MITIGATED NEGATIVE DECLARATION
Marin County Environmental Review

Pursuant to Section 21000 et. seq. of the Public Resources Code and Marin County Environmental Impact Review Guidelines and Procedures, a Negative Declaration is hereby granted for the following project.

1. Project Name: Rogers Design Review and Tree Removal Permit

2. Location: 308 Los Angeles Boulevard, San Anselmo

3. Project Summary:

   The applicant has submitted Design Review and Tree Removal Permit applications requesting approval to construct a single-family residence, with attached garage, retaining walls, access driveway, emergency turnaround/parking area, and car bridge (over Sorich Creek) on a vacant lot located at 308 Los Angeles Blvd in San Anselmo. The proposed project would consist of 4,306 square-feet of total building area and 3,872 square-feet of total floor area, for a floor area ratio of 5 percent on the 77,124 square-foot lot.

4. Project Sponsor: Cecily Rogers

5. Finding:

   Based on the attached Initial Study and without a public hearing, it is my judgment that:

   ☐ The project will not have a significant effect on the environment.

   ☒ The significant effects of the project noted in the Initial Study attached have been mitigated by modifications to the project so that the potential adverse effects are reduced to a point where no significant effects would occur.

Rachel Reid _____ Date: 10/29/18

Rachel Reid
Environmental Planning Manager

1. Mitigation Measures:

   ☐ No potential adverse impacts were identified; and therefore, no mitigation measures are required.

   ☒ Please refer to mitigation measures in the attached Initial Study.

   ☐ The potential adverse impacts have been found to be mitigable as noted under the following factors in the Initial Study attached.

   All of the mitigation measures for the impacts listed above have been incorporated into the project and are required as conditions of approval.

2. Preparation:

   This Mitigated Negative Declaration was prepared by Dudek on behalf of the Marin County Community Development Agency - Planning Division. Copies may be obtained at the address listed below.

   Marin County Community Development Agency
   Planning Division
   3501 Civic Center Drive, Suite 308
   San Rafael, CA 94903
   (415) 473-6269
   Monday-Thursday, 8:00 a.m. to 4:00 p.m.

DRAFT

Rogers Design Review and Tree Removal Permit Project
Initial Study and
Environmental Checklist

Prepared for:

Marin County Community Development Agency
Planning Division
3501 Civic Center Drive, Suite 308
San Rafael, California 94903
Contact: Tammy Taylor

Prepared by:

DUDEK
1630 San Pablo Avenue
Oakland, California 94612
Contact: Darcey Rosenblatt

OCTOBER 2018

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BACKGROUND

A.	**Project Sponsor's Name and Address:**	Cecily Rogers 1575 37th Avenue San Francisco, California 94122
B.	**Lead Agency Name and Address:**	Marin County Community Development Agency, Planning Division 3501 Civic Center Drive, Suite 308 San Rafael, California 94903
C.	**Agency Contact:**	Tammy Taylor 415.473.7873 ttaylor@marincounty.org

PROJECT DESCRIPTION

A.	**Project Title:**	Rogers Design Review and Tree Removal Permit Project (Project ID P1396 and P1397)
B.	**Type of Application(s):**	New Single-Family Residence
C.	**Project Location:**	308 Los Angeles Boulevard San Anselmo, California 94960 Assessor's Parcel Number 177-190-16
D.	**General Plan Designation:**	SF6, Low-Density Residential, 4–7 dwelling units per acre and PR, Planned Residential (lot has two plan designations)
E.	**Zoning:**	R1, Residential Single-Family, 7,500 square feet minimum lot area and RMP-0.75, Residential Multiple Planned (lot is split zoned)

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ACRONYMS

ACOE	U.S. Army Corps of Engineers
asl	above sea level
BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
BMP	best management practice
CALGreen	California Green Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CMSA	Central Marin Sanitation Agency
DPM	diesel particulate matter
EIR	environmental impact report
ESCP	Erosion and Sediment Control Plan
DPW	Marin County Department of Public Works
GHG	greenhouse gas
MMWD	Marin Municipal Water District
NAHC	Native American Heritage Commission
OSHA	Occupational Safety and Health Administration
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 micrometers or less
PM_{10}	particulate matter with an aerodynamic diameter of 10 micrometers or less
RWQCB	San Francisco Bay Regional Water Quality Control Board
SCA	Stream Conservation Area
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
WUI	wildland–urban interface

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I. DESCRIPTION OF THE PROJECT

ENVIRONMENTAL SETTING

The 1.76-acre (76,827 square feet) Rogers Design Review and Tree Removal Permit Project (Project) site is located outside the eastern limits of the Town of San Anselmo, in southeastern Marin County (County). The street address is 308 Los Angeles Boulevard (Assessor's Parcel Number 177-190-016) (Figure 1, Project Location). Sorich Park is to the north, and the Mount Tamalpais Cemetery is to the east of the site. Sorich Creek, an intermittent stream, flows through the front, westernmost portion of the site and connects with San Anselmo Creek 3,510 feet south of the lot, which drains into Corte Madera Creek and San Francisco Bay.

The Project site is a rectilinear lot, sloping steeply from west to east with an average 40% slope. Elevations on the Project site begin at 111 feet above sea level (asl) and extend up to 316 feet asl. The lot is long (approximately 750 feet northwest to southeast) and narrow (approximately 100 feet northeast to southwest).

The Project site is on the edge of an existing single-family neighborhood, most of which is part of the Town of San Anselmo. However, the Project site and its immediate neighbors are in unincorporated Marin County. The boundary for the City of San Rafael is approximately 0.15 miles to the east. As shown on Figure 2, Zoning, the lot is split-zoned; a narrow portion adjacent to Los Angeles Boulevard is zoned as Residential Single-Family (R1), as are the surrounding properties. The majority of the lot is zoned Residential Multiple Planned (RMP-0.75) (Figure 2).

Habitat. The Project site is surrounded by developed properties, although the site itself is undeveloped. There are two distinct vegetation community types within the Project site. The area bordering Sorich Creek is mixed willow series and riparian vegetation with corresponding habitat. Upland of the riparian habitat is a stand of coast live oak and other native tree species.

The dominant tree species within the mixed willow series is pacific willow (*Salix lasiandra*), but arroyo willow (*Salix lasiolepis*) and California buckeye (*Aesculus californica*) are also present. Within the riparian plant community, three species of high concern (listed by the California Invasive Plant Council) were identified: English ivy (*Hedera helix*), Scotch broom (*Cytisus scoparius*), and Himalayan blackberry (*Rubus armeniacus*).

The presence of exotic plant species indicates that the ecosystem has been dramatically altered from native vegetation. The trees throughout the Project site are nearly all native species, but the understory is dominated by exotic species.

Protected and Heritage Trees. The Project site contains 79 trees consisting of 6 different taxa. All but one of the taxa observed are native to California. Of the total 79 trees, 6 native trees are now dead. Of the 73 living trees, 29 are protected under the County's Native Tree Protection and Preservation Ordinance. Of the 29 protected trees, 9 are defined as heritage trees.

Historic and Cultural Resources. Per the Archaeological Report prepared by the Anthropological Studies Center (California State University, Sonoma), the Project area lies in the ethnographic territory of the Coast Miwok and is located within a moderately

sensitive area for historic and cultural resources. The Archaeological Report describes the Project area as located in the southeastern portion of the Canada de Herrera Land Grant, an over 6,000-acre rancho given to Domingo Sais in 1839. Although the Sais family sold some of their land following the Treaty of Guadalupe Hidalgo of 1848 and the Gold Rush, the remainder was patented to them in 1876. The 1858 plat of the rancho does not show any features in the vicinity of the Project area; during this time, the land was mostly used to graze cattle. No previously recorded cultural resources were found in the Project area. The closest recorded prehistoric resource is located approximately 500 feet to the northeast of the Project area and is composed of two ground stone artifacts (likely handstones or pestles based on available photographs).

Geology. The Project site is located within the Coast Range Geomorphic Province of California. The regional bedrock geology consists of complexly folded, faulted, sheared, and altered sedimentary, igneous, and metamorphic rock of the Jurassic-Cretaceous age (65–190 million years ago) Franciscan Complex.

The Project site is underlain by Franciscan mélange bedrock. Mélange is defined as a tectonic mixture of resistant rock types, principally sandstone, greenstone, chert, and serpentinite, embedded in a matrix of pervasively sheared shale. On the Project site, the mélange likely includes several rock types, including greenstone, sandstone, and some calc-silicate rocks. The site is located near the borderline of what is shown as alluvium, which consists of unconsolidated deposits of clay, silt, sand, and gravel material transported and deposited by streams. A significant existing area of artificial fill (approximately 6 to 8 feet thick) is located at the western edge of the property (west of the creek), near the end of the existing paved access road. Artificial fill is surficial material that is not characteristic of the naturally occurring surface materials, and the existing fill includes a significant quantity of concrete rubble. The Project site is not located in a mapped flood zone.

