard canyon bottom contains the only feature or riparian habitat on the project parcel, more than 100 feet distant from the project footprint of development. See USFWS map at https://www.fws.gov/wetlands/Data/Mapper.html.

[62] Note: the alliance of coast live oak and California sagebrush that characterize the project site is designated by the California Department of Fish and Wildlife ("CDFW") as "S4" – "apparently secure" and "not sensitive." See CDFW Natural Communities List at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline. Pursuant to the United States Fish and Wildlife Service ("USFWS") National Wetlands Inventory, Millard canyon bottom contains the only feature or riparian habitat on the project parcel, more than 100 feet distant from the project footprint of development. See USFWS map at https://www.fws.gov/wetlands/Data/Mapper.html.

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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				☒	☐
The GPEIR analyzed that "buildout of the [2035 County General Plan] will impact regional wildlife linkages and may impact nursery sites."[63] Notwithstanding this finding of significance where development occurred in wildlife linkages and nursery sites, the 2035 County General Plan EIR formulated GPMM-BIO-3 as feasible mitigation to reduce impacts to less than significant where the interaction of development with these resources could be mediated. GPMM-BIO-3 stipulates that "[wildlife] corridors shall not be entirely closed by any development" and where "wildlife corridors and wildlife nursery sites" are impacted, mitigation may include "native landscaping to provide cover on the corridor" or "preservation by deed in perpetuity for another comparable…site."[64] While the GPEIR contemplated development in wildlife linkages and nursery sites, and a single-family residence could seek relief to do so, the proposed project footprint of development is not located in a wildlife corridor or nursery site at a regional, sub-regional or landscape scale and therefore transcends this mitigation measure and the finding of unavoidable significance. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR." In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this] impact would be less than significant."[65] The proposed project satisfies all required CUP findings, including those required for issuance of an Oak Tree Permit, and is not inconsistent with any 2035 County General Plan policy relating to biological resources. The proposed project, which removes one tree and					

[63] Source: 2035 County General Plan EIR, page 5.4-124. n Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[64] Source: 2035 County General Plan EIR, page 5.4-123. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[65] Source: GPEIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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includes long-term care for four replacement trees in superior habitat than the one tree removed, is designed and constrained to minimize impacts to trees and other biological resources on the project site, in accordance with the intent of these policies and ordinances. While variances to regulatory requirements or CUP findings may be sought where they would frustrate a permitted use, the project belongs to the class of conforming single-family residences that do not seek such relief. As such, these uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this] impact would be less than significant.: [5.4-5]"[66] Within the County, the three adopted habitat conservation plans are the Desert Renewable Energy Conservation Plan Natural Communities Conservation Plan/Habitat Conservation Plan ("NCCP"/"HCP"), the Palos Verdes Peninsula NCCP/HCP, and the West Mojave Plan HCP.[67] In addition, the USFWS Conservation Plan and Agreements Database[68] also includes the Newhall Farm Seasonal Crossings Habitat Conservation Plan. The proposed project is not sited within any of these adopted habitat conservation plans and would therefore not conflict with them. There are no California Regional Conservation Plans in the County.[69] As a constituent of the class of residentially zoned single-family residences in urbanized areas lacking any habitat conservation plan, the proposed project does not conflict with any habitat conservation plan. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residences in urbanized areas, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Cultural and Tribal Cultural Resources					
Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5				☒	☐

[66] Source: GPEIR, page 5.4-121. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[67] Source: GPEIR, pages 5.10-4 - 5.10-5. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[68] Source: United States Fish and Wildlife Service. Available at: https://ecos.fws.gov/ecp0/conservationPlan/.
[69] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

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The GPEIR formulated GPMM-CUL-1, GPMM-CUL-2 and GPMM-CUL-3 to mitigate for impacts to historical resources, though the effect was found to be significant and unavoidable at the scale of all permitted future development in the County because "limited protection to historic structures…would not ultimately prevent the demolition of a historic structure if preservation is determined to be infeasible."[70] While a single-family residence could significantly affect an historical resource by demolition or alteration, requiring project-specific analysis, the project parcel contains no historic structures or other known historic or cultural resources. The project therefore transcends this finding of unavoidable significance. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR." Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residences that do not impact historic structures, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5				☒	☒
The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity."[71] The GPEIR also formulated GPMM-CUL-4 and GPMM-CUL-5 to establish performance standards in the event an unanticipated archaeological/tribal cultural or paleontological discovery was made, concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level,"[72] both for individual projects and cumulatively. While GPMM-CUL-4 and GPMM-CUL-5 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance for projects requiring mechanical excavation in much					

[70] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[71] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[72] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas with no known resources. Also, the project does not entail excavation in volumes with substantial potential for archaeological discovery, with modest grading and drilling occurring in previously disturbed fill and in plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was to be encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Disturb any human remains, including those interred outside of formal cemeteries				☒	☒
The GPEIR analyzed that "compliance with [] regulations would ensure impacts to human burial grounds remain less than significant."[73] Specifically, "Public Resources Code Section 5097.98 mandates the process to be followed in the event of a discovery of any human remains and would mitigate all potential impacts." These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a.) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b.) A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section				☒	☒

[73] Source: GPEIR, page 5.5-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.					
The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity."[74] The GPEIR also formulated GPMM-CUL-4 and GPMM-CUL-5 to establish performance standards in the event an unanticipated archaeological/tribal cultural or paleontological discovery was made, concluding that "[GPMM-CUL-4 and GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level,"[75] both for individual projects and cumulatively. While GPMM-CUL-4 and GPMM-CUL-5 were formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas with no known resources. Also, the project does not entail excavation in volumes with substantial potential for archaeological discovery, with modest grading and drilling occurring in disturbed fill and plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Geology and Soils					
Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				☒	☒

[74] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[75] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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i.) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii.) Strong seismic ground shaking iii.) Seismic-related ground failure, including liquefaction iv.) Landslides					

Fault Rupture

The GPEIR analyzed that "[a]dherence to [the Alquist-Priolo Earthquake Fault Zoning Map], and the associated setbacks from active fault traces, would help would reduce the hazards associated with earthquake fault rupture to a less than significant level." While the Alquist-Priolo Earthquake Fault Zones Act levies no jurisdictional setback requirement, Title 14, California Code of Regulations, Section 3603(a) states that "the area within 50 feet of such active faults shall be presumed to be underlain by active fault branches of that fault unless proven otherwise[,]" establishing a *de facto* zone of further required investigation to determine an appropriate setback that would extend no further than 50 feet. The nearest Alquist-Priolo Earthquake Fault Zone ("APEFZ") is more than six miles to the northwest.[76] The nearest County-designated active fault trace is approximately 1,000 feet to the southeast of the project.[77] As attributed in a geotechnical report for the project, as is required of any hillside structure, the nearest surface trace of a mapped fault is approximately 150 feet south of the proposed home. As a constituent of the class of residentially zoned single-family residences not sited on any fault, the proposed project site is not at risk of fault rupture. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not sited on a fault, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.

As to cumulative impacts of fault rupture or any other geologic effect discussed below, the GPEIR analyzed that "[d]ue to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology and soils impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis….Future cumulative development under the Proposed Project and the surrounding area would be subject to the same local, state, and federal regulations pertaining to geology and soils, including CBC and Los Angeles County Building Code requirements (or city building code requirements,

[76] Source: California Geological Survey. Available at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SUNLAND_EZRIM.pdf.
[77] Source: 2035 County General Plan: Figure 12-1. Available at: http://planning.lacounty.gov/assets/upl/project/gp_2035_2014-FIG_12-1_seismic_hazards.pdf.

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as appropriate). Therefore, cumulative development in the region would not result in a significant cumulative impact."[78]

Ground Shaking
The GPEIR analyzed that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to the provisions of the [California Building Code], which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements, and would include foundation and structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level."[79] The project has been analyzed in a site-specific geotechnical investigation that conforms to these criteria, completed a geotechnical plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

Ground Failure
The GPEIR analyzed that "[f]uture development projects pursuant to the [2035 County General Plan] would be required to adhere to existing building and grading codes, and construction-related grading requires the preparation and submittal of site-specific grading plans and geotechnical reports that must be reviewed and approved by the County beforehand. Each future development project would be required to comply with the recommendations in the geotechnical investigation report and comply with the CBC, thereby reducing such hazards to a less than significant level."[80] The project has completed a geotechnical plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

Landslides
The GPEIR analyzed that "[c]ompliance with existing state and county regulations, as well as goals and policies included as part of the [2035 County General Plan] would ensure that the impacts associated with exposure to strong seismic ground shaking, seismic-related

[78] Source: 2035 County General Plan EIR, page 5.6-23. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[79] Source: GPEIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[80] Source: GPEIR, page 5.6-19. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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ground failure including liquefaction, and landslides are reduced to a less than significant level."[81] The project has been analyzed with a typical geotechnical investigation that conforms to these criteria. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Result in substantial soil erosion or the loss of topsoil				☒	☒
The GPEIR analyzed that "[a]dherence to the requirements of the County Code and the CBC, together with the safeguards afforded by the County's building plan check and development review process, would help ensure that appropriate erosion controls are devised and implemented during construction,"[82] concluding that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss…are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[83] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
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				☒	☒
The GPEIR analyzed that "[i]ndividual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[84] The GPEIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure					

[81] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[82] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[83] Source: GPEIR, page 5.6-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[84] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[85] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property				☒	☒
The GPEIR analyzed that "[i]ndividual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also require the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues….Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable."[86] The GPEIR concluded that "[c]ompliance with existing state and county regulations, as well as the goals and policies included as part of the [2035 County General Plan], would ensure that the impacts associated with erosion and topsoil loss, as well as development atop unstable geologic units and soil, or expansive soil are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be less than significant."[87] The project has completed a standard plan check review process and has been designed in compliance with the CBC. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water				☒	☒
The GPEIR analyzed that "[m]ost new development that is anticipated in the Project Area would not require the use of septic tanks or alternative wastewater disposal systems…In addition, all on-site wastewater treatment systems (OWTS) will be required to comply with County Code, Titles 11 and 28 and other regulations applicable to OWTS, including					

[85] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[86] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[87] Source: GPEIR, page 5.6-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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requirements for preparation and submittal of feasibility reports in order to obtain the Department of Public Health - Environmental Health approval for construction and installation of OWTS. As such, there would be no impact…" As a constituent of the class of residentially zoned single-family residences with ready sewer access to dispose wastewater, the proposed project site is not at risk of impacts associated with soil deficiencies in the treatment of wastewater. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not sited on a fault, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature				☒	☒
The GPEIR analyzed that "existing federal, state, and local regulations address: the provision of studies to identify archaeological and paleontological resources; application review for projects that would potentially involve land disturbance; project-level standard conditions of approval that address unanticipated archaeological and or paleontological discoveries; and requirements to develop specific mitigation measures if resources are encountered during any development activity."[88] The GPEIR also formulated GPMM-CUL-5 to establish performance standards in the event an unanticipated paleontological discovery was made, concluding that "[GPMM-CUL-5] would reduce potential impacts associated with cultural resources to a less than significant level."[89] While GPMM-CUL-5 was formulated to encompass a range of more impactful subsequent activities, and standard regulatory compliance measures may not ensure less than significant avoidance for projects requiring mechanical excavation in much larger volumes, more undisturbed volumes, or volumes with known resources, they are deemed sufficient for the class of single-family residence in urbanized areas. Also, the project does not entail excavation in volumes with substantial potential for paleontological discovery, with modest grading and drilling occurring in disturbed fill and plutonic igneous rock with no potential. Nevertheless, the project has been conditioned with these measures in the unexpected event that any resource was to be encountered. Because these measures establish general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as					

[88] Source: GPEIR, page 5.5-20. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[89] Source: GPEIR, page 5.5-25. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Greenhouse Gas Emissions and Energy					
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment				☒	☒
The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[90] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[91] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably					

[90] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[91] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR."					
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases				☒	☒
The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[92] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[93] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably					

[92] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[93] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR."					
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation				☒	☒
The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[94] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[95] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably					

[94] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[95] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR."					
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency				☒	☒
The GPEIR analyzed the impacts of both buildout of the County and implementation of the County Community Climate Action Plan as a part of the 2035 County General Plan. Consistently with California legislative goals under AB 32 and related legislation, and with subsequent California Supreme Court precedent, the County General Plan EIR considered significant greenhouse gas impacts to be those inconsistent with a statewide compliance approach to the California legislature's emissions reductions targets. As such, "[i]mplementation of local GHG reduction actions would generate construction-related GHG emissions. However, construction-related emissions are considered under buildout of the Proposed Project. Implementation of the CCAP would not result in an increase in GHG emissions. Implementation of local measures in the CCAP would reduce emissions and therefore be a beneficial GHG impact. Therefore, no impact would occur" in connection with CCAP implementation.[96] As to buildout emissions, the GPEIR concluded that while CCAP compliance would minimize greenhouse gas emissions and inefficient energy usage to the extent feasible and in compliance with AB 32, a statewide compliance approach to the more aggressive Executive Order S-03-05 reductions targets had not yet been established, and the effect was therefore cumulatively significant and unavoidable.[97] As a constituent of the class of residentially zoned single-family residences without substantial design degrees of freedom in construction or operational emissions, compliance with progressively tightening state and local efficiency standards (including rooftop solar for all new residential construction) is intended to meet a "fair share" approach to cumulative emissions reductions under any conceivable approach, and would maintain the impacts of any single residential project below a level of significance. Therefore, the project transcends this finding of unavoidable significance in the lack of any unified statewide approach to meeting Executive Order S-03-05 at the time of the prior EIR. To the extent any CCAP goals or policies may be construed to apply at the scale of the proposed project, as a net-zero home exceeding minimum efficiency standards, the proposed project embodies CCAP goals, including efficient use of energy. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR."					