PROPOSED PROJECT

The applicant proposes to construct a two-story single-family residence with an attached garage. The Project would consist of 4,306 square feet of total building area and 3,872 square feet of total floor area for a floor area ratio of 5% on the 76,827-square-foot lot. Figure 3 shows the proposed site plan.

Associated permanent improvements would include a driveway and concrete parking deck with an emergency access/turnaround area, retaining walls to support the driveway, a vehicle bridge crossing Sorich Creek, bridge abutment, external pedestrian circulation, patios, decks, and landscaping for the site.

The driveway would provide access from Los Angeles Boulevard to the residence. It would be approximately 285 feet long and 12 feet wide and would include an 85-foot vehicle bridge. It would have an average grade of 8%. As required by the County Fire Department, the driveway would lead to a “hammerhead” turnaround to facilitate emergency access. A portion of this turnaround would be built onto a concrete parking deck. The foundations of this parking deck are planned for placement 20 feet from the creek, and the deck would be cantilevered over the creek (to the west). The Project includes a 1,200-gallon water tank that would be placed under the parking deck. The Project would require excavation to accommodate the proposed ground floor and subterranean parking structure. The maximum depth of excavation would be approximately 10 feet below grade and would result in roughly 300 cubic yards of soil

export from the Project site. For context, the average commercial dump truck carries between 10 and 14 cubic yards of soil.

The Project would be constructed on the lower portion of the Project site, between elevations 110 feet asl and 155 feet asl. The proposed residence would reach a maximum height of 26 feet above natural grade, and the exterior walls would have the following setbacks: approximately 112 feet from the western front property line, 80 feet from the eastern rear property line, 11 feet and 5 inches from the southern side property line, and 6 feet and 3 inches from the northern side property line.

The Project site is not currently served by utilities. However, water, sewer, and electrical service utilities would be extended from their existing underground locations along the existing 20-foot utility and roadway easement, which extends from Los Angeles Boulevard to the Project site, approximately 350 feet total. Water would be supplied by the Marin Municipal Water District (MMWD). The applicant would submit the plans to MMWD to ensure compliance with MMWD Code. The property is in the Ross Valley area of the Central Marin Sanitation Agency's (CMSA's) service area; thus, CMSA would provide wastewater treatment. Pacific Gas & Electric would supply electrical service.

Landscaping. A total of 556 square feet of landscaping is proposed within the Project site. In total, 19 trees, classified as either protected or heritage per the Marin County Code, are proposed for removal as part of Project construction. Figure 4 shows the location of existing trees and if they would remain or be removed as part of the Project. In total, 19 native trees are proposed to be planted southwest, beyond the area of construction disturbance, as shown on Figure 5, Planting Plan. They include seven California buckeye, five coast live oak (*Quercus agrifolia*), and seven Oregon white oak (*Quercus garryana*).

Construction. Project construction would occur over an estimated 24-month period and include typical construction phases, such as site preparation and grading, building construction, paving, and architectural finishing. At the building stage, the applicant would coordinate with MMWD to ensure code compliance. Construction is proposed in six phases (Table 1).

Phase 1 would last for 2 weeks and would remove trees and vegetation and install tree protection fencing. Tree protection fencing would be a minimum of 4 feet in height and form a continuous barrier around individual trees or groups of trees. Fencing would serve as a barrier to prevent encroachment of any type of construction activities, equipment, materials storage, or personnel. There would be limited personnel on site, no temporary power, and no material stockpile. The overflow parking would occur on Sacramento Avenue.

Phase 2, the following 2 weeks, would excavate the pad foundation and construct the temporary road for site access. This 10-foot-wide temporary access road across Sorich Creek would be in place for construction of the permanent bridge. It would be composed of approximately 140 cubic yards of compacted fill soil placed on a mat of geotextile fabric. The temporary road would have a 237-square-foot staging area on the eastern side of Sorich Creek. An 18-inch diameter culvert would be placed in the flow line of Sorich Creek while the fill is in place. Both the temporary access road and culvert would be removed upon completion of the bridge. The personnel, power, material stockpile, and parking conditions are the same as Phase One.

Phase 3, the following month, would include construction of retaining wall footings, the retaining walls, and house footings. Material stockpiles would be located next to the temporary road.

Phase 4, the following 2 weeks, would include the construction of the bridge footings. Space for material stockpiles would be available on the graded area of the home.

Phase 5 would take place for 1.5 months and include removal of the temporary road, construction of the bridge, and installation of temporary power.

Phase 6, the following 19 months, would entail installation of the erosion control devices and construction of the residential structures.

Table 1: Project Phases

Phase	Duration	Main Activity
1	2 weeks	Remove tree/vegetation and install tree protection fencing.
2	2 weeks	Excavate foundation and construct temporary road.
3	1 month	Construct retaining wall footings, retaining walls, and house footings.
4	2 weeks	Construct bridge footings.
5	1.5 months	Remove temporary road, construct bridge, and install temporary power.
6	19 months	Install erosion control devices and construct home.
TOTAL	**24 months**	**--**

During Project construction, typical construction equipment that would be used on the Project site would include backhoes, dozers, pavers, concrete mixers, trucks, saws, and hammers. Trucks providing deliveries to the Project site and hauling from the Project site would be anticipated to access the site from Los Angeles Boulevard.

Materials proposed for construction of the new residence include vertical fiber cement siding in a pale green color, grey composition shingle roofing, grey Trex decking, and concrete retaining walls.

ENTITLEMENTS AND REQUIRED APPROVALS

The Project falls under the influence of the following County planning documents and policies but does not fall under a community plan subarea:

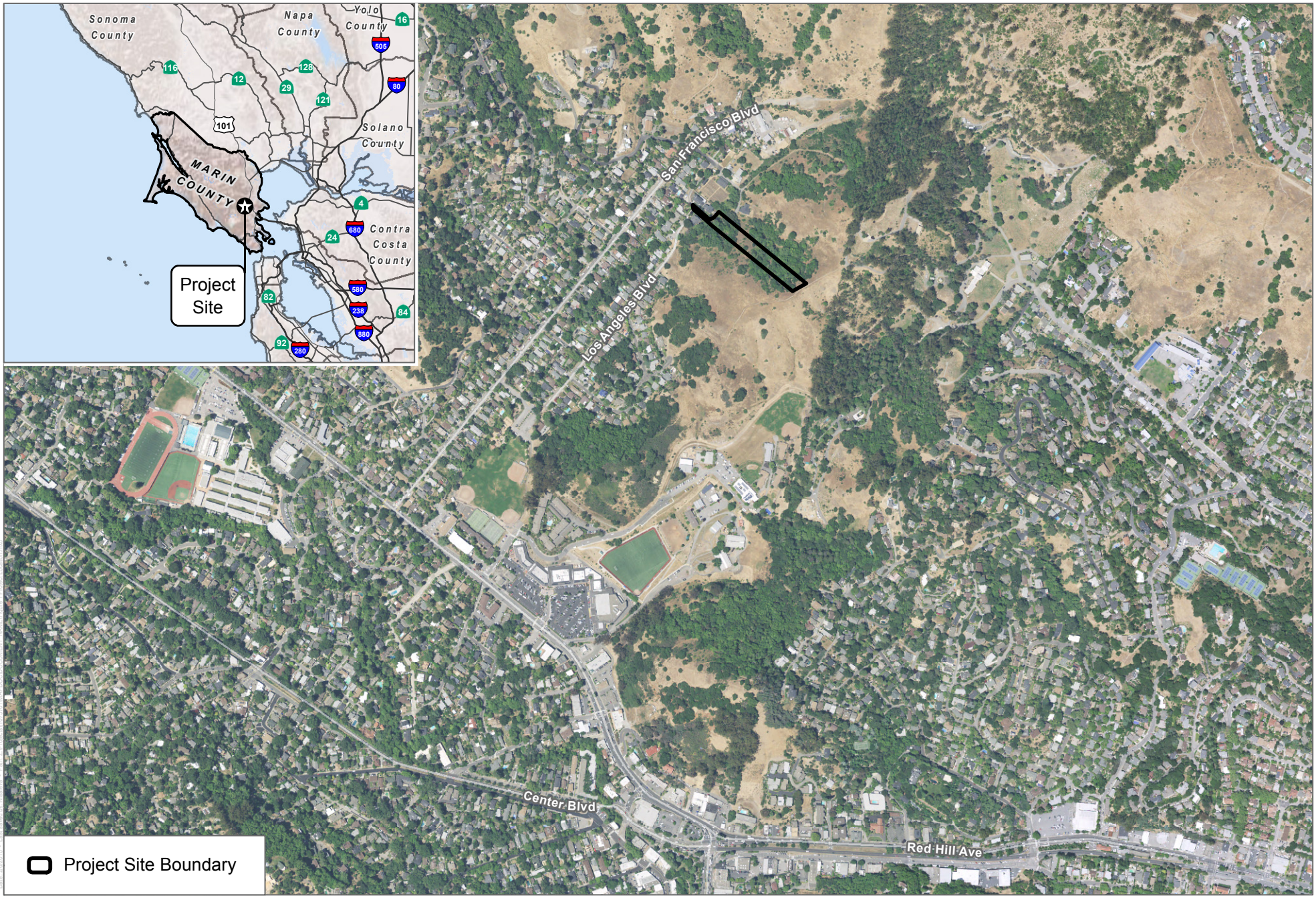
- Marin Countywide Plan
- Marin County Code (Title 22)