[96] Source: GPEIR, page 5.7-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[97] Source: GPEIR, page 5.7-43. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Hazards and Hazardous Materials					
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials				☒	☒
The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[98] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all hazards and hazardous materials effects discussed herein, the GPEIR analyzed that "analyzed that "[a]ny future development would be required to comply with applicable federal, state and local regulations related to hazardous materials, emergency response, wildland fires, and public airports, private airstrips, and heliports. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, would be less than significant. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials, emergency response, wildland fires, and airports would be less than significant. Therefore, impacts related to hazards and hazardous materials would not be cumulatively considerable."[99] In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment				☒	☒
The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[100] These uniformly applicable development					

[98] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[99] Source: 2035 County General Plan EIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[100] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school				☒	☒
The GPEIR analyzed that "any future development and use of land uses, as designated under the [2035 County General Plan], would be required to comply with applicable federal, state and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant."[101] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code. The proposed project is also not sited within one-quarter mile of an existing or proposed school.					
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment				☒	☒
The GPEIR analyzed that "compliance with applicable existing regulations and processes would ensure that the [2035 County General Plan] would not result in a significant hazard to the public or the environment from future development on existing hazardous materials sites. Therefore, the [2035 County General Plan] would have a less than significant impact associated with existing hazardous materials sites."[102] These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					

[101] Source: GPEIR, page 5.8-17. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[102] Source: GPEIR, page 5.8-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
In addition, the project has been documented above to conform to Appendix M criteria screening that the proposed site does not appear on the Cortese List compiled pursuant to Section 65962.5 of the Government Code.					
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area				☒	☒
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[103] However, the proposed project is not located within the vicinity of an airport or within the boundary of an airport land use compatibility plan. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not located in proximity to an airport, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan				☒	☒
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[104] These include public response infrastructure planning and provisioning, support for emergency personnel, public awareness, and other centralized approaches to avoiding impairment of emergency response. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Directly or indirectly cause a significant risk of loss, injury or death involving wildland fires				☒	☒
The GPEIR analyzed that "[2035 County General Plan] policies and conditions of approval for future development projects within the [County], in addition to compliance with applicable regulations, would minimize [2035 County General Plan] impacts related to					

[103] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[104] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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wildland fires. Consequently, the overall associated impacts would be less than significant."[105] Cited policies aligned with standard conditions of approval for projects sited in VHFSZs, which include fire-rated wall and roof assemblies and windows, landscape management, adequate service and site location for fire suppression infrastructure, and low intensity, are characteristic of the proposed project. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Hydrology and Water Quality					
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality				☒	☒
The GPEIR analyzed that "[i]mpacts would be less than significant upon compliance with regulatory requirements and [2035 County General Plan] policies."[106] Cited policies aligned with standard conditions of approval include Low Impact Development standards facilitating buffering and/or infiltration of stormwater, and Best Management Practices limiting the contamination of stormwater. These uniformly applicable development standards mitigate against a significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all hydrology and water quality effects discussed herein, the GPEIR analyzed that "[a]s cumulative projects would be required to comply with [applicable] water-quality, drainage, and flood safety requirements, significant cumulative impacts would not occur. Therefore, the [2035 County General Plan] would not contribute to significant cumulative hydrology and water-quality impacts."[107]					
Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin				☒	☒
The GPEIR analyzed that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be less than significant."[108] Like other residential projects, the proposed project would result in a relatively minor increase in impervious					

[105] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[106] Source: GPEIR, page 5.9-30. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[107] Source: GPEIR, page 5.9-41. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[108] Source: GPEIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
surface area of approximately 1,159 square feet. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i.) Result in substantial erosion or siltation on- or off-site ii.) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite iii.) 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 iv.) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation v.) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan				☒	☒
The GPEIR analyzed that "[d]evelopments in the unincorporated area[] of…West San Gabriel Valley…would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be less than significant."[109] Like other single residential projects, the proposed project would result in a relatively minor increase in impervious surface area of approximately 1,159 square feet, and would not divert a waters. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Land Use and Planning					
Physically divide an established community				☒	☒
The GPEIR analyzed that "[u]nlike the roadways proposed for the more rural areas of Los Angeles County, those proposed for the heavily urbanized portions of Los Angeles County (the East San Gabriel Valley, Gateway, Metro, San Fernando Valley, West San Gabriel Valley, and Westside Planning Areas) would traverse existing communities. These highways include roadways proposed to be widened (or otherwise improved) and roadways that would be built where no current roadway exists. Although such projects would involve the displacement of existing land uses, they would generally be constructed to increase					

[109] Source: GPEIR, pages 5.9-31. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
access and connectivity in established communities, not divide them."[110] Like other single residential projects, the proposed project would not divide an established community. The prior EIR analyzed the proposed project as such, and impacts of residential development are not more significant than what the prior EIR analyzed.					
Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect				☒	☒
The GPEIR analyzed that "the Proposed Project would not conflict with goals contained within SCAG's 2012–2035 RTP/SCS or other land use plans. Therefore, impacts related to compatibility between the Proposed Project and applicable plans adopted for the purpose of avoiding or mitigating environmental effects would be less than significant."[111] These policies and regulations were considered in the context of specific environmental effects in other impact areas of analysis, as attributed in this Checklist. The proposed project, which seeks no variance from any applicable regulation or standard, was analyzed as such by the prior EIR, and would not have any effects that are more significant than what the prior EIR analyzed.					
Mineral Resources					
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[112] in all Planning Areas except portions of the Antelope Valley. As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for mining. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for mining use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Result in the loss of availability of a locally-important mineral resource recovery site delineated				☒	☒

[110] Source: GPEIR, pages 5.10-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[111] Source: GPEIR, pages 5.10-42. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[112] Source: GPEIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

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on a local general plan, specific plan or other land use plan					
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [these] impacts would be less than significant"[113] in all Planning Areas except portions of the Antelope Valley. As a constituent of the class of residentially zoned single-family residences, the proposed project site is not zoned to permit use for mining. Because development standards are uniformly unnecessary to mitigate against this effect in the class of projects not zoned for mining use, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Noise					
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies				☒	☒
The GPEIR formulated GPMM-NOI-1 to mitigate for an increase in construction-related noise levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[114] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. While the impact of new noise is significant at the scale of the 358,931 additional residential units and millions of square feet of new commercial, industrial, and public-sector facilities that may be developed under the 2035 County General Plan, it would not be significant at the scale of the small fraction of one acre developed by the project for one residential unit. The project therefore transcends this finding of unavoidable significance. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR." Compliance with the County Noise Control Ordinance would be sufficient to mitigate against a significant effect from noise in the class of single-family residential projects. The County Noise Control Ordinance considered and formulated context-specific thresholds and exceptions that are different for the construction and period of occupancy of one single-family residence in a residential neighborhood, in consideration of the times of day, duration, intermittency and magnitude of noise impacts, and of the existing condition.					

[113] Source: GPEIR, pages 5.11-48. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[114] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Nevertheless, the project has been conditioned to satisfy GPMM-NOI-1 of the GPEIR as the standard approach to contingency noise mitigation. GPMM-NOI-1 stipulates that "[m]itigation measures such as installation of temporary sound barriers for construction activities that occur adjacent to occupied noise-sensitive structures, equipping construction equipment with mufflers, and reducing non-essential idling of construction equipment to no more than five minutes shall be incorporated into the construction operations to reduce construction-related noise to the extent feasible."[115] Because GPMM-NOI-1 establishes general performance standards for future, inherently circumstance-specific mitigation, specific development standards need not be uniformly applied. However, these mitigation measures are uniformly applicable to any project track of CEQA compliance subordinated to the analysis of the GPEIR, mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. As to cumulative impacts of all noise effects, the GPEIR analyzed that "[c]umulative projects in the Los Angeles County region would have the potential to result in a cumulative noise impact if they would, in combination with regional growth in the immediate area, create excessive community noise levels. The traffic noise levels predicted for buildout conditions…are based on cumulative traffic conditions that take into account cumulative development in the region. Therefore, these impact discussions inherently incorporate the cumulative scenario by default. Further, cumulative projects under the buildout of the Proposed Project within Los Angeles County would be required to comply with the applicable land use compatibility classification or they would not be approved without a general plan amendment. Therefore, the Proposed Project would not contribute to a significant cumulative noise impact above and beyond [the non-cumulative noise analysis]."[116]					
Generation of excessive ground-borne vibration or ground-borne noise levels				☒	☒
The GPEIR formulated GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 to mitigate for an increase in or unacceptable exposure to vibration levels, though the effect was found to be significant and unavoidable because of "the potential for proximity of construction activities to sensitive uses and potential longevity of construction activities"[117] across the continuous buildout at the scale of all future development permitted under the 2035 County General Plan. While the impact of new vibration is significant for projects requiring vibration-intensive equipment used for extended duration adjacent to sensitive uses, it					

[115] Source: GPEIR, pages 5.12-106. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[116] Source: 2035 County General Plan EIR, page 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[117] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
would not be significant for typical residential impacts, which do not use vibration-intensive equipment. The project therefore transcends this finding of unavoidable significance. Also, pursuant to State CEQA Guidelines Section 15183.3(c), unavoidably significant effects "need not be analyzed again for an individual infill project even when that effect was not reduced to a less than significant level in the prior EIR." Compliance with the County Noise Control Ordinance would be sufficient to mitigate against a significant effect from vibration in the class of single-family residential projects. Nevertheless, GPMM-NOI-3, GPMM-NOI-4, and GPMM-NOI-5 have been considered for their potential applicability to the project. GPMM-NOI-3 stipulates that "[n]ew development that occurs within 200 feet of a railroad track…shall be evaluated for potential vibration impacts."[118] However, the proposed project is not sited within 200 feet of a railroad track. GPMM-NOI-4 stipulates that "[i]ndividual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors shall be evaluated for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses…additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g. drilled piles to eliminate use of vibration-intensive pile driver)."[119] The proposed project would not make use of vibration-intensive equipment and therefore transcends this mitigation measure. GPMM-NOI-5 stipulates that "heavy industrial projects are required to provide evidence that vibration due to the operation of machinery would not adversely affect nearby vibration sensitive uses."[120] The proposed project is not a heavy industrial project and does not require the use of any vibration-intensive equipment. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels				☒	☒
The GPEIR analyzed that "with the application of Policy LU 7.6 and Policy N 1.12 and review by the Los Angeles County ALUC, future development under the Proposed Project would be consistent with adopted ALUCPs and there would be no significant noise					