The following County of Marin approvals are required for the Project:

- Design review
- Tree removal permit

The Project requires the following permit approvals:

- San Francisco Bay Regional Water Quality Control Board (RWQCB) — Clean Water Act, Section 401, Water Quality Certification
- California Department of Fish and Wildlife (CDFW) — Section 1602 Streambed Alteration Agreement
- U.S. Army Corps of Engineers (ACOE) — Clean Water Act, Section 404, Permit



SOURCE: NAIP 2016

DUDEK

0 425 850 Feet

FIGURE 1

Project Location

Rogers Design Review and Tree Removal Permit

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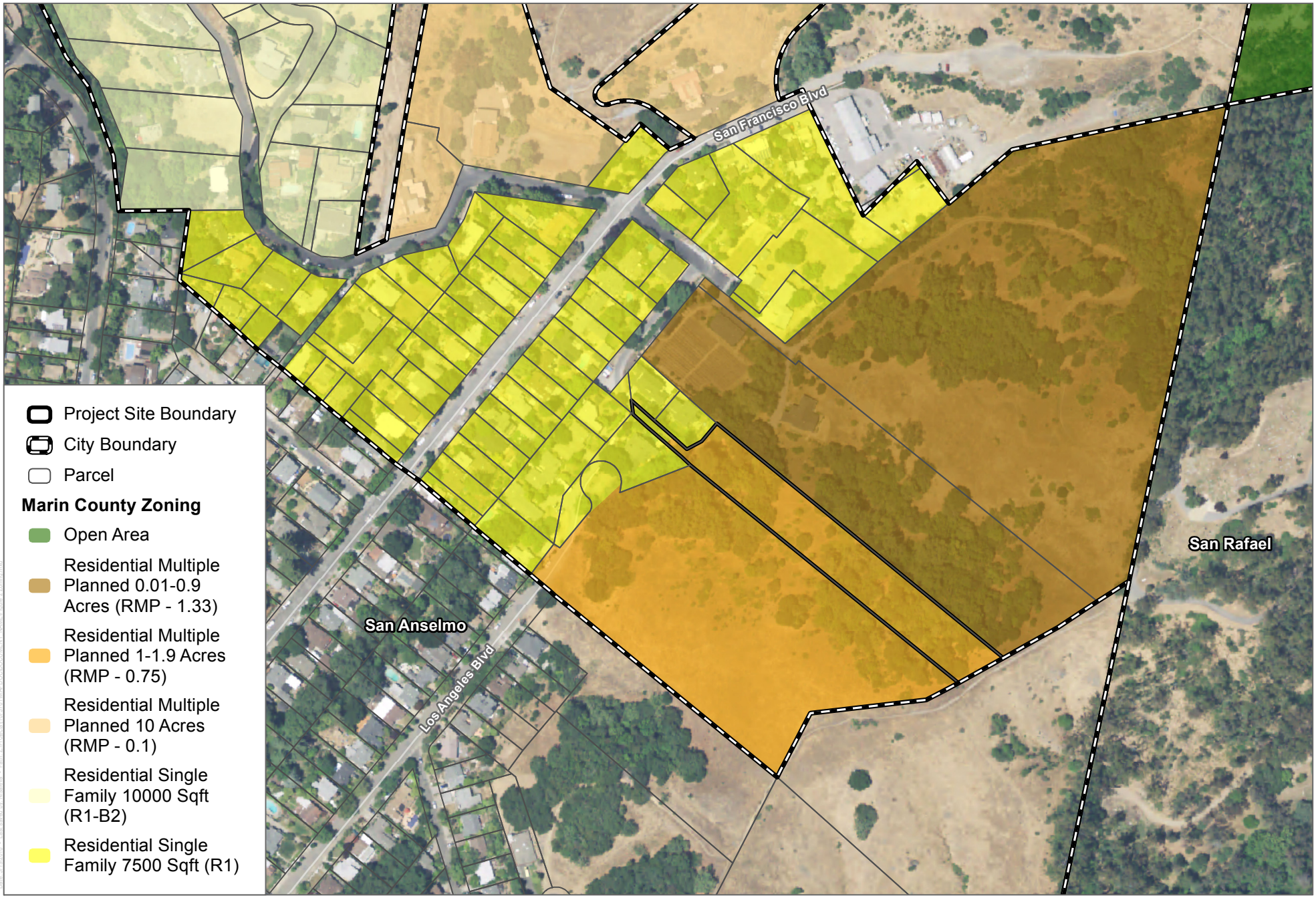

SOURCE: NAIP 2016, Marin County 2015

DUDEK

0 125 250 Feet

FIGURE 2

Zoning

Rogers Design Review and Tree Removal Permit

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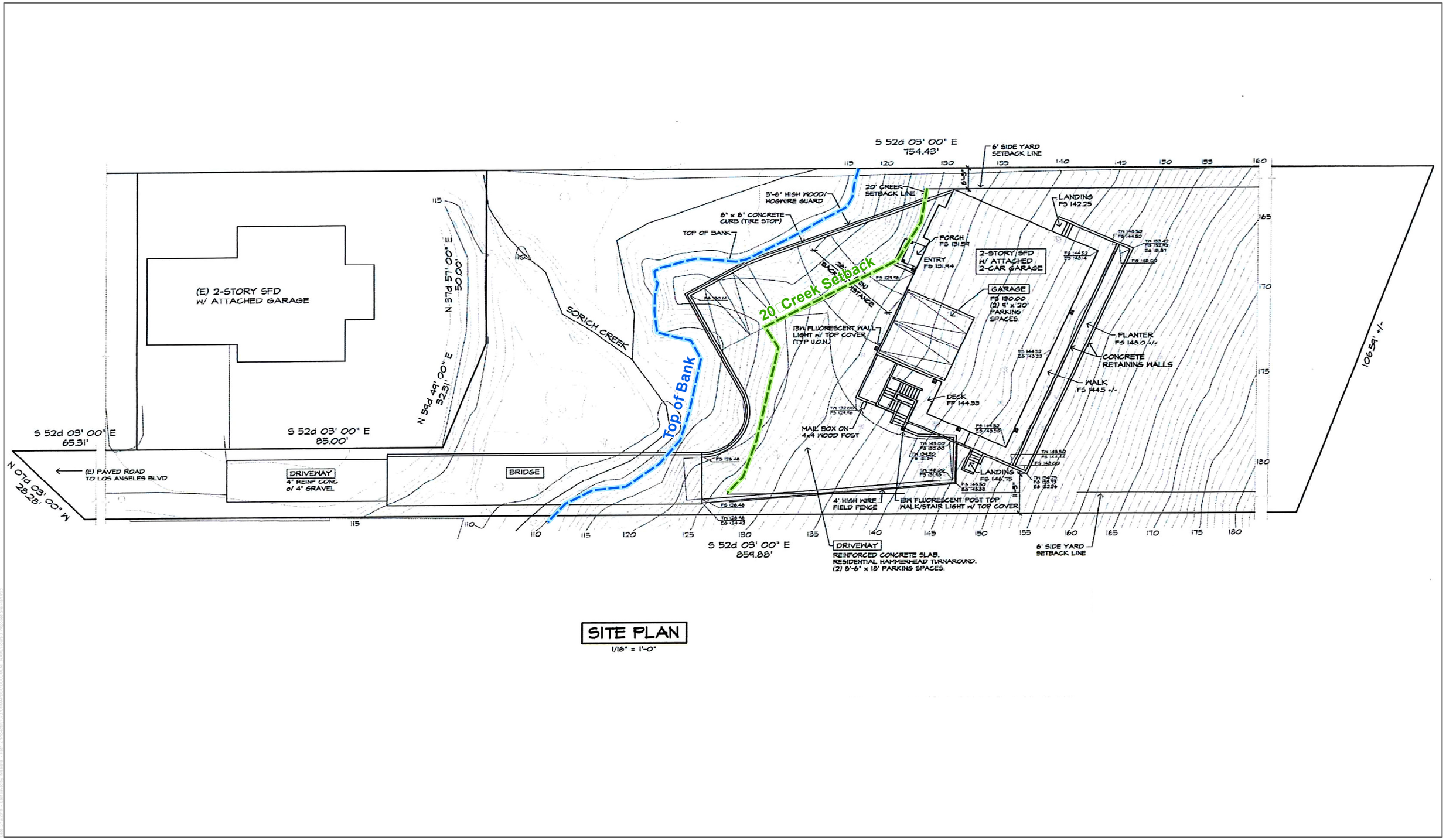

SOURCE: OST Engineering, Inc. 2017

DUDEK 0 12.5 25 Feet

FIGURE 3

Proposed Site Plan

Rogers Design Review and Tree Removal Permit

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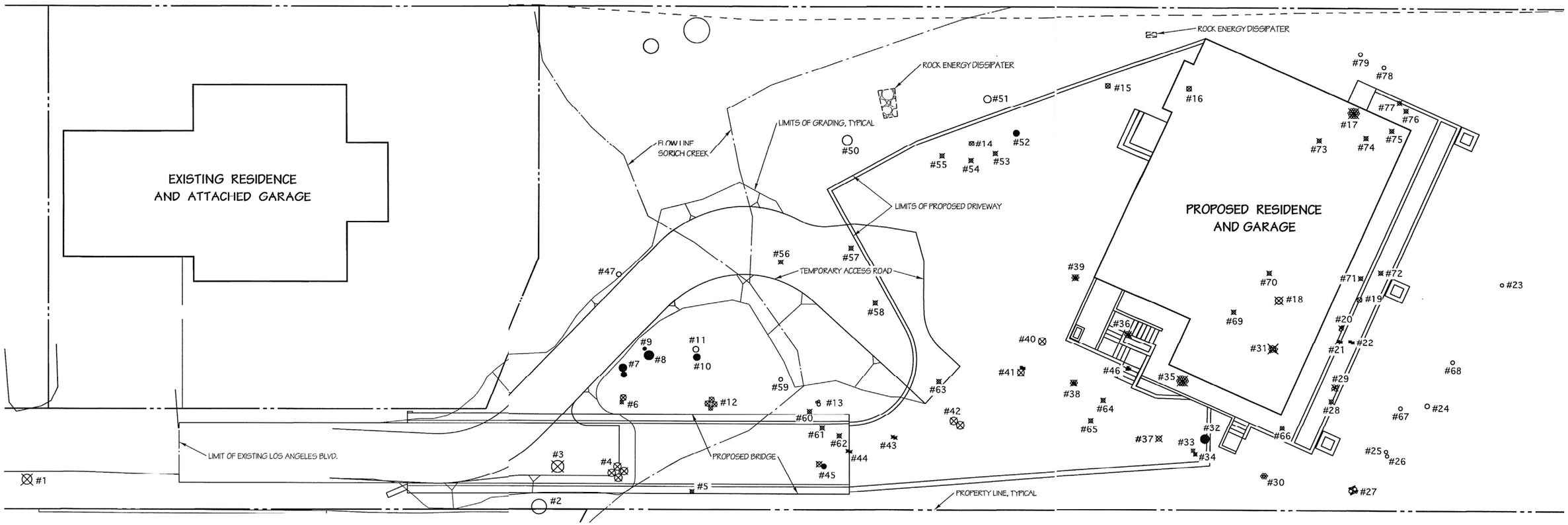

LEGEND

#13 ○ EXISTING TREE TO REMAIN
#16 ⊠ EXISTING TREE TO BE REMOVED
#32 ● EXISTING DEAD TREE

SOURCE: Balcerak Design 2017

DUDEK

0 187.5 375 Feet

FIGURE 4

Existing Trees

Rogers Design Review and Tree Removal Permit

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PLANTING LEGEND

KEY	SIZE	BOTANICAL NAME	COMMON NAME	REMARKS	MATURE H X W	WATER USE
		TREES				
■ ACA	#15	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE		15'-25' X 15'-30'	VERY LOW
■ QAG	#15	QUERCUS AGRIFOLIA	COAST LIVE OAK		30'-50' X 25'-80'	VERY LOW
■ QGA	#15	QUERCUS GARRYANA	OREGON WHITE OAK		30'-50' X 25'-40'	LOW
		SHRUBS				
■ BAQ	#5	BERBERIS AQUIFOLIUM	OREGON GRAPE	SYN. MAHONIA AQUIFOLIUM	4'-6' X 3'-4'	MEDIUM
BBN	#1	BUDDLEJA DAVIDII 'BLACK KNIGHT'	BUTTERFLY BUSH		6'-10' X 6'-10'	MEDIUM
◪ CVV	#5	CEANOTHUS MARITIMUS 'VALLEY VIOLET'	SANTA BARBARA CEANOTHUS		2'-3' X 3'-4'	LOW
■ HDI	#5	HOLODISCUS DISCOLOR	OCEAN SPRAY		4'-6' X 4'-6'	LOW
LOM	#5	LANTANA MONTEVIDENSIS	TRAILING LANTANA		2' X 6'-10'	LOW
□ SAC	#1	SALVIA CLEVELANDII 'ALLEN CHICKERING'	SAGE		3'-4' X 3'-4'	LOW
■ SYA	#5	SYMPHORICARPOS ALBUS VAR. LAEVIGATUS	SNOWBERRY		3'-8' X 3'-12'	LOW
		PERENNIALS				
■ AMI	#1	ACHILLEA MILLEFOLIUM	YARROW		1'-3' X 1'-3'	LOW
KFL	#1	KNIPHOFIA UVARIA 'FLAMENCO'	RED HOT POKER PLANT		2' X 2'	LOW
◪ LOP	#1	LEYMUS CONDENSATUS 'CANYON PRINCE'	RYEGRASS		2'-3' X 3'-5'	LOW
		VINES				
■ CLG	#5	CLEMATIS LIGUSTICIFOLIA	CLEMATIS		6'-20' X 6'-20'	MEDIUM
TJA	#5	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE		1'-3' X 4'-10'	MEDIUM

□ NATIVE TO CALIFORNIA
◪ NATIVE TO THE BAY AREA
■ NATIVE TO MARIN COUNTY

Summary Hydrozone Table

Hydrozone	Area (sq. ft.)	% of Landscape
High water use	0 sq. ft.	0 %
Moderate water use	228 sq. ft.	5.0 %
Low water use	2039 sq. ft	45.2 %
Very low water use	2253 sq. ft	49.8 %
Total	4520 sq. ft	100%

Maximum Applied Water Allowance

Enter Zip Code 94960 40.03 Residential? Yes

Enter Project Information

Project Name:	Rogers Residence
Address:	308 Los Angeles Blvd
Meter Number:	New
Location/Sheet No.	
Date:	5/2/17

Maximum Applied Water Allowance (MAWA):

Landscaped Area:	4,520	sqft
Special Landscaped Area	0	sqft
MAWA =	82	CCF

Estimated Total Water Use (ETWU)

Low water use plant	4,292	sqft
Moderate water use plant	228	sqft
High water use plant	0	sqft
Efficiency Factor	0.80	

% of Total Landscape Irrigated with Drip	Irrigation Efficiency Factor	
0-33%	select	0.75
34-66%	select	0.80
67-100%	select	0.85