[118] Source: GPEIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[119] Source: GPEIR, pages 5.12-107. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[120] Source: GPEIR, pages 5.12-108. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
exposure impacts relative to airport or airstrip noise levels."[121] However, the proposed project is not located within the vicinity of a private airstrip or within the boundary of an airport land use compatibility plan, and effects on occupants of the class of single-family residences do not affect a sufficient number to constitute an environmental effect. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects not located in proximity to an airport, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Population and Housing					
Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)				☒	☒
The GPEIR analyzed that "[t]he Proposed Project accommodates up to 659,409 housing units, and although buildout is not expected to occur by 2035, the opportunities for housing development provided in the Proposed Project are consistent with SCAG growth projections for 405,500 units by 2035. The housing and population growth allowed under the Proposed Project is consistent with SCAG projections and do not constitute a significant adverse environmental impact."[122] Resulting ratios of jobs to housing were acceptable in all planning areas but the Antelope Valley Planning Area, resulting in central planning mitigation for that area. Because standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation and associated central planning strategies, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere				☒	☒
The GPEIR analyzed that "[w]ithout mitigation, [this impact] would be less than significant**.**"[123] Because standards are uniformly unnecessary to mitigate against this effect in the class of projects that are consistent with land use designation and associated central planning strategies, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Public Services					

[121] Source: GPEIR, pages 5.12-105. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[122] Source: GPEIR, pages 5.13-6. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[123] Source: GPEIR, pages 5.13-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: i. Fire protection ii. Police protection iii. Schools iv. Parks v. Other Public Facilities				☒	☒

Fire protection
The GPEIR formulated GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3 to mitigate for provisioning new fire protection infrastructure and personnel, analyzing that "existing regulatory programs and [GPMM-PS-1, GPMM-PS-2, and GPMM-PS-3] would reduce potential impacts associated with fire protection to a level that is less than significant."[124] GPMM-PS-2 and GPMM-PS-3 are not applicable, and the project would comply with the applicable "fair share" mitigation measure GPMM-PS-1 by paying the applicable Fire Department Developer Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

Police protection
The GPEIR formulated GPMM-PS-4 to mitigate for provisioning new police protection infrastructure and personnel in the high-growth Antelope Valley area, analyzing that ""[GPMM-PS-4] would reduce potential impacts associated with law enforcement to a level that is less than significant."[125] However, the project is not located in the Antelope Valley area. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.

Schools

[124] Source: GPEIR, pages 5.14-11. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[125] Source: GPEIR, pages 5.14-18. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[126] These include payment of a Schools Developer Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed. *Parks and other public facilities* The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[127] These include payment of a Library Impact Fee as required by ordinance. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Recreation					
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[128] These include centralized strategies and funding sources for provisioning and upkeep of parkland with buildout. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements, [this impact] would be less than significant."[129] These include centralized strategies and funding sources for provisioning and upkeep of parkland with buildout. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were					

[126] Source: GPEIR, pages 5.14-28. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[127] Source: GPEIR, pages 5.14-34. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[128] Source: GPEIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[129] Source: GPEIR, pages 5.15-26. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Transportation					
Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities				☒	☒
The GPEIR found impacts to the circulation system to be significant and unavoidable because certain "impacted locations are still considered to be significantly impacted with mitigation," represented by significant increases in the level of service at some intersections and on some already-congested freeways, and because "completing certain improvements located within cities lies with agencies other than the County," with "potential that significant impacts may not be fully mitigated if such improvements are not completed for reasons beyond the County's control."[130] Notwithstanding this finding of cumulative significance under some circumstances, the GPEIR formulated GPMM-T-1, GPMM-T-2, GPMM-T-3, GPMM-T-4 and GPMM-T-5 as feasible mitigation to reduce impacts to less than significant under other circumstances. GPMM-T-1 stipulates that "[t]he County shall continue to monitor potential impacts on roadway segments and intersections on a project by project basis as buildout occurs by requiring traffic studies for all projects that could significantly impact traffic and circulation patterns. Future projects shall be evaluated and traffic improvements shall be identified to maintain minimum levels of service in accordance with the County's Traffic Impact Analysis ("TIA") Guidelines, where feasible mitigation is available."[131] In accordance with the County's TIA Report Guidelines, use of the 10th edition of the Institute of Transportation Engineers ("ITE") Trip Generation Manual[132] results in an expected trip generation rate for a single-family residence of approximately 10 trips/day during the period of occupancy, including one trip at the peak hour. During construction, the same source expects six to seven trips per day, including one trip at the peak hour. These amounts do not exceed the screening criteria for performance of traffic modeling in a TIA. GPMM-T-2 stipulates that the County "shall implement over time objectives and policies contained within the General Plan Mobility Element."[133] Mobility Element policies relate to the design, construction, operation and maintenance of the transportation system, which are not pertinent to a single-family home.					

[130] Source: GPEIR, page 5.16-83. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[131] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[132] Source: Institute of Transportation Engineers. Available at: http://www.ite.org/tripgeneration.
[133] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
GPMM-T-3, GPMM-T-4 and GPMM-T-5 are conditional requirements of the County that are not triggered by the construction of a single-family home. As the project would not change Level of Service criteria on any roadway or intersection and is entirely within the County's jurisdiction, it transcends the finding of unavoidable significance. In complying by non-applicability with all relevant mitigation established by the GPEIR, the proposed project is consistent with the analysis of the prior EIR, and its impacts are not more significant than what the prior EIR analyzed.					
Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)				☒	☒
While State CEQA Guidelines Section 15064.3(b) came into effect on 12/28/18 pursuant to Government Code section 11343.4(b)(3), after the adoption of the 2035 County General Plan and its EIR, the 2035 County General Plan advanced polices aligned with State CEQA Guidelines Section 15064.3(b) to reduce per-capita VMT, including Policy M 4.16. The project would provide housing in the Pasadena Regional Statistical Area, which has had and is projected to continue to have a high ratio of jobs to housing,[134] corresponding to an expectation of reduced per capita VMT for non-specific residents. Additionally, the Applicant and his wife propose to walk to and from work at the major jobs center (of nearly 6,000 workers) in the area, a distance of less than a mile by foot, or less than two miles by vehicle, and so would be expected to further reduce VMT (which is dominated by distance of vehicular commute) for the foreseeable future, compared to other residents commuting to job centers in central Pasadena or elsewhere. Cumulative impacts would be expected to be less than significant because the GPEIR analyzed that "buildout of the [2035 County General Plan] would slightly reduce per capita VMT."[135] This impact is also subject to a screening threshold for "land use projects" as recommended by the Office of Planning and Research in its Technical Advisory in Evaluating Transportation Impacts in CEQA,[136] of more than 110 trips per day generated or attracted. This is the standard approach to managing cumulative impacts, such as air quality and greenhouse gas emissions, and with the SCAG's 2012 RTP/SCS, as analyzed by the GPEIR. As documented above, single-family residences would be expected to result in an order of magnitude lower trips than this screening threshold. Because standards are uniformly unnecessary to mitigate against this effect in the class of single-family residences, and because the project would be consistent with state and 2035 County General Plan policy to reduce VMT, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					

[134] Source: Southern California Association of Governments. The New Economy and Jobs/Housing Balance in Southern California. Available at: http://www.scag.ca.gov/Documents/NewEconomyJobsHousingBalance.pdf.
[135] Source: GPEIR, page 5.3-29. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[136] Source: California Office of Planning and Research, Technical Advisory in Evaluating Transportation Impacts in CEQA, page 10. Available at: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[137] These include common standards for the design of the circulation system and required visibility regions around driveways edges at their intersection with the roadway. Nevertheless, the GPEIR anticipated that project-specific analysis may occur where a dangerous design feature is created or pre-exists the project. While a single-family residence could create a hazard by seeking a variance from visibility requirements mediating merging into the flow of traffic around a driveway, or sited in the flow of an intersection with known issues, the proposed project would have adequate visibility along sight lines of more than 450 feet north (the incoming, project-side lane of traffic) and 150 feet south, on a roadway with a posted speed limit of 25mph, with no nearby intersections. Compliance with driveway visibility requirements in the County Code and standard flagging as needed for larger vehicles or obstructions during construction would ensure that hazards are avoided in the interaction of project-related traffic with future traffic on the roadway. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Result in inadequate emergency access				☒	☒
The GPEIR analyzed that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[138] These include common standards for maintaining access on the circulation system during construction. Nevertheless, the GPEIR anticipated that project-specific analysis may occur where a project could result in functional compromise of an emergency evacuation route that was not mediated by standard construction provisions, such as landsliding on, subsidence below, or other non-transient destruction of a roadway surface. While a single-family residence could block an emergency route during an emergency if it resulted in non-transient functional failure of the roadway, the proposed project does not involve activities that could reasonably cause such damage. Like all single-family residences, the proposed project would result in some obstruction of the fronting roadway for connection of below-grade utilities that are routed under that roadway. This construction					

[137] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[138] Source: GPEIR, page 5.16-81. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
would entail trenching in the roadway at depths up to 8ft. Pursuant to standard conditions, at most a single lane of Canyon Crest Road would be blocked at any given time, during standard daylight working hours for a number of days, with proper signage and flagging of traffic. Pursuant to standard conditions, steel roadway channel and asphalt to restore uncompromised flow of traffic in both lanes must be kept on hand for installation at the end of permitted working hours and in the event of an emergency. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Utilities and Service Systems					
Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects				☒	☒
The GPEIR discussed various approaches in section 5.17 to centralized planning and provisioning of utility infrastructure, finding all approaches adequate and no residually significant cumulative effects. As a constituent of the class of residentially zoned single-family residences, the proposed project does not impose marginal demand on any utility or service system sufficient in magnitude to induce any new infrastructure. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years				☒	☒
The GPEIR forecast that in the West San Gabriel Valley Planning Area, "[t]here is adequate forecasted residual water supply at buildout to serve [complete buildout], and impacts on water supplies would be less than significant,"[139] weighing residual supply capacity of 176mgd against projected added demand of 4.69mgd in nine planning areas that include the West San Gabriel Valley Planning Area. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					

[139] Source: GPEIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments				☒	☒
The GPEIR forecast that in all planning areas, "[t]here is adequate water treatment capacity in the region for the net increase in water [treatment] demands from [complete buildout], and impacts would be less than significant."[140] Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					
Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals				☒	☒
The GPEIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant." These include construction and demolition debris recycling requirements for single-family residences and provisions of the County's Integrated Waste Management Plan. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste				☒	☒
The GPEIR found these effects to be less than significant in the context of the existing regulatory setting, stating that "[u]pon implementation of regulatory requirements and standard conditions of approval, [this impact] would be less than significant."[141] These include construction and demolition debris recycling requirements for single-family residences and provisions of the County's Integrated Waste Management Plan. These uniformly applicable development standards mitigate against a potentially significant effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					

[140] Source: GPEIR, page 5.17-46. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[141] Source: GPEIR, page 5.17-60. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
Wildfire					
Substantially impair an adopted emergency response plan or emergency evacuation plan				☒	☒
The GPEIR analyzed that "[c]ompliance with applicable regulations and implementation of the [2035 County General Plan] goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is less than significant."[142] These include public response infrastructure planning and provisioning, support for emergency personnel, public awareness, and other centralized approaches to avoiding impairment of emergency response. These uniformly applicable development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Due to slope, prevailing winds, and other factors, exacerbate wildfire risk, and thereby expose project occupants to pollutant concentrates from a wildfire or the uncontrolled spread of wildfire				☒	☒
While this threshold was added to the State CEQA Guidelines in 2019, after the adoption of the GPEIR, the GPEIR analyzed the vectors that contribute to wildfire risk, which has long existed as a hazard in the County. The GPEIR analyzed that "the LACoFD has instituted a variety of regulatory programs and standards for vegetation management, pre-fire management and planning, fuel modification, and brush clearance. In addition to these programs, the LACoFD and the County Department of Public Works enforce fire and building codes related to development in VHFHSZs. The Fire Department has access requirements for single family residential uses built in VHFHSZs."[143] "[2035 County General Plan] policies and conditions of approval for future development projects within the Project Area, in addition to compliance with applicable regulations, will minimize Proposed Project impacts related to wildland fires. Consequently, the overall associated impacts would be less than significant."[144] Cited policies aligned with standard conditions of approval for projects sited in VHFSZs, which include fire-rated wall and roof assemblies and windows, landscape management, adequate service and site location for fire suppression infrastructure, and low intensity, are characteristic of the proposed project. Proximity to a slope vegetated with fire-wise plantings, as opposed to flashy fuels promoting a ladder effect, would not significantly exacerbate risk. The proposed design entails no vented attic or crawlspace to protect against wind-borne embers, which the California Building Code also addresses in its standards. These uniformly applicable					

[142] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[143] Source: GPEIR, page 5.8-21. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.
[144] Source: GPEIR, page 5.8-22. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

	Sig. Impact	LTS Impact w/Mit. Incorp.	No Impact	Analyzed in Prior EIR	Subst. Mit. by Uniformly App. Dev. Policies
development standards mitigate against a potentially significant cumulative effect, were analyzed as such by the prior EIR, and address effects that are not more significant than what the prior EIR analyzed.					
Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment				☒	☒
While this threshold was added to the State CEQA Guidelines in 2019, after the adoption of the GPEIR, the GPEIR analyzed the vectors that contribute to wildfire risk and associated secondary effects, including "the use of fuel breaks, fire fighting equipment, water drops, and other techniques."[145] As a constituent of the class of residentially zoned single-family residences, the proposed project site does not impose marginal demand on any utility or service system sufficient in magnitude to induce any new infrastructure. Because development standards are uniformly unnecessary to mitigate against this effect in the class of single-family residential projects, this effect was analyzed as less than significant by the prior EIR, and is not more significant than what the prior EIR analyzed.					

[145] Source: GPEIR, page 5.14-2. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf.

L. CATEGORICAL EXEMPTION CHECKLIST

INTRODUCTION

This document is a Categorical Exemption Checklist to evaluate the conformance of the proposed 3577 Canyon Crest Single-Family Residence project ("project") to the criteria established under CEQA (Public Resources Code Section 21000, et. seq.) and the State CEQA Guidelines ("CEQA") Sections 15300 *et seq.*, for projects that are categorically exempt from CEQA.

As attributed in State CEQA Guidelines Section 15300, "Section 21084 of the Public Resources Code requires these guidelines to include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA. In response to that mandate, the Secretary for Resources has found that [certain] classes of projects [] do not have a significant effect on the environment, and they are declared to be categorically exempt from the requirement for the preparation of environmental documents."

33 classes of categorical exemption have been declared by the Office of Planning and Research to date, each listing "[e]xamples [that] include, but are not limited to" a certain type of project. Whether a project conforms to a class of declared exemption is a matter of law and statutory construction, examined for substantial evidence in the administrative record whenever a Lead Agency makes findings of fact that the project conforms to the class of exemption (and is not possessed of any exception). *Robinson v. City and County of San Francisco* (2012) 208 Cal.App.4th 950, 955-56.

As attributed in State CEQA Guidelines Section 15300.2, when this finding is supported by substantial evidence, it shall apply in all instances except where substantial evidence does not support that the project is not possessed of one of six exceptions – Location, Cumulative Impact, Significant Effect, Scenic Highways, Hazardous Waste Sites and Historical Resources. *Berkeley Hills Watershed Coalition* (2019) 31 Cal.App.5th 880, 890 (substantial evidence test applies to determination for all exceptions).

The California Supreme Court in *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086 enumerated a two-prong test for making this determination when a "Significant Effect" exception is alleged. In the first prong, "[w]hether a particular project presents circumstances that are unusual for projects in an exempt class is an essentially factual inquiry…[A]s to this question, the agency serves as "the finder of fact" [Citation], and a reviewing court should apply the traditional substantial evidence standard that section 21168.5 incorporates. [Citation.] [R]eviewing courts, after resolving all evidentiary conflicts in the agency's favor and indulging in all legitimate and reasonable inferences to uphold the agency's finding, must affirm that finding if there is any substantial evidence, contradicted or uncontradicted, to support it. [Citation].)" *Id.* at 1114. "The Secretary, in complying with the Legislature's command to determine the "classes of projects" that "do not have a significant effect on the environment" (§ 21084, subd. (a)), necessarily resolved any number of "fair arguments" as to the possible environmental effects of projects in those classes. Allowing project opponents to negate those determinations based on nothing more than "a fair argument that the project will have significant environmental effects" [Citation] would be fundamentally

inconsistent with the Legislature's intent in establishing the categorical exemptions." *Id.* at 1106. In other words, types of impacts that are typical of the class are settled to be less than significant in degree, and only unusual impacts could be significant.

When substantial evidence does not support that a type of effect is not unusual, the second prong of the test applies. "When there are "unusual circumstances," it is appropriate for agencies to apply the fair argument standard in determining whether "there is a reasonable possibility [of] a significant effect on the environment due to unusual circumstances." (Guidelines, § 15300.2, subd. (c).) As to this question, the reviewing court's function "is to determine whether substantial evidence support[s] the agency's conclusion as to whether the prescribed 'fair argument' could be made." [Citation.]" *Id.* at 1115. Where such a determination hinges on factual determinations, the Lead Agency is afforded deference as the "finder of fact." *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1277.

Therefore, a finding that a project is categorically exempt is valid unless either of these two circumstances exist:

1. The project conforms as a matter of law to the definitions of one or more classes of exemption, but substantial evidence does not exist to support the conclusion that no exceptions are present, *and* substantial evidence exists to support a fair argument of a significant effect; or
2. the project does not conform as a matter of law to the definitions of any class

If a public agency properly finds that a project is exempt from CEQA, no further environmental review is necessary. *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 74 ("If a project falls within a category exempt by administrative regulation…no further agency evaluation is required."); *Association for Protection of Environmental Values v. City of Ukiah* (1991) 2 Cal.App.4th 720, 726 ("Where a project is categorically exempt, it is not subject to CEQA requirements and 'may be implemented without any CEQA compliance whatsoever.' [Citation.]").

A Lead Agency's use permit authority may weigh impacts extending beyond CEQA's consideration of physical effects, to social or economic effects that balance the public and private good. That conditions with the incidental or purposeful effect of minimizing insignificant physical impacts are imposed on a categorically exempt project does not negate the applicability of categorical exemptions under CEQA. *San Francisco Beautiful v. City and County of San Francisco* (2014) 226 Cal.App.4th 1012, 1033 ("Conditions on a project endorsed by a governmental agency do not constitute mitigation, where the record shows those conditions were not the basis for the agency's conclusion that the project qualified for a categorical exemption."); *accord Protect Telegraph Hill v. City and County of San Francisco* (2017) 16 Cal.App.5th 261, 268 (finding traffic and pedestrian safety "conditions imposed on the conditional use authorization" to address "ordinarily anticipated inconvenience and danger that arises when significant [sic] construction activity occurs in a congested urban environment" were not adopted for the purpose of mitigating a significant physical impact on the environment to less than significant, and were not improper in relation to either the use permit or the exemption determination for a 12,000 square feet project); *Berkeley Hillside Preservation v. City of Berkeley* (2015) 241 Cal.App.4th 943, 959 ("[Lead Agency's] attempt to generally minimize

detrimental impacts of residential development" is not evidence of an exception to the categorical exemption entitled a large single-family home on a wooded hillside).

Similarly, standard conditions and regulatory compliance measures pre-existing the project do not negate the applicability of an exemption. *Citizens for Environmental Responsibility v. State ex. rel. 14th District Agricultural Association* (2014) 242 Cal.App.4th 555, 570-571. *See also Association for Protection etc. Values v. City of Ukiah* (1991) 2 Ca1.App.4th 720, 735-736 (standard conditions from the Uniform Building Code to address soil stability and water runoff in a hillside single-family home are "common and typical concerns" for hillside construction and do not constitute mitigation improperly exempted from public feedback of effectiveness); *Berkeley Hillside Preservation v. City of Berkeley* (2015) 241 Cal.App.4th 943, 961 (standard construction traffic control plan was not an improper mitigation measure in connection with a categorical exemption because traffic management is a "common and typical concern" and not a tailored mitigation measure for an unusual effect).

CATEGORICAL EXEMPTION PROJECT DEFINITION

Project title:

3577 Canyon Crest Road Single-Family Residence Project

Lead agency name and address:

County of Los Angeles
320 W Temple St, Los Angeles, CA 90012

Contact name and address:

Stacy Corea
Regional Planner
Los Angeles County
Department of Regional Planning
320 W Temple Street,
13th Floor
Los Angeles, CA 90012
E-mail: scorea@planning.lacounty.gov

Project location:

3577 Canyon Crest Road
Altadena, CA 91001

Project sponsor's name and address:

Stephen Kuhn
443 W. Poppyfields Drive
Altadena, CA 91001

General plan designation:

Residential

Zoning:

R1-10000

This designation permits one single-family residence on a minimum 10,000 square foot lot.

Description of project:

The proposed project is a 1,555 square-foot, single-family home with a 397 square-foot attached garage on a vacant residential parcel of 1.02 acres in Altadena, a census-designated place and urbanized area in the unincorporated area of the County of Los Angeles ("County"). The project parcel is located approximately 1,000 feet south of the Angeles National Forest and approximately 14 miles northeast of the County civic center, in the West San Gabriel Valley Planning Area. The project would be sited on the eastern portion of the project parcel, in an existing residential neighborhood adjacent to other residences that have also been constructed in and adjacent to Millard Canyon. The project footprint of development would be located more than 150 feet distant from the nearest delineated waters, an intermittent, seasonal feature tributary to the Arroyo Seco in the bottom of Millard Canyon.

The proposed design of the home complies with all applicable land use regulations in effect as of the date of the Notice of Preparation. The proposed design is terraced to complement the natural topography, in accordance with the County's Hillside Management Area Sensitive Design Guidelines, and is at most two stories above grade in each building segment. The proposed design places most of its volume below the level of Canyon Crest Road, from which the home would be accessed with a driveway comprised of an open-celled tree root protection system. The total footprint of development of the proposed design, including the driveway and building footprint, is less than approximately 2,000 square feet. The proposed design entails no hardscape or appreciable grading outside the building footprint at grade of approximately 1,159 square feet.

A single-family residence is permitted by right in the County's R1-10000 Zone. However, a Minor Conditional Use Permit ("MCUP") is required in the Altadena Community Standards District, in order to construct on a slope greater than 25%. In addition, an Oak Tree Permit ("OTP") is required for the removal of one non-heritage oak tree and encroachment of the protected zones of 10 non-heritage oak trees on or adjacent to the project parcel that are governed by the County's Oak Tree Ordinance, forming a part of a degraded oak woodlands that extends through the developed residential area in all directions. Pursuant to standard

compensatory provisions of the County Oak Tree Ordinance, the project would incorporate replacement plantings for the single removed oak tree; oak-compatible landscaping comprising a native understory; and Best Management Practices and design features before, during, and after construction to promote the health of the oak trees on the project parcel. The project would also rehabilitate some of the existing impacts from the surrounding residential development that have degraded the oak trees affected by the project.

Surrounding land uses and setting:

Existing development in the vicinity consists of residential buildings of varying sizes and styles with associated facilities including above- and below-grade utilities, roadways and other hardscape, and residential landscaping. There are 51 residences within 500 feet of the project site.

To the south are single-family residences in the city of Pasadena, many of which are similarly situated at the rim of Millard Canyon or the Arroyo Seco. To the east are single-family residences zoned R1-10000 with low density land use designation (1-6 units/gross acre) in the Altadena Community Plan. To the north are five existing residences along the canyon side of Canyon Crest Road, similarly situated at the rim of Millard Canyon, as well as additional residences to the northeast, zoned R1-10000 with Non-Urban land use designation (up to one unit/gross acre) in the Altadena Community Plan. To the west are the southernmost residences of the Meadows neighborhood of more than 200 homes, zoned predominantly R1-7000 with low density land use designation in the Altadena Community Plan. Farther west is the Arroyo Seco.

The easternmost portion of the project site was graded during the construction of Canyon Crest Road, and most of the frontage of the parcel has been used as a shoulder for street-side parking and as supplementary parking by adjacent residences. In the 1960’s, a below-grade sewer siphon main was constructed spanning most of the length of the parcel from east to west, including an above-grade steel trestle structure across the intermittent stream that flows in the bottom of Millard Canyon. An easement exists for maintenance, repair, and eventual replacement of this utility.