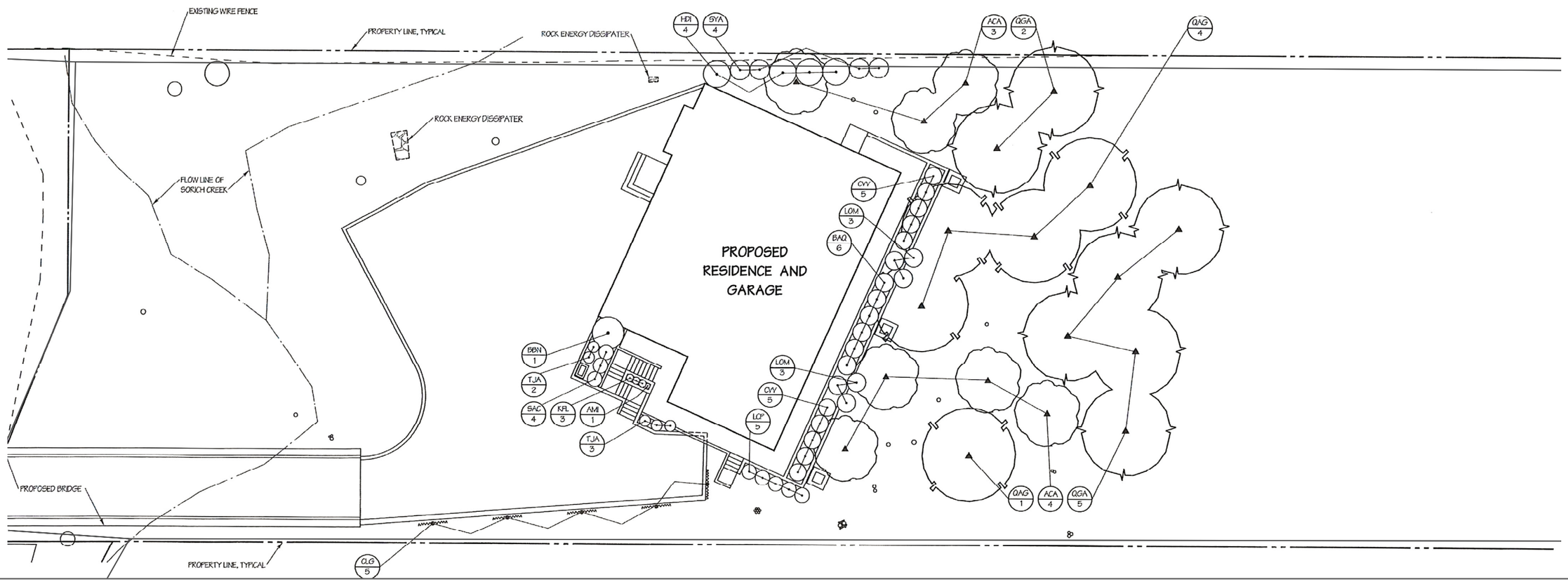
ETWU = 59 CCF

Water Use Table

ETWU	Gallons:	44,132	CCF's:	59	AF:	0.14
Baseline Period	Jan/Feb	Mar/Apr	May/Jun	Jul/Aug	Sep/Oct	Nov/Dec
Baseline CCF's	2	4	11	17	16	9

1 CCF = 748 Gallons, 1 AF = 435.0 CCF's

For more information please contact 415-945-1497 or see our website at www.marinwater.org



SOURCE: Balcerak Design 2017

DUDEK 0 10 20 Feet

FIGURE 5

Planting Plan

Rogers Design Review and Tree Removal Permit

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II. CIRCULATION AND REVIEW

This Initial Study/Mitigated Negative Declaration is being circulated for a 30-day review and comment period pursuant to the California Environmental Quality Act (CEQA) Guidelines, Section 15073. It is being circulated to agencies that have jurisdiction over the subject property or the natural resources affected by the Project and to consultants, community groups, and interested parties to attest to the completeness and adequacy of the information contained in the Initial Study as it relates to the concerns that are germane to the agency's or organization's jurisdictional authority or to the interested parties' issues. Marin County agencies include the following:

- Marin County Department of Public Works (DPW)
- Marin County Community Development Agency
- Marin County Fire Department, County Service Area 31

Trustee and responsible agencies include the following:

- ACOE
- U.S. Fish and Wildlife Service
- CDFW
- California RWQCB

III. EVALUATION OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Pursuant to Section 15063 of the CEQA Guidelines and the County Environmental Impact Report (EIR) Guidelines, Marin County will prepare an Initial Study for projects not categorically exempt from the requirements of CEQA. The Initial Study evaluation is a preliminary analysis of a project which provides the County with information to use as the basis for deciding whether to prepare an EIR or Negative Declaration. The points listed below describe the primary procedural steps undertaken by the County in completing an Initial Study checklist evaluation and, in particular, the manner in which significant environmental effects of the Project are made and recorded:

A. The determination of significant environmental effect is to be based on substantial evidence contained in the administrative record and the County's environmental database consisting of factual information regarding environmental resources and environmental goals and policies relevant to the County. As a procedural device for reducing the size of the Initial Study document, relevant information sources cited and discussed in topical sections of the checklist evaluation are incorporated by reference into the checklist (e.g., general plans, zoning ordinances). Each of these information sources has been assigned a number which is shown in parenthesis following each topical question and which corresponds to a number on the data base source list provided herein in Section VIII, References. Other sources used or individuals contacted may also be cited in the discussion of topical issues where appropriate.

B. In general, a Negative Declaration shall be prepared for a project subject to CEQA when the Initial Study demonstrates that there is no substantial evidence that the project may have one or more significant effects on the environment. A Negative Declaration shall also be prepared if the Initial Study identifies potentially significant effects, but revisions to the Project made by or agreed to by the applicant prior to release of the Negative Declaration for public review would avoid or reduce such effects to a level of less than significance, and there is no substantial evidence before the Lead County Department that the Project as revised will have a significant effect on the environment. A signature block is provided in Section VII of this Initial Study to verify that the applicant has agreed to incorporate mitigation measures into the Project in conformance with this requirement.

C. All answers to the topical questions must take into account the whole of the 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. Significant unavoidable cumulative impacts shall be identified in Section VI of this Initial Study (Mandatory Findings of Significance).

D. A brief explanation shall be given for all answers except "Not Applicable" answers that are adequately supported by the information sources the Lead County Department cites in the parenthesis following each question. A "Not Applicable" 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 "Not Applicable" answer shall be discussed 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).

E. "Less Than Significant Impact" is appropriate if an effect is found to be less than significant based on the Project as proposed and without the incorporation of mitigation measures recommended in the Initial Study.

F. "Potentially Significant Unless Mitigated" applies where the incorporation of recommended mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The Lead County Department must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level.

G. "Significant Impact" is appropriate if an effect is significant or potentially significant, or if the Lead County Department lacks information to make a finding that the effect is less than significant. If there are one or more effects which have been determined to be significant and unavoidable, an EIR shall be required for the Project.

H. The answers in this checklist have also considered the current CEQA Guidelines and Appendix G contained in those guidelines.

IV. ISSUES (AND SUPPORTING INFORMATION SOURCES)

1. LAND USE AND PLANNING

Would the proposal:

a) Conflict with applicable Countywide Plan designation or zoning standards? (source #: 4, 5)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project site is governed by the land use designation contained in the Marin Countywide Plan and by zoning standards contained in Title 22 of the Marin County Code.

Marin Countywide Plan

The Marin Countywide Plan establishes and maps various land use designations. The Project site is split into land use designation of Single-Family 6 (SF6) and Planned Residential (PR). The Single-Family 6 (SF6) designation is one of several low-density residential land use categories for areas where public services and some urban services are available and where properties are not typically limited by physical hazards or natural resources. Areas designated Single-Family 6 (SF6) have minimum lot sizes of 10,000 square feet or less and a density range of four to seven dwelling units per acre, and a floor area ratio of 10%–30%.[1] The Planned Residential (PR) designation is a rural/residential category for areas where public services are limited and on properties where physical hazards and natural resources may restrict development. The minimum lot size is 20,000 square feet and a density range of one unit per 1 to 10 acres, and a floor area ratio of 10%–90%. The property (zoned R1 and RMP-0.75) is consistent with the SF6, PR land use designation. The 4,306 square feet of total building area on a 76,827-square-foot lot represents a floor area ratio of 5%. However, although the Project site does not fall within the floor area ratio limits, it contains physical constraints that restrict development. Therefore, the Project would be in conformance with the Marin Countywide Plan land use designations.

Marin County Code

As previously noted, the Project site is split-zoned into two different residential zoning districts. The narrow portion of the site adjacent to Los Angeles Boulevard is zoned as Residential Single-Family (R1). The principally permitted use allowed in this district is single-family residential development. The portion of the lot where the proposed house and associated residential uses would occur is zoned Residential Multiple Planned (RMP-0.75). The purpose of this zoning district is to allow flexibility in residential development and various types of housing to be designed without the confines of specific yard requirements.

Both zoning districts recommend or require a maximum height for the main building not to exceed 30 feet above surrounding grade. The maximum height of the proposed residence would be 26 feet. Setbacks for the Residential Single-Family (R1) zoning district are contained in Marin County Code, Section 22.10.140, while the Residential Multiple Planned (RMP-0.75) zoning district is determined by site constraints and implemented through discretionary review in accordance with Marin County Code, Section 22.42, Design Review. The Project would comply with the development standards established by

the Residential Single-Family (R1) and Residential Multiple Planned (RMP-0.75) zoning districts because it would have the following minimum setbacks for the exterior walls of the future residence to property lines: 144 feet from the western front property line, 20 feet from the northern side property line, 100 feet from the southern side property line, and over 100 feet from the eastern rear property line. With approval of the proposed setbacks, the Project would be consistent with the Residential Single-Family (R1) and Residential Multiple Planned (RMP-0.75) zoning districts with respect to height and setbacks.