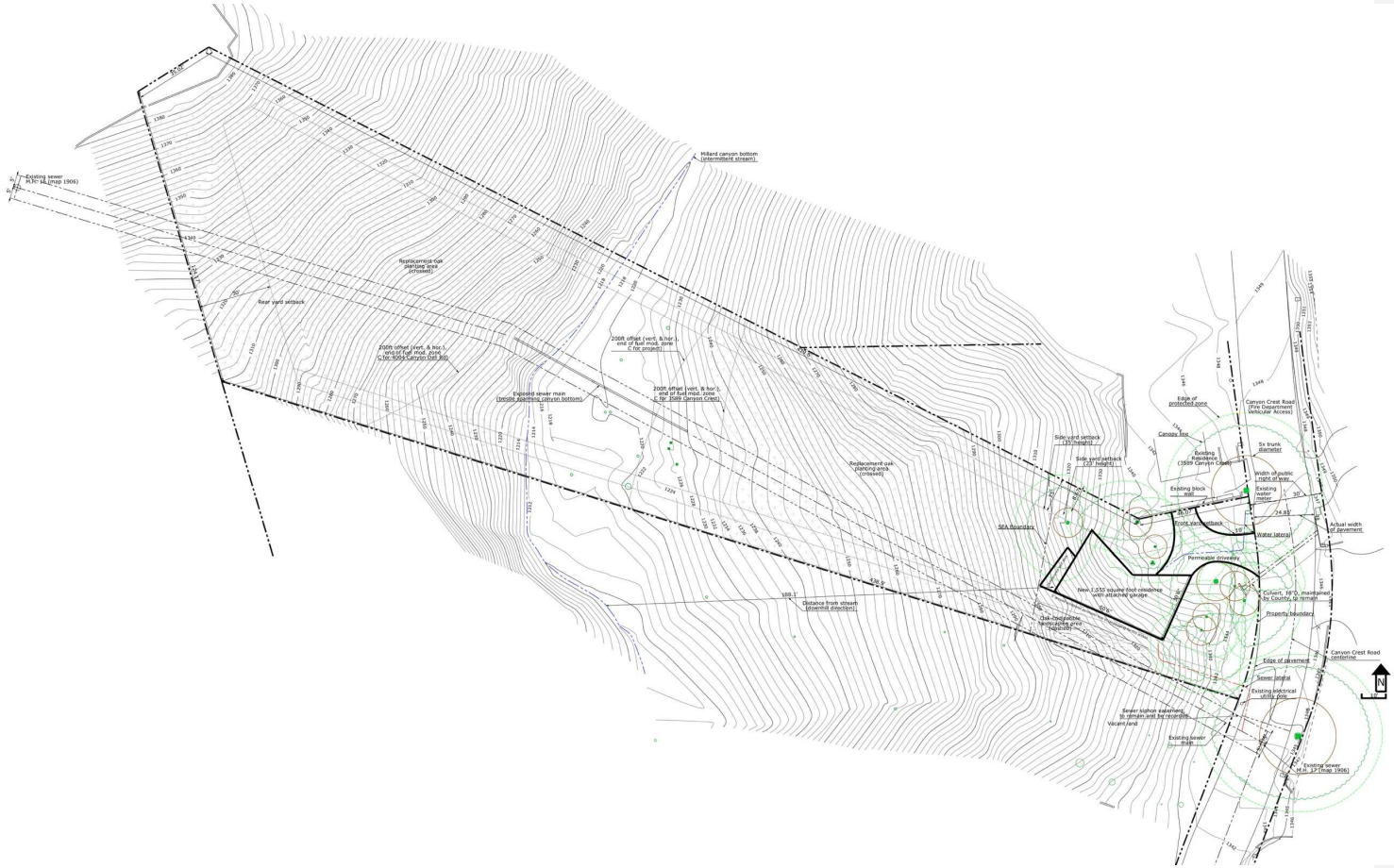

Figure 1: Proposed Project Site Plan

Figure 2: Before and After View of Project Site Driving South on Canyon Crest Road[1]

[1] Source: Applicant

Figure 3: Before and After View of Project Site Driving North on Canyon Crest Road[2]

[2] Source: Applicant

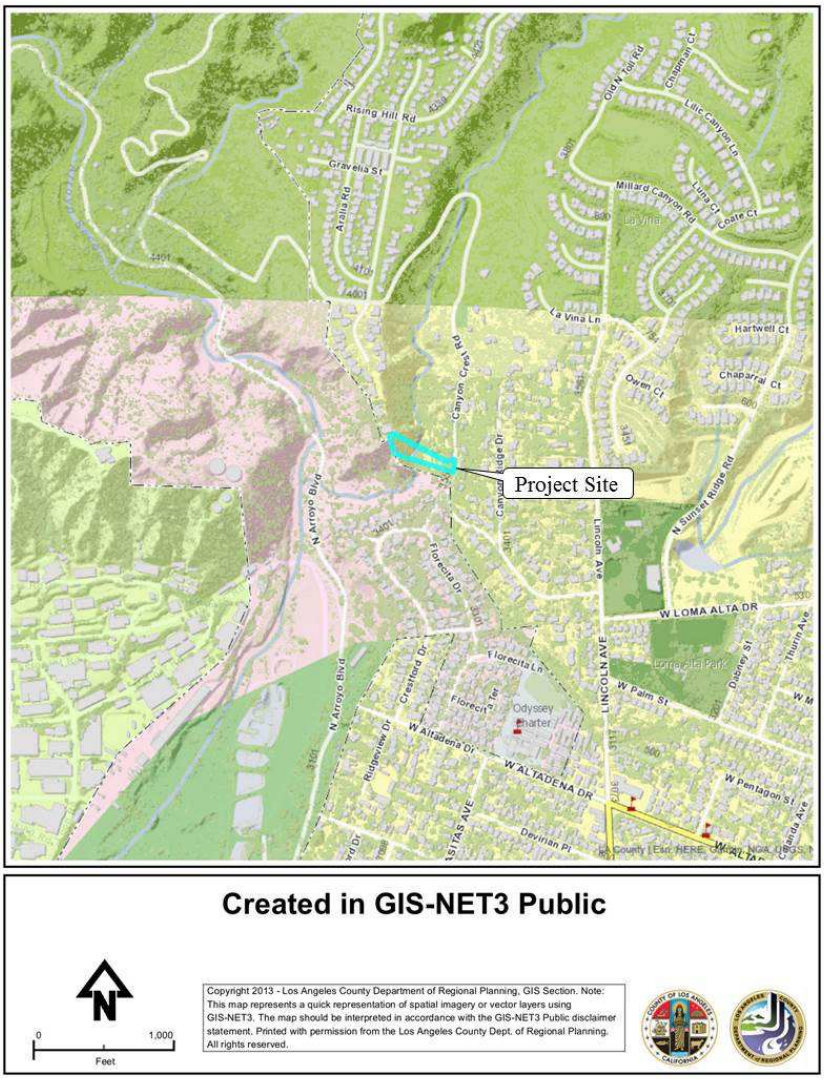

Figure 4: Project Vicinity Map[3]

[3] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

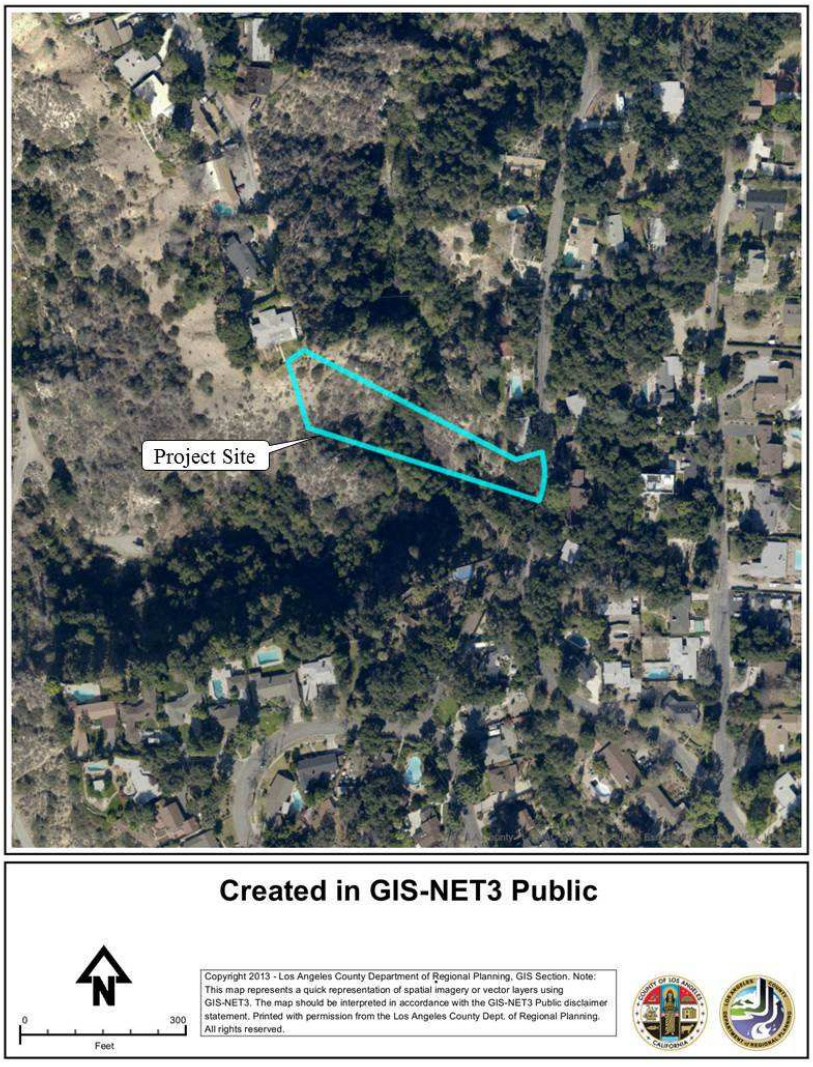

Figure 5: Project Vicinity Aerial Photograph[4]

[4]Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

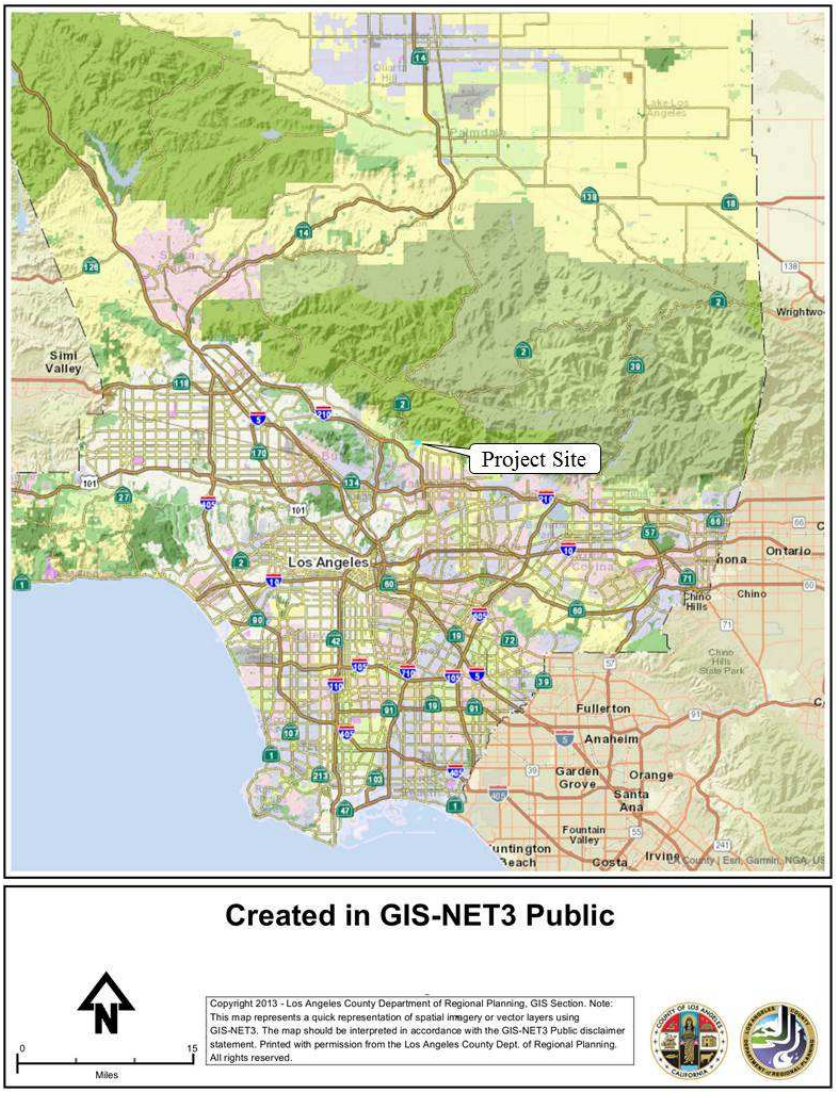

Figure 6: Regional Map[5]

[5] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

Other public agencies whose approval is required:

Departments of the County of Los Angeles must approve all appurtenant building permits.

CATEGORICAL EXEMPTION PROJECT DEFINITION CRITERIA

Which project approvals are subject to CEQA?

Approval of a Minor Conditional Use Permit ("MCUP") and Oak Tree Permit ("OTP") are discretionary and subject to CEQA.

Which classes of exemption apply to these approvals?

The MCUP meets the criteria of State CEQA Guidelines Section 15303 as permitting a "new, small…structure" that is "[o]ne single-family residence[.]" The OTP meets the same criteria, as the single removal is caused by volumetric interference with the envelope of one single-family residence.

The OTP also meets the criteria of State CEQA Guidelines Section 15304 as permitting "minor…private alterations in the condition of land," that do not remove any healthy, mature tree from any setting designated by federal, state or local authorities as "scenic." The County's CEQA Environmental Reporting and Documentation Procedures exempt the removal of non-heritage trees, stating that a number fewer than three is considered sufficient, if not necessary, to conform to the exemption.[6] All changes to the landscape approved by the OTP, including tree removal, encroachment, replacement, and landscape control, conform to the criteria of a minor land use alteration pursuant to State CEQA Guidelines Section 15304, and would occur in connection with volumetric clearance for one single-family residence pursuant to State CEQA Guidelines Section 15303.

Although not required by CEQA, the removal of one oak tree conforms to one of the examples in State CEQA Guidelines Section 15304(i) because the tree is located less than 30 feet from the structure of the Home, in a Very High Fire Hazard Severity Zone, and County fuel modification guidelines recommend that where discretion exists, *Quercus* species, like other fire-tolerant but not fireproof native tree species, should not exist within 30 feet of any structure, in order to reduce the volume of flammable vegetation adjacent to structures.[7]

Are any discretionary project conditions necessary in order to qualify for the categorical exemption(s)?

[6] Source: County Environmental Reporting and Documentation Procedures, Appendix G, page G-9. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/10/LAC_CEQA_Guidelines.pdf.

[7] Source: County Fire Department Forestry Division, Fuel Modification Plant Selection Guidelines, p. 12. Available at: https://fire.lacounty.gov/wp-content/uploads/2022/02/Plant-Selection-Guidelines_10.2021.pdf.

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No. The whole of the project would not be expected to have any significant effect, with or without consideration of discretionary permit conditions, consistent with other authorities to have applied the "questions of degree" CEQA presents in the analysis of a single-family home. *See, e.g., Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 272 and *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1100-2 ("common sense tells us that the majority of private projects…are minor in scope – e.g. relating only to the construction…of an individual dwelling").

The discretionary constraints imposed on this project are an attempt to reasonably minimize impacts to the extent feasible under the County's use permit authority, in order to limit both social and physical impacts, in balancing private rights with the public good.

Of these discretionary constraints, those of SC-BIO-1 reflect an extensive set of standard avoidance and minimization measures as part of the County's administration of its OTP process, including adherence to common and typical Best Management Practices recommended by the arborist, as required by County Code. Pursuant to State CEQA Guidelines Section 15378(a), the project definition includes the "whole of an action" that is "reasonably foreseeable", which includes replacement in "at least" a ratio of 2:1 of any oak trees that are removed or which decline substantially during a monitoring period (County Code Section 22.174.070(A)(6)(a)). These conditions are routinely applied to all OTP.

Three constraints identified in other tracks as generally applicable "mitigation measures" have been applied to the project with the sole purpose of meeting the criteria of exemption or continuation under State CEQA Guidelines Sections 15168, 15183, and 15183.3, as alternative tracks of CEQA compliance for the project. These three (MM-BIO-1, MM-CUL-1, and MM-NOI-1) fulfill generally applicable measures of the 2035 County General Plan EIR (which anticipated a range of more impactful subsequent activities) and are contingency for effects that would be unexpected to occur in connection with this project. Therefore, these measures are not integral to any significance determination or necessary to establish that the project conforms to the class of categorical exemptions.

What evidence supports that State CEQA Guidelines Section 15300.2 exceptions do not apply to the proposed project?

Sensitive Resources Exception

Pursuant to State CEQA Guidelines Section 15300.2(a), "a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies."

Pursuant to State CEQA Guidelines Section 15387, an "urbanized area" is "a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. A lead

agency shall determine whether a particular area meets the criteria in this section either by examining the area or by referring to a map prepared by the U.S. Bureau of the Census which designates the area as urbanized. Maps of the designated urbanized areas can be found in the California EIR Monitor of February 7, 1979." The unincorporated census-designated place of Altadena is located adjacent to the city of Pasadena, with a population of more than 137,000 as of the most recently available 2020 census.[8] Altadena has a population density of 5,060 people per square mile as of the most recently available 2020 census.[9] The proposed project is located within the boundary of what the U.S. Bureau of the Census designates as an "urbanized area."[10] Therefore, the proposed project site falls squarely within CEQA's definition of an "urbanized area," upon which the burden of establishing a "particularly sensitive environment" would require a location within a mapped resource designated as being "sensitive," or "hazardous" or of "critical concern."

Of the resources the County precisely maps in the 2035 County General Plan, a "Significant Ecological Area" could conform to all requisite criteria. SEA boundaries are portrayed in County maps and in the County's Geographic Information Systems.

A SEA exists on the western portion of the project parcel, adopted in 2019. However, the project footprint of development, defined by the footprint of the structure and its driveway (with no other hardscape or grading outside the structural footprint), does not overlap with this area. (*See* Figure 7: Significant Ecological Area). Five existing single-family homes to the north of the project parcel along the western side of Canyon Crest Road in the same block also share the attribute that the SEA spans a portion of their parcel. Physical effects that could substantially alter the SEA downslope of the proposed project footprint of development, including landsliding, were analyzed by a qualified geotechnical professional to present no substantial risk, and standard conditions constrain the small amount of grading to be performed by hand. *See also Berkeley Hills Watershed Coalition v. City of Berkeley* (2019) 31 Cal.App.5th 880 (location exception does not apply to areas with geotechnical risk, which characterize much of California, when a geotechnical assessment concludes that geotechnical risks would not be substantial). The same principle applies to wildfire risk mitigated by compliance with codified regulations for areas at risk of wildfire.

[8] Source: City of Pasadena. Pasadena Census and Population. Available at: https://ww5.cityofpasadena.net/planning/planning-division/community-planning/pasadena-census-and-population/.
[9] Source: United States Census Bureau. Available at: https://www.census.gov/quickfacts/altadenacdpcalifornia.
[10] Source: United States Census Bureau. Bureau of the Census 2020 Census Urban Area Reference Map – Los Angeles-Long Beach-Anaheim, CA. Available at: https://cacensus.maps.arcgis.com/apps/webappviewer/index.html?id=67f7e4aa0bc6450e8a052176a12d86b9.

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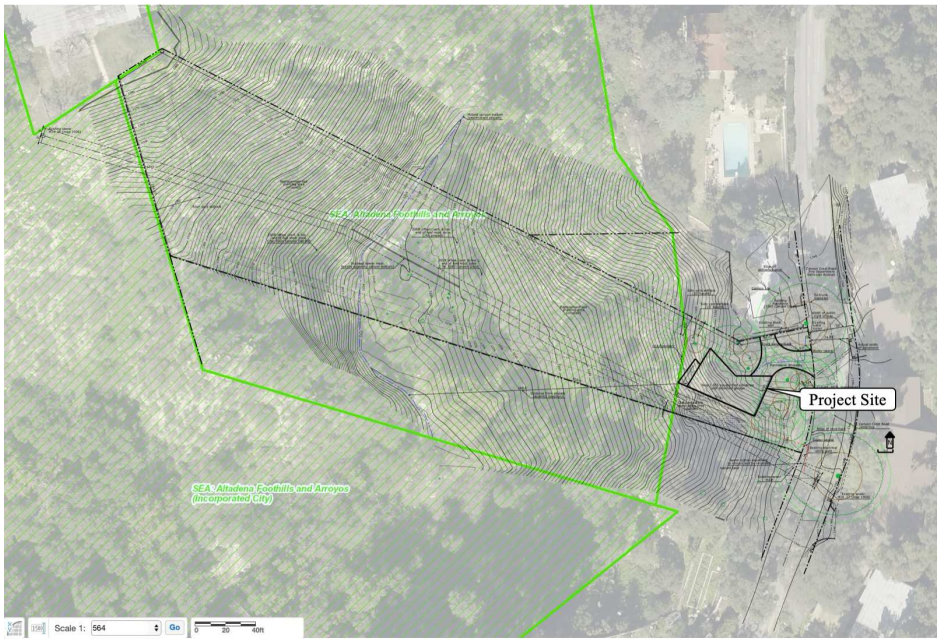

Figure 7: Significant Ecological Area[11]

The proposed project footprint of development is not located in maps of any designated critical habitat identified by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service. The proposed project footprint of development is not located in maps of any wetlands or riparian vegetation designated by the National Wetlands Inventory or by a wetland delineation, which place the nearest riparian resources more than 100 feet downslope of the westernmost part of the project. (See Figure 8: Wetlands and Riparian Habitat at "Landscape" Scale).

To the extent fuel modification requirements relative to a building footprint are construed as "development," the pre-existing requirements for one or more adjacent residences cover the large majority of the project parcel, with the exception of the riparian canyon bottom. Such fuel modification requirements are an existing condition independent of the project, against which only the project's marginal impact need be considered.

In terms of extent of some fuel modification requirement, the marginal difference of the project is approximately 2,000 square feet (see Figure 7: Significant Ecological Area) and occurs in Fuel Modification Zone C, the least restricted zone designation. The species present in this area, comprised of a canopy of coast live oak and understory of native fire-tolerant shrubs are

[11] Source: Regional Planning Geographical Information Systems, overlaid on project site plan. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

consistent with Fuel Modification Zone C requirements, and would require no alteration in connection with the proposed project.

This evaluation of the present condition of the area is considered sufficient to determine that no exception exists. While the area could change in any number of ways in the future – e.g. if a flashy non-native fuel invades, or a pest results in premature death of a tree, or a wildfire occurs – in a manner that could necessitate alteration for fuel modification, such changes are speculative and not reasonably foreseeable. The alteration activities to correct for any non-native or dead vegetation would also not be "adverse" to intact native communities, which is the environmental resource the SEA is designated to contain, adverse impacts to which could trigger the exception. In the future, no fuel modification would be required for any intact native communities in Fuel Modification Zone C.

The impact in this area is not subject to discretionary approval under the County's SEA Ordinance, as impacts of this type occurring in an area of less than 20,000 square feet have been designated for ministerial review and therefore determined to be less than significant.[12]

[12] Source: Regional Planning SEA Ordinance Implementation Guide. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/Chap2-SEA-Ord-Assess-Process.pdf.