Marin County Code, Section 22.27, establishes regulations for native tree protection and preservation and requires a Tree Removal Permit for removal of protected trees and heritage trees, as defined, except under certain circumstances. As described in the Project Description, the applicant has provided documentation of the number of protected and heritage trees within the Project area and has proposed a plan for the replacement planting of trees that would be removed.

The Project is in compliance with the zoning standards and would not conflict with any applicable land use plans, policies, or regulations. Impacts would be less than significant.

b) Conflict with applicable environmental plans or policies adopted by Marin County? (source #: 1, 4)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The environmental protection policies contained in the Marin Countywide Plan that pertain to the Project include the following: (1) protection of riparian systems; (2) species and habitat preservation; (3) prevention of air, water, and noise pollution; (4) protection of visual resources and amenities; (5) protection of trees; (6) minimization of grading activities; and (7) appropriate streamside development and erosion control. The relevant policies are listed below, followed by the policy analyses.

2007 Marin Countywide Plan Policies

Policy BIO-1.3 – Protect Woodlands, Forests, and Tree Removal

BIO-1.3: *The County shall strive to protect large trees, trees with historical importance, and oak woodland habitat, and prevent the untimely removal of trees through implementation of tree preservation ordinance.*

Consistent. Of the 73 living trees, 29 are protected under the County's Native Tree Protection and Preservation Ordinance. Of the 29 protected trees, 9 are defined as heritage trees. With the development of the building area and driveway, 19 protected or heritage trees are located within the area of disturbance and are proposed for either removal or may be impacted by the development of the lot. Replacement of the trees would be recommended at a 2:1 ratio wherever possible as per the standards identified in Marin County Code Section 22.26.040. Adherence to these regulations would reduce impacts to trees on the property to a less-than-significant level.

Policies BIO-1.5, BIO-1.6, BIO-1.7, BIO-2.1, BIO-2.4, and BIO-2.5 – Promote Use of Native Plant Species, Control Spread of Invasive Exotic Plants, Remove Invasive Exotic Plants, Include Resource Preservation in Environmental Review, Protect Wildlife Nursery Areas and Movement Corridors, and Restrict Disturbance in Sensitive Habitat During Nesting Season

BIO-1.5: *Encourage use of a variety of native or compatible nonnative, non-invasive plant species indigenous to the site vicinity as part of project landscaping to improve wildlife habitat values.*

BIO-1.6: *Prohibit use of invasive species in required landscaping as part of the discretionary review of proposed development.*

BIO-1.7: *Require the removal of invasive exotic species, to the extent feasible, when considering applicable measures in discretionary permit approvals for development projects unrelated to agriculture, and include monitoring to prevent re-establishment in managed areas.*

Consistent. These policies seek to protect and enhance native vegetation. As analyzed in Section V.8, Biological Resources, 19 protected trees, 6 of which are heritage trees, are proposed for removal. Replacement of the trees would be recommended at a 2:1 ratio wherever possible as per the standards identified in Marin County Code Section 22.26.040. Should it be needed, the replacement trees would be planted, and selected in accordance with the Ross Valley Fire Department standards, and the replanting and tree replacement would be verified during the Building Permit Phase. Therefore, the impacts associated with this project would be less than significant related to this issue. The Project site is within the Wildland-Urban Interface (WUI), and new landscaping for each developed lot would be required to comply with Ross Valley Fire and Marin County Fire Department Fire Protection Standard 220, Vegetation Management. Compliance would include development, submittal, and approval of a Vegetation Management Plan. This rule requires establishment of a defensible space zone around structures that must be planted with fire-resistant plants and irrigated if necessary. Standard 220 requires property owners to use fire resistant plants, and to select native or domesticated plants that best suit the architectural and planning design of the Project. Standard 220 includes a list of prohibited plants, which includes many common invasive species. Adherence to Standard 220 will ensure that the Project does not result in introduction or spread of invasive plant species, and thus will ensure consistency with these policies.

BIO-2.1: *Require environmental review pursuant to CEQA of development applications to assess the impact of proposed development on native species and habitat diversity, particularly special-status species, sensitive natural communities, wetlands, and important wildlife nursery areas and movement corridors. Require adequate mitigation measures for ensuring the protection of any sensitive resources and achieving "no net loss" of sensitive habitat acreage, values, and function.*

BIO-2.4: *Ensure that important corridors for wildlife movement and dispersal are protected as a condition of discretionary permits, including consideration of cumulative impacts. Features of particular importance to wildlife for movement may include riparian corridors, shorelines of the coast and bay, and ridgelines. Linkages and corridors shall be provided that connect sensitive habitat areas such as woodlands, forests, wetlands, and essential habitat for special-status species, including an assessment of cumulative impacts.*

BIO-2.5: *Limit construction and other sources of potential disturbance in sensitive riparian corridors, wetlands, and baylands to protect bird nesting activities. Disturbance should generally be set back from sensitive habitat during the nesting season from March 1 through August 1 to protect bird nesting, rearing, and fledging activities. Preconstruction surveys should be conducted by a qualified professional where development is proposed in sensitive habitat areas during the nesting season, and appropriate restrictions should be defined to protect nests in active use and ensure that any young have fledged before construction proceeds.*

Consistent. These policies address the potential effects of the Project on existing sensitive species and habitats. The Wildlife Habitat Assessment and Vegetation Assessment, both provided by Balcerak Design, evaluate the potentially occurring wildlife, vegetation, and habitat. Dudek conducted a peer review of both assessments. **Mitigation Measures 8.a.-2** through **8.a-4** would address impacts to birds and other potential species that could be on site. Through these mitigation measures, the Project is consistent with the policies discussed above because the Project would not reduce the number of potentially occurring endangered, threatened, or rare plant or animal species in the vicinity. The Project would result in a less-than-significant impact with mitigation incorporated related to this issue. Refer to Section V.8 for a more detailed analysis of this issue.

Policy BIO-4.1 – Restrict Land Use in Stream Conservation Areas

BIO-4.1: *A Stream Conservation Area (SCA) is established to protect the active channel, water quality and flood control functions, and associated fish and wildlife habitat values along streams. Development shall be set back to protect the stream and provide an upland buffer, which is important to protect significant resources that may be present and provides a transitional protection zone. Best management practices shall be adhered to in all designated SCAs. Best management practices are also strongly encouraged in ephemeral streams not defined as SCAs.*

Consistent. Pursuant to Policy BIO-4.1: The installation of utilities and the driveway bridge would require work within the stream conservation area of Sorich Creek on the Project site. The site is not feasibly accessible through any other egress due to site topography, existing protected open areas, and existing development and a private road that borders the western frontage of the property. Pursuant to Countywide Plan policies in BIO-4.1, driveway and other utility connections are allowed to encroach within protected Stream Conservation Area boundaries if no other areas on the property are suitable for development. The work associated with the main house would maintain the required 20-foot buffer from the delineated top of bank. Proposed development on the property would adhere to the Countywide Plan policies in BIO-4.1; therefore, the Project is consistent with this policy.

Policies BIO-4.19 and BIO-4.20 – Maintain Channel Stability and Minimize Runoff

BIO-4.19: *Applicants for development projects may be required to prepare a hydraulic and/or geomorphic assessment of on-site and downstream drainageways that are affected by project area runoff. This assessment should be required where evidence that significant current or impending channel instability is present, such as documented channel bed incision, lateral erosion of banks (e.g., sloughing or landsliding), tree collapse due to streambank undermining and/or soil loss, or severe in-channel sedimentation, as determined by the County.*

BIO-4.20: *In order to decrease stormwater runoff, the feasibility of developing a peak stormwater management program shall be evaluated to provide mitigation opportunities such as removal of impervious surface or increased stormwater detention in the watershed.*

Consistent. As discussed in Section V.4, Water, the Project includes a rainwater system designed to capture more than double the anticipated increase in post-Project runoff. This design feature prevents overflow from the cistern from increasing flows in Sorich Creek relative to pre-Project conditions. Furthermore, the vehicular bridge footings have been located outside the 100-year flood, thereby avoiding direct impacts on drainage patterns within the creek. Compliance with the State Water Resources Control Board (SWRCB) Phase II Small MS4 Permit; Marin County Code, Section 24.04.627; and standard construction requirements administered by the Department of Public Works would ensure the Project would maintain channel stability and not generate additional surface runoff.