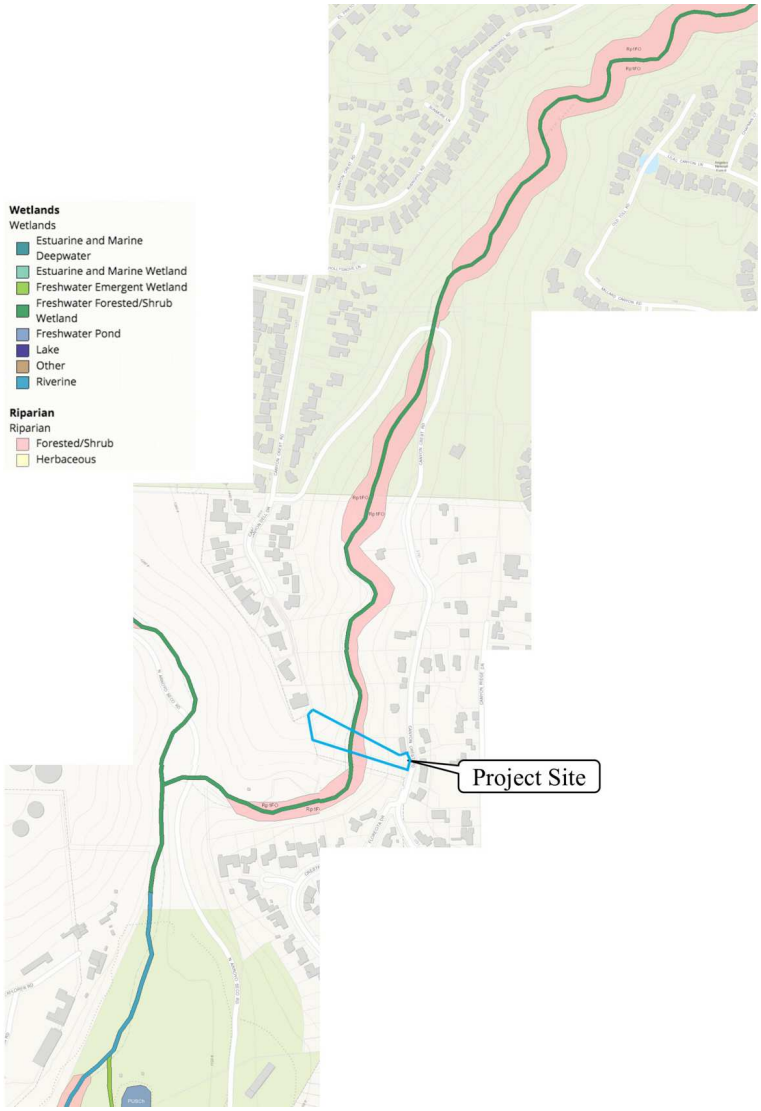

Figure 8: Wetlands and Riparian Habitat at "Landscape" Scale[13]

[13] Source: United States Fish and Wildlife Service National Wetlands Inventory. Available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

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The oak woodlands that exists on the project parcel is part of the coast live oak woodlands plant community. This community has a state rarity of S4,[14] indicating that it is "apparently secure." According to the California Department of Fish and Wildlife ("CDFW"), "Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA."[15] Therefore, the association of coast live oak woodlands and California sagescrub ("*Quercus agrifolia* / *Artemisia californica"*) that exists on the project parcel is not designated as "sensitive." As such, coast live oak woodlands do not constitute a "particularly sensitive" environment. *See also California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 280-283 (coast live oak trees were properly determined not to be sensitive biological resources in an urbanized area).

This determination is similarly supported by the location of the woodlands, in a suburban residential neighborhood that has reduced wildlife permeability and substantially degraded the oak woodlands. On the project parcel, this degradation has manifested as a history of compaction from residential usage for parking and storage; re-grading/dumping to expand this usable area; pavement encroachment from Canyon Crest Road and the paved driveway, patio, slab-on-grade foundation and seepage pit at the adjacent residence of 3589 Canyon Crest Road; significant pruning for parking, roadway, residence and power line clearance; signs of mechanical damage; and construction of concrete drainage devices impinging on the collars of several trees. This level of degradation is typical of, if not more severe than, that characteristic of surrounding suburban residential development, throughout which oak woodlands extends for some distance in all directions.

In addition, oak woodlands in the County are not precisely mapped, and therefore cannot meet all of the criteria for this exception. Existing approximations of the extent of oak woodlands referenced in the County Oak Woodlands Conservation Management Plan[16] have been only loosely mapped in coarse polygons of several acres, based on the "potential" for occurrence, including a large buffer. "In almost all situations, oak tree species are integrated into other vegetation types making oak woodland boundaries somewhat, to very, indistinct."[17]

CEQA Section 21083.4 provides mitigations that are sufficient, as a matter of law, to reduce a significant conversion of oak woodlands to a less than significant level "[i]f a County determines" that a project would result in a significant conversion. However, it does not designate oak woodlands as an environmental resource of "hazardous or critical concern." *See, e.g.*, *Don't Cell Our Parks v. City of SD* (2018) 21 Cal.App.5th 338, 361 (public park not designated as a resource of hazardous or critical concern by a public agency).

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[14] Source: California Department of Fish and Wildlife. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
[15] Source: California Department of Fish and Wildlife. Available at: https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive%20natural%20communities.
[16] Source: County Oak Woodlands Conservation Management Plan, pages 42-44. Available at: http://planning.lacounty.gov/assets/upl/project/oakwoodlands_conservation-management-plan.pdf.
[17] Source: County Oak Woodlands Conservation Management Plan, page 9. Available at: http://planning.lacounty.gov/assets/upl/project/oakwoodlands_conservation-management-plan.pdf.

CEQA Section 21083.4(b) states that "a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment," "[a]s part of the determination made pursuant to Section 21080.1." CEQA Section 21080.1 states that "[t]he Lead Agency shall be responsible for determining whether an environmental impact report, a negative declaration, or a mitigated negative declaration shall be required for any project *which is subject to [CEQA]*." (emphasis added). A categorically exempt project is not subject to CEQA, and so this determination does not need to be made.

Substantial evidence supports the determination that the project does not impact "a particularly sensitive environment," as defined in State CEQA Guidelines Section 15300.2(a). Substantial evidence supports the determination that removal of one non-heritage, non-sensitive species of oak tree from severely degraded oak woodlands in a residential neighborhood in an urbanized area would not be a significant effect on the environment. The removal of one coast live oak tree in connection with a single-family residence is a quasi-ministerial action pursuant to County Code Section 22.174.040(2)(b), which permits waiver of any Oak Tree Report in connection with such a project. Guidance from the University of California Integrated Hardwood Range Management Program for the mitigation of oak woodlands impacts, incorporating input from a range of experts and stakeholders, treats as less than significant at a site scale of "less than 3 acres" the removal of "less than 10 trees."[18] Consistently, the Oak Woodlands Protection Act,[19] a proposed successor act to CEQA Section 21083.4 that would repeal and replace it, proposed a threshold of significance to trigger its permitting process of 10 or more coast live oak trees 10" in diameter or greater in trunk size at breast height (up to any size).

Therefore, no exception that meets all of the requirements of State CEQA Guidelines Section 15300.2(a) exists for the project.

Cumulative Impacts Exception

Pursuant to State CEQA Guidelines Section 15300.2(b), an exception exists when the "cumulative impact of successive projects of the same type in the same place, over time is significant."

The project parcel's zoning of R1-10000 permits only one single-family residence and would not be expected to contribute to a significant cumulative impact or cumulatively considerable effect in an existing residential neighborhood. *See Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720, 734 ("[n]o serious argument or evidence was presented…that more than one house could be constructed on the lot or that as the last house to be constructed in this otherwise fully developed neighborhood, any sort of cumulative impact could be anticipated."). The proposed project parcel is also one of the last undeveloped lots in a residential neighborhood in which all but a few vacant, residentially zoned lots are either developed or

[18] Source: University of California Integrated Hardwood Range Management Program. Oak Woodland Impact Decision Matrix: A Guide for Planner's to Determine Significant Impacts to Oaks as Required by SB 1334, page 11. Available at: http://ucanr.edu/sites/oakplanner/files/71734.pdf.
[19] Source: California Legislative Information. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2162.

effectively annexed and owned by adjacent residences, with no other nearby permit applications underway with the Department of Regional Planning. In addition, the approval of future projects for which applications have not yet been received, with notional impacts that may or may not be cumulatively considerable if and when those projects emerge, is speculation, which need not be addressed under CEQA. *Hines v. California Coastal Commission* (2010) 186 Cal.App.4th 830, 857-858 ("[S]peculation that many others may also seek to build within [a restricted area for which a use permit was granted] and that the County would permit them to do so does not provide substantial evidence of significant cumulative impacts", applying the fair argument test, before *Berkeley Hillside* had been decided).

Therefore, no exception that meets all of the requirements of State CEQA Guidelines Section 15300.2(b) exists for the project.

Significant Effect Exception

Pursuant to State CEQA Guidelines Section 15300.2(c), "[a] categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances." Two established methods demonstrate a circumstance to be unusual: (1) that "some feature of the project…distinguishes the project from other features in the exempt class," or (2) that more than substantial evidence of a fair argument of a significant effect exists, such that the project conclusively "*will* have a significant environmental effect." *Citizens for Environmental Responsibility v. State ex. rel. 14th District Agricultural Association* (2015) 242 Cal.App.4th 555, 574-576.

"In determining whether the environmental effects of a proposed project are unusual or typical, local agencies have discretion to consider conditions in the vicinity of the proposed project," specifically in "one particular neighborhood." *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1118-1119. Therefore, where substantial evidence demonstrates that an attribute is shared by one or more other similar projects in the vicinity of the project, that attribute shall not be considered "unusual." Also, compliance with density, height and bulk regulations provide sufficient evidence to conclude that a project is not possessed of unusual circumstances. *Protect Telegraph Hill v. City and County of San Francisco* (2017) 16 Cal.App.5th 261, 271.

The coast live oak woodland natural community is designated by the CDFW with the NatureServe rank of S4, indicating that many populations or occurrences exist, and the community is not sensitive. Every one of the 51 residences within 500 feet of the project parcel overlap with coast live oak woodlands. "As of 2009, there are over 150,000 existing homes in the immediate vicinity of oak woodlands in Los Angeles [County]."[20] Development exists in and among "almost all" of 30,000 to 44,000 acres of County oak woodlands in private hands, including 27,456 acres of coast live oak woodlands.[21] As of 2001, 10 million acres of California

[20] Source: County Oak Woodlands Conservation Management Plan, page 10. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf

[21] Source: County Oak Woodlands Conservation Management Plan, page 44. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/oakwoodlands_conservation-management-plan.pdf

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are comprised of oak woodlands,[22] - approximately 10% of the landmass of the state. The United States Forest Service estimated in 2002 a statewide inventory on only Forest Service Lands in California of 6.5 million coast live oak trees, +/- 14.2 percent.[23] Oak woodlands are commonly defined as any area with a canopy density of two or more California native oak trees of at least 10%. (See Fish and Game Code Section 1361(h) – "Oak woodlands" means an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover).

Oak tree trunks, branches and canopy exist in proximity to residences in the neighborhood at offsets that are as close or closer than proposed for the project. (See Figure 9: Examples of Oak Tree Proximity of Development Surrounding Project).

[22] Source: California Department of Fish and Wildlife. Oak Woodlands Conservation Program Application and Guidelines, Preface. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18730.
[23] Source: United States Forest Service. Available at: https://www.fs.usda.gov/psw/publications/documents/psw_gtr184/054_Gaman.pdf.

Deleted: https://www.fs.fed.us/r5/rsl/publications/inventory/OakInventory.pdf.

Figure 9: Examples of Oak Tree Proximity of Development Surrounding Project[24]

[24] Source: Applicant
A: 3637 Canyon Crest Road, ~350 feet north of project parcel
B: 3617 Canyon Crest Road, ~250 feet north of project parcel
C: 3617 Canyon Crest Road, ~250 feet north of project parcel
D: 3556 Canyon Crest Road, ~150 feet southeast of project parcel
E: 3405 Florecita Drive, ~500 feet southwest of project parcel
F: 3665 Canyon Crest Road, ~500 feet north of project parcel
G: 3340 Crestford Drive, ~650 feet south of project parcel

These residences and their associated development (roadways, hardscapes, parking areas, fences, pools, irrigated lawns, tennis courts, stables, equestrian areas, subterranean and above-ground utilities) impact the protected zones of some oak trees to extents that are greater than is characteristic of any oak tree impacted by the project. For instance, oak tree #1 has been encroached in over 2/3 of its protected zone by the impermeability and compaction of pavement, either of Canyon Crest Road or the driveway and foundation of 3589 Canyon Crest Road. It has been significantly pruned for roadway and parking clearance near the ground and higher up for high-voltage power line clearance. It has been subjected to deep excavation on more than one side, both to drill a 5'x35' seepage pit with associated laterals for 3589 Canyon Crest Road, the edge of which encroached at a distance of approximately 6', and to install a water meter.

Substantial evidence supports the conclusion that the existence of oak woodlands on the project parcel, as well as the manner and extent of its encroachment by the proposed project, is not unusual in the neighborhood in which it is sited. Therefore, substantial evidence supports that the project is not unusual in the class of exempt projects in the neighborhood for the presence of oak woodlands on the project parcel, or the encroachment of trees comprising oak woodlands. *See Protect Telegraph Hill v. City and County of San Francisco* (2017) 16 Cal.App.5th 261, 271 (traffic, aesthetic and geotechnical concerns cited as evidence of potentially significant impacts were not unusual in the neighborhood in which the project was sited and did not trigger the unusual circumstances exception).