Policies WR-1.3 and WR 2.3 – Improve Infiltration and Avoid Erosion and Sedimentation

WR-1.3: *Enhance water infiltration throughout watersheds to decrease accelerated runoff rates and enhance groundwater recharge. Whenever possible, maintain or increase a site's predevelopment infiltration to reduce downstream erosion and flooding.*

WR-2.3: *Minimize solid erosion and discharge of sediments into surface runoff, drainage systems, and water bodies. Continue to require grading plans that address avoidance of soil erosion and on-site sediment retention. Require developments to include on-site facilities for the retention of sediments, and, if necessary, require continued monitoring and maintenance of these facilities upon project completion.*

Consistent. Construction of the future residence, driveway, and associated infrastructure would result in grading of the Project site that could result in erosion of on-site soils. Through the building permit processes, the Project would be required to comply with County standards and best management practices (BMPs) required by DPW, which include installation of erosion-control blankets, cover of exposed soil with straw mulch, preservation of existing vegetation, and use of fiber rolls. Additionally, erosion would be avoided with the collection and dispersal of runoff through appropriate drainage systems and erosion-control measures that would be reviewed and approved by DPW and required to comply with County standards. Refer to Section V.3, Geophysical, for additional discussion on these issues. The Project would not result in substantial soil erosion or discharge of sediments or pollutants into surface runoff due to excavation and drainage improvements as a result of meeting required standards. Therefore, consistency with these policies would be achieved.

Policies EH-2.1 and EH-2.3 – Safety from Seismic and Geologic Hazards

EH-2.1: *Require development to avoid or minimize potential hazards from earthquakes and unstable ground surfaces.*

EH-2.3: *Design and construct all new buildings to be earthquake resistant. The minimum level of design necessary would be in accordance with seismic provisions and criteria contained in the most recent version of the State and County Codes. Construction would require effective oversight and enforcement to ensure adherence to the earthquake design criteria.*

Consistent. Based on review of geologic maps, Alquist–Priolo Earthquake Fault Zone maps, and on-site reconnaissance, there is no evidence that any fault crosses the Project site. The site is not located within an Alquist–Priolo Special Studies Zone. The building permit process would ensure the Project would be designed and constructed to comply with California Building Code standards, which would avoid or minimize potential impacts related to soil stability, seismicity, and landslides. Therefore, the Project is consistent with these policies.

Policies EH-3.1 and EH-3.2 – Safety from Flooding and Inundation

EH-3.1: *Utilize regulations instead of flood control projects whenever possible to minimize losses in areas where flooding is inevitable.*

EH-3.2: *Ensure that flow capacity is maintained in stream channels and floodplains, and achieve flood control using biotechnical techniques instead of storm drains, culverts, riprap, and other forms of structural stabilization.*

Consistent. As discussed in Section V.4, Water, compliance with the Marin County Code requirements would reduce potentially significant impacts caused by flooding to less-than-significant levels. The Project would meet flood control requirements, as verified by DPW during the Building Permit process, ensuring consistency with these policies.

Policies EH-4.1, EH-4.2, and EH-4.5 – Safety from Fires and Regulate Land Uses to Protect from Wildfires

EH-4.1: *Ensure that adequate fire protection is provided in new development and when modifications are made to existing structures.*

EH-4.2: *Abate the buildup of vegetation around structures.*

EH-4.5: *Land use regulations, including but not limited to subdivision approvals and denials, as means of protecting people and property from hazards associated with wildland fires.*

Consistent. The Project would meet fire safety requirements, as verified by the Ross Valley Fire Department during the building permit process, including but not limited to the approval of a vegetation management plan. The Project is located within the WUI. Fire risk reduction measures are required by the Building Code and have been specified for the Project by the Ross Valley Fire Department. These measures include the minimum horizontal and vertical roadway clearance, turnaround dimensions, and bridge and road design standards to accommodate emergency vehicles.

Policies AIR-1.2 and AIR-1.3 – Meet Air Quality Standards and Require Mitigation of Air Quality Impacts

AIR-1.2: *Seek to attain or exceed the more stringent of federal or State Ambient Air Quality Standards for each measured pollutant.*

AIR-1.3: *Require projects that generate potentially significant levels of air pollutants, such as quarry, landfill operations, or large construction projects, to incorporate best available air quality mitigation in the project design.*

As discussed in Section V.5, Air Quality, the Project would not result in potentially significant impacts to air quality related to dust and vehicle-related emissions during construction. Implementation of the standard County permit requirements and the Dust Control measure adopted in 22.20.040 of the Marin County Code and included in Section V.5 of this Initial Study will ensure conformance with the identified policy by reducing air quality impacts to a less-than-significant level and will ensure compliance with the identified policy. The Project is consistent with Policies AIR-1.2 and 1.3.

Policy AIR-4.1 – Reduce Greenhouse Gas Emissions

AIR-4.1: *Adopt practices that promote improved efficiency and energy management technologies; shift to low-carbon and renewable fuels and zero emission technologies.*

Consistent. As discussed in Section V.6, Greenhouse Gas Emissions, the single-family home constructed under the Project would be required to comply with the Marin County Green Building Ordinance and California Title 24 building codes, which would ensure that construction and use of the residences minimizes greenhouse gas emissions. Section V.6 finds that the Project would not result in significant increases in greenhouse gas emissions, nor would it conflict with existing plans to reduce such emissions.

Policies CD-1.1 and CD-5.2 – Direct Land Uses to Appropriate Areas

CD-1.1: *Concentrate urban development in the City-Centered Corridor, where infrastructure and facilities can be made available most efficiently. Protect sensitive lands in the Baylands Corridor. Emphasize agricultural uses in the Inland Rural Corridor, along with preservation of resources, habitat, and existing communities. Focus on open space, recreational, and agricultural land uses, as well as preservation of existing communities, in the Coastal Corridor.*

CD-5.2: *For health, safety, and general welfare, new development should occur only when adequate infrastructure is available, consistent with the following findings:*

a. Project-related traffic will not cause the level of service established in the circulation element to be exceeded.

b. Any circulation improvements or programs needed to maintain the established level of service standard have been programmed and funding has been committed.

c. Environmental review of needed circulation improvement projects or programs has been completed.

d. The time frame for completion of the needed circulation improvements or programs will not cause the established level of service standard to be exceeded.

e. Wastewater, water (including for adequate fire flows), and other infrastructure improvements will be available to serve new development by the time the development is constructed.

Consistent. These Marin Countywide Plan policies all direct development to areas deemed suitable for the type of development proposed and already served by essential infrastructure. As discussed in Sections V.12, Public Services, and V.13, Utilities and Service Systems, the Project site is adequately served with infrastructure and essential services. As discussed in

Section V.7, Transportation/Circulation, the Project would not cause a reduction in intersection level of service, and no circulation improvements are required.

Policies HS-2.2, HS-2.3, and DES-3.b – Well-Designed Housing

HS-2.2: *Enhance neighborhood identity and sense of community by designing all new housing to be sensitive to and compatible with the scale and form of the surrounding area.*

HS-2.3: *The intent in the design of new housing is to provide stable, safe, and attractive neighborhoods through high-quality architecture, site planning, and amenities.*

DES-3.b: *Promote design that fits into the context of the neighborhood.*

Consistent. As analyzed during the design review process, the future residence would fit within the context of the neighborhood, minimize the perception of mass and bulk through the modest size of the building envelope, and comply with the Single-Family Residential Design Guidelines and the Planned District Development Standards. Thus, the Project would be consistent with these policies.

Policy NO-1 – Protection from Excessive Noise

NO-1: *Direct the siting, design, and insulation of new development to ensure that acceptable noise levels are not exceeded.*

Consistent. The Project would create two types of noise impacts: noise associated with construction activities and noise associated with residential uses. Section V.11, Noise, concludes that the noise associated with construction activities and the proposed residential uses would be less than significant, ensuring compliance with the identified policy.

c) Affect agricultural resources, operations, or contracts (e.g., impacts to soils or farmlands, impacts from incompatible land uses, or conflicts with Williamson Act contracts)? (source #: 2, 3)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[ ]**	**[X]**

The California Department of Conservation Important Farmland Map for the County indicates that there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on or in the immediate vicinity of the Project site. The Project site is not subject to any Williamson Act contracts. Therefore, the Project would not conflict with any existing zoning for agricultural use. Furthermore, the Project would not involve any changes to the environment that would otherwise result in the conversion of farmland or forest land to other uses, and thus, no impact would occur.

d) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The Project site is located on Los Angeles Boulevard within a developed subdivision, characterized by low-density residential development. The Project would result in the development of a single-family residence and would not result in the direct or indirect physical division of an established community. The Project would result in a less-than-significant impact related to this issue.

e) Result in substantial alteration of the character or functioning of the community, or present or planned use of an area?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project site would be developed with a single-family residence and is located within an existing subdivision of single-family lots. The character of the new home would be similar to and compatible with the existing neighborhood and community because it would only consist of a residence, attached garage, and various accessory structures. The Project would result in a less-than-significant impact related to this issue.

f) Substantially increase the demand for neighborhood or regional parks or other recreational facilities, or affect existing recreational opportunities?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project entails the development of a single-family residence and would not increase demand on neighborhood or regional parks or other such facilities. There are ample recreational facilities located within close proximity to the Project site and surrounding neighborhood. Therefore, the Project would have a less-than-significant impact on recreational facilities and opportunities.