As portrayed in Figure 10: Proximity of Existing Single-Family Residences to Millard Canyon Bottom, more than 40 nearby existing residences are located at similar horizontal offsets (less than 250 feet) from the riparian canyon bottom. Parts of at least eight existing residences are located at a closer horizontal offset to the riparian canyon bottom than any part of the project. Parts of at least two existing residences are located at closer vertical offsets to the riparian canyon bottom than any part of the project. Therefore, substantial evidence supports that the project is not unusual in its vicinity for its location with respect to riparian habitat.

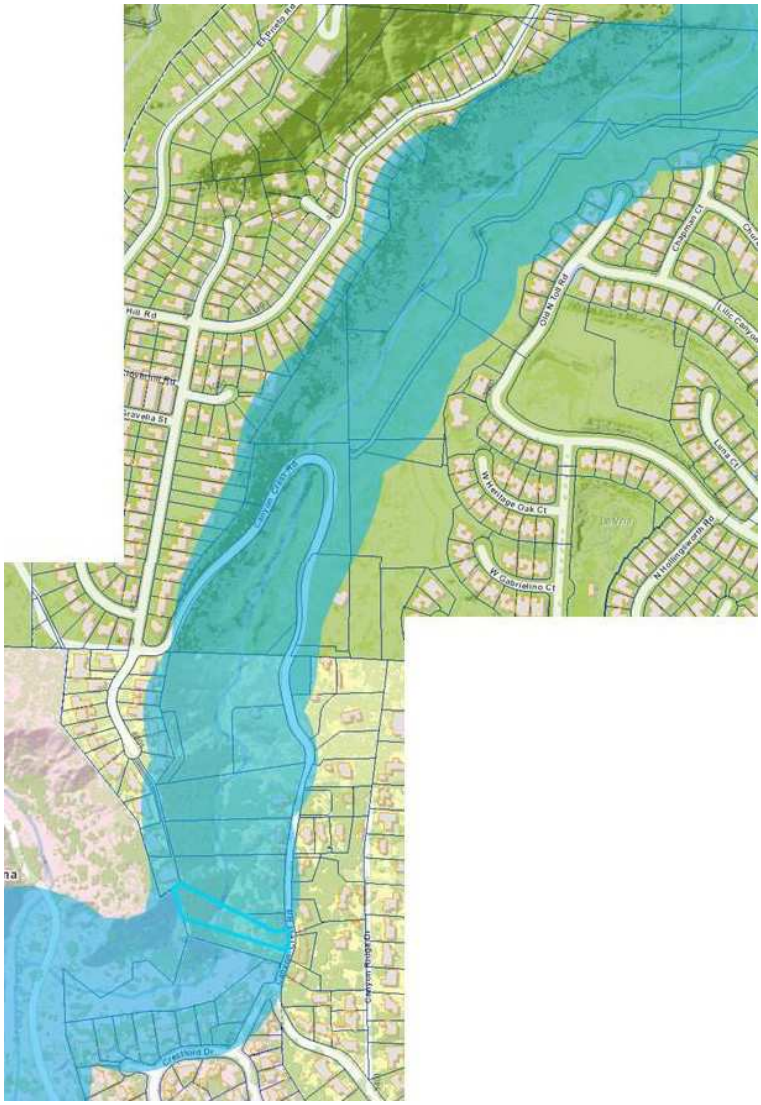

Figure 10: Proximity of Existing Single-Family Residences to Millard Canyon Bottom[25]

[25] Source: Regional Planning Geographical Information Systems. Available at: http://rpgis.isd.lacounty.gov/Html5Viewer/index.html?viewer=GISNET_Public.GIS-NET_Public.

The proposed project is a single-family residence in a neighborhood of single-family residences. It complies with all current development standards. Without more, this is sufficient to substantiate that the project is not unusual for any design attribute. *See again Protect Telegraph Hill v. City and County of San Francisco* (2017) 16 Cal.App.5th 261, 271 (compliance with density, height and bulk regulations provide substantial evidence to conclude that a project is not possessed of unusual circumstances).

The proposed project when viewed from public vantages would subtend an angular field of view that is consistent with nearby residences. The floor area of the proposed project is smaller than 14 of the 19 other residences within 300 feet and also less than the average floor area of these residences. (See Table 1: Comparison of Zoning Parameters of Residences Within 300 Feet of Project). The maximum height of the proposed project is less than at least one other residence within 300 feet. (*Ibid.*). The maximum height of the proposed project above the street grade plane is less than at least three other residences within 300 feet, including two residences immediately to the east of the project parcel across Canyon Crest Road. (*Ibid*.). At least one other residence within 300 feet contains four split levels. (*Ibid*.). The proposed project is set back a greater distance in its front yard than 12 other residences within 300 feet. (*Ibid*.). The proposed project is set back a greater distance along its side yards than 16 other residences within 300 feet. (*Ibid*.). The proposed project is sited at a similar situation at the head of a slope that is also as steep at several adjacent residences, varying between 50% and 100%. (*See, e.g.,* residence at 3617 Canyon Crest Road). Construction of single-family residences on steep hillsides in the Los Angeles metropolitan area is common, and the City of Los Angeles Hillside Ordinance provisions for construction on slopes in excess of 100%,[26] such that this is not an unusual circumstance in a hillside neighborhood.

Table 1: Comparison of Zoning Parameters of Residences Within 300 Feet of Project[27] [28] [29]

Address	**GSA[30] (sq. ft.)**	**Max. Height (at least, ft.)**	**Max. Height above street grade plane (at least, ft.)**	**# of levels**	**Max. # stories above grade**	**Min. Front Yard Setback (ft.)**	**Min. Side Yard Setback (ft.)**
Project	1,555	33’10”	25’	4	2	26’	15’
3556 Canyon Crest Rd.*	2,276	27’2”	36’3”	2	2	14’*	-7’*
3566 Canyon Crest Rd.*	2,105		25’7”	1	1	13’*	6’*

[26] Source: City of Los Angeles Planning Department, Hillside Ordinance, pp. 21-22. Available at: https://planning.lacity.org/Code_Studies/HillsideAreaDefinitionAmendment/AdoptedBaselineHillsideOrdinance.pdf .

[27] Source: Applicant. Note: Height measurements of residences apart from the project are derived from LiDAR.

[28] Note: * denotes violation of the Altadena Community Standards if proposed today

[29] Note: ** denotes not subject to Altadena Community Standards, because the residence is located in the City of Pasadena

[30] Source: County Assessor. Available at: http://maps.assessor.lacounty.gov/GVH_2_2/Index.html?configBase=http://maps.assessor.lacounty.gov/Geocortex/Essentials/REST/sites/PAIS/viewers/PAIS_hv/virtualdirectory/Resources/Config/Default.

Address	GSA[30] (sq. ft.)	Max. Height (at least, ft.)	Max. Height above street grade plane (at least, ft.)	# of levels	Max. # stories above grade	Min. Front Yard Setback (ft.)	Min. Side Yard Setback (ft.)
3588 Canyon Crest Rd.*	1,259		28’10”	1	1	16’*	-1’*
3589 Canyon Crest Rd.*	958			1	1	10’*	2’*
3535 Canyon Ridge Dr.*	4,683	36’8”*	36’8”	4	3*	23’	6’*
3617 Canyon Crest Rd.*	1,978			2	2	4’*	2’*
3637 Canyon Crest Rd.*	1,605			1	1	3’*	1’*
3665 Canyon Crest Rd.*	1,616			1	1	3’*	50’
3624 Canyon Crest Rd.*	1,262					17’*	-4’*
3550 Canyon Crest Rd.*	1,237					120’	-3’*
3506 Canyon Crest Rd.*	1,920					15’*	2’*
3500 Canyon Crest Rd.*	1,509					32’	-2’*
3483 Canyon Ridge Dr.*	1,842					36’	-2’*
3497 Canyon Ridge Dr.*	2,188					46’	-1’*
3551 Canyon Ridge Dr.*	3,000					2’*	-5’*
3410 Florecita Dr.**	1,431						
3425 Florecita Dr.**	3,756						

Address	GSA[30] (sq. ft.)	Max. Height (at least, ft.)	Max. Height above street grade plane (at least, ft.)	# of levels	Max. # stories above grade	Min. Front Yard Setback (ft.)	Min. Side Yard Setback (ft.)
4001 Canyon Dell Rd.*	1,834					N/A[31]	2'*
4003 Canyon Dell Rd.*	2,442					N/A	6'*[32]
Average:	2,047						

The proposed project is sited along Canyon Crest Road along with dozens of existing residences that were constructed with similar constraints, including similar or smaller amounts of construction staging area. (*See, e.g.*, residence at 3589 Canyon Crest Road). The proposed project has more than 1,000 square feet of suitable staging area that is nearly 40 feet deep and adequate to stage the largest typical construction vehicle (a cement truck) out of the roadway, with impacts minimized by arborist-recommended BMPs including a Tree Root Protection System. Visibility from the project parcel along Canyon Crest Road is similar to or greater than other existing residences in the vicinity, with high visibility merging into the project-side lane of traffic. (*See, e.g*., residence at 3550 Canyon Crest Road). To the extent the form of the proposed project deviates from single-story slab-on-grade structures that characterize some of the surrounding development, it does so principally by making use of less destructive grading and compaction of flat building areas, as many existing homes carved out of the hillside. These design attributes are encouraged by the County's Hillside Management Area Sensitive Design Guidelines and are therefore reasonably expected to be typical of sensitive hillside development in the County, regardless of whether the form of existing residences was enabled by lesser sensitivity in years past, which demonstrate lesser consistency with modern design guidelines. Therefore, substantial evidence supports that the proposed project's size and nature are not unusual circumstances in the area.

Therefore, no exception that meets all of the requirements of State CEQA Guidelines Section 15300.2(c) exists for the project.

Scenic Highways Exception

Pursuant to State CEQA Guidelines Section 15300.2(d), "[a] categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway."

[31] Note: flag lots have a uniform yard setback of 10'
[32] Note: As a flag lot, this may denote either a rear or a side yard setback.

The project is not visible from any state scenic highway.[33,34] There are also no County-designated scenic highways near the project parcel. The nearest designated state scenic highway is the Angeles Crest Highway/Route-2, more than 1.7 miles to the northwest of the project parcel. Interstate-210 is an "eligible" state scenic highway that is not officially designated, more than 1.3 miles to the southwest of the project parcel. Even from these substantial removes, views of the project parcel are occluded from these highways by terrain and vegetation.

Therefore, no exception that meets all of the requirements of State CEQA Guidelines Section 15300.2(d) exists for the project.

Hazardous Waste Sites Exception

Pursuant to State CEQA Guidelines Section 15300.2(e), "[a] categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code."

The project is not located on a site which is included in any of the databases or lists that exist pursuant to Government Code Section 65962.5, including the Cortese list.

Therefore, no exception that meets all of the requirements of State CEQA Guidelines Section 15300.2(e) exists for the project.

Historical Resources Exception

Pursuant to State CEQA Guidelines Section 15300.2(f), "[a] categorical exemption shall not be used for a project which may cause a substantial change in the significance of a historical resource."

The proposed project is not sited on nor would it be expected to substantially change any historical resource described in State CEQA Guidelines Section 15064.5.

Therefore, no exception that meets all of the requirements of State CEQA Guidelines Section 15300.2(f) exists for the project.

[33] Source: 2035 County General Plan, Figure 9-7. Available at: https://planning.lacounty.gov/wp-content/uploads/2022/11/6.gp_2035_B-Updated-Figures-and-Maps.zip.

[34] Source: California Scenic Highway Mapping System. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Deleted: http://planning.lacounty.gov/assets/upl/project/gp_2035_2017-FIG_9-7_scenic_highways.pdf.

Deleted: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

On the basis of this initial valuation:

- ☒ I find that the proposed project WOULD conform to one or more classes of categorical exemption, as identified in this Checklist, and that substantial evidence supports that all State CEQA Guidelines Section 15300.2 exceptions do not apply to the proposed project. A Notice of Exemption will be filed pursuant to State CEQA Guidelines Section 15062.
- ☐ I find that the proposed project WOULD NOT conform to one or more classes of categorical exemption. This Checklist serves as documentation of this analysis. Another environmental document and track of CEQA compliance will be identified.
- ☐ I find that the proposed project WOULD conform to one or more classes of categorical exemption, but the proposed project WOULD NOT qualify as exempt because substantial evidence does not support that one or more State CEQA Guidelines Section 15300.2 exceptions do not apply to the proposed project. This Checklist serves as documentation of this analysis. Another environmental document and track of CEQA compliance will be identified.

SIGNATURE DATE