2. POPULATION AND HOUSING

Would the proposal:

a) Increase density that would exceed official population projections for the planning area within which the project site is located as set forth in the Countywide Plan and/or community plan? (Source #: 4)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The construction of a single-family home would not induce substantial population growth; the zoning of R1 and RMP-0.75 anticipate residential development. Because the development is proposed for a private lot in an approved subdivision, the construction of a single-family residence and related land uses would not result in an increase in density that would exceed official population projections for the planning area. Therefore, the Project would have a less-than-significant impact related to increasing population density.

b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?)? (source #: 4, 5)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not induce substantial growth because it would only result in the development of a single-family residence and is consistent with the density standards contained in the Marin Countywide Plan and Marin County Code. Further, the Project site is currently served by existing roads and utilities and would not require substantial additional infrastructure. Therefore, the Project would have a less-than-significant impact related to direct or indirect growth.

c) Displace existing housing, especially affordable housing?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not displace affordable housing because it entails the development of a single-family residence on a lot that is currently vacant. Further, the Project would not involve the removal of any other residences. Therefore, the Project would have a less-than-significant impact related to displacement of existing housing.

3. GEOPHYSICAL

a) Location in an area of geologic hazards, including but not necessarily limited to: 1) active or potentially active fault zones; 2) landslides or mudslides; 3) slope instability or ground failure; 4) subsidence; 5) expansive soils; 6) liquefaction; 7) tsunami; or 8) similar hazards?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

(a) 1: Active or potentially active fault zones.

In a seismically active region such as Northern California, there is always some possibility for future ground shaking from a local or regionally significant earthquake. The most likely source for future earthquakes is the Rodgers Creek fault, located approximately 14 miles away from the Project site. Furthermore, the San Francisco Bay Region has experienced several historic earthquakes from the San Andreas and associated active faults. The largest earthquake to impact this region was the 1906

earthquake on the San Andreas Fault. The 1989 Loma Prieta Earthquake also subjected this region to substantial ground shaking. A database search of past earthquakes indicate that nine earthquakes greater than magnitude 5.0 on the Richter scale have occurred within 100 kilometers of the site since 1900.

The intensity of ground shaking at any specific location within the County depends on the characteristics of the earthquake, the distance from the epicenter, and on the local geologic and soil conditions. The probability of a large earthquake (magnitude 7.0 or greater) occurring anywhere (and on any fault) within the San Francisco Bay Area (Bay Area) by 2032 is considered to be 36%; a very large earthquake (magnitude 7.5 or greater) has about a 10% probability of occurrence by 2032. Based on review of geologic maps, Alquist–Priolo Earthquake Fault Zone maps, and on-site reconnaissance, there is no evidence that any fault crosses the Project site, and the site is not located within an Alquist-Priolo Special Studies Zone. Therefore, there would be no impact (i.e., ground offset) with respect to on-site rupture of a known earthquake fault. Furthermore, the Project would not affect surrounding properties by increasing the likelihood or severity of ground shaking on neighboring properties.

The California Building Code requires design and construction of buildings intended for human occupancy to withstand the anticipated ground motion generated during a large earthquake with minimal damage and without structural collapse. The Project's Geotechnical Report assessed the seismic risk of the Project and recommended seismic coefficients, grading practices, retaining walls, and foundation types to minimize the potential for significant structural failure in an earthquake. While earthquakes are unavoidable and the Project would expose new homeowners to the ground-shaking hazards in this region, seismic design parameters required through enforceable building codes would reduce the risk of injury and the loss of life during an earthquake. Impacts associated with fault rupture and earthquake ground shaking are less than significant.

(a) 2, 3: Landslides or mudslides, slope instability and ground failure.

Landslides are the downward and outward movements of slope-forming materials including rock, soil, artificial fill, or combinations of such materials under the direct influence of gravity. The Project is not within a U.S. Geological Survey Quadrangle that has been mapped under the state's Seismic Hazard Zonation Program for earthquake-induced landslide and liquefaction hazard zones; thus, regulatory earthquake hazard zones for these hazards have not been determined for the area. The site is located on moderate to steep slopes with potential for a seismically induced landslide. In a 1998 publication by the U.S. Geological Survey, the area of the Project site was characterized as having "many" or "mostly" landslides. These are coarse-scale regional assessments for the purpose of flagging potentially landslide-prone areas. Based on the geologic reconnaissance conducted as part of the site-specific geotechnical investigation, no evidence of landsliding was observed at the site. Exploratory borings reveal the presence of two feet of residual soils underlain by weathered bedrock composed of interbedded sandstone and shale. The bedrock generally grades harder, stronger, and less weathered with depth.

Design and construction of the Project in accordance with the site grading and drainage recommendations provided in the geotechnical report is adequate to address the potential for seismic and non-seismic slope stability concerns. Grading on slopes would require that residual soils be removed, fill placed on slopes greater that 10:1 (horizontal:vertical) be keyed into firm bedrock, and fill be drained to avoid the buildup of hydro-static and

seepage forces behind the fill. For temporary slopes and excavations, the federal Occupational Safety and Health Administration (OSHA) has promulgated rules for excavations. OSHA dictates allowable slope configurations and minimum shoring requirements based on categorized soil types. In conformance with OSHA's categorization, the upper soil is "Type C11," and the weathered bedrock below is characterized as "Type B" The contractor may elect to use a variety of shoring and temporary slope configurations, but grading operations must conform to federal and state OSHA regulations. Retaining walls would be built to resist the earth pressures using the design criteria provided in the Geotechnical Report, and this includes a seismic surcharge and proper drainage provisions to ensure seepage is collected and conveyed to the stormwater drainage system.

Because the Project is designed with retaining walls to buttress the hillslope, and subdrainage would be provided to avoid seepage accumulation, the Project would not result in increased risks from landslides for the site or off-site properties. Prior to approval of final Project plans and construction of the Project, the Project-specific Geotechnical Report shall be reviewed and approved by DPW, and the Building and Safety Division shall verify as part of the plan-check process that the applicant's grading and building plans have incorporated the appropriate recommendations from the Geotechnical Report. Because geotechnical investigations are required by law through the California Building Code and the County Building Code, and because the site has been designed with retaining walls to buttress upslope area, the impact of the Project with respect to slope stability would be less than significant.

(a) 4, 5, 6: Subsidence, expansive soils and liquefaction.

Subsidence is the gradual, differential lowering or sudden sinking of the ground surface due to changes in the subsurface or movement of earth materials. Subsidence tends to occur in broad groundwater basins upon which there is substantial groundwater pumping or oil/gas production. Accordingly, the Project site is not located in an area with known current or historic subsidence. In the County, subsidence could be caused by the removal of groundwater from a shallow aquifer overlain by clay or the collapse of a localized subsurface void (soil piping or tunnel). The Project site is underlain by Franciscan mélange bedrock. No groundwater extraction is proposed as part of the Project. Therefore, there is no potential for subsidence.

Expansive soils have a potential to undergo significant changes in volume in the form of either shrinking or swelling due to changes in moisture content. Periodic shrinking and swelling of expansive soils can cause extensive damage to buildings, other structures, and roads. The Project site soil contains no potential for expansion. Regardless of the expansion potential of the site's existing topsoil, all such soils within the construction footprint of the Project would be removed because it is not adequate as foundation material. Where needed, engineered fill with a low expansive potential would be used as a base for road pads, utility trenches, foundations, decks, and retaining walls. Therefore, impacts would be less than significant.

Liquefaction generally occurs as a result of strong ground shaking in areas where granular sediment or fill material either contains or is located immediately above high moisture content. The ground shaking transforms the material from a solid state to a temporarily liquid state and can result in settlement, flow failure, and lateral spreading. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may sink or suffer major structural damage. The Geotechnical Investigation reports the dense silty/clay sand and relatively

shallow bedrock at the site are not susceptible to liquefaction and liquefaction-related phenomenon (Miller Pacific Engineering 2016). In addition, as indicated in Exhibit 6 (Liquefaction Susceptibility Hazards) of the Marin Countywide Plan, the Project site is shown to have low liquefaction susceptibility. Therefore, impacts related to seismic-related ground failure would be less than significant.

(a) 7: Tsunami; or 8) similar hazards?

Tsunamis and seiches can present a hazard to developments located along the shoreline of the ocean or San Francisco Bay. The Project site is situated below an inland spur ridge at a minimum elevation of 111 feet asl and more than four miles from the closest open water (San Rafael Bay and San Pablo Bay). Therefore, tsunami and seiche hazards would not pose a risk to the Project, and the impact would be less than significant.

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
b) Substantial erosion of soils due to wind or water forces and attendant siltation from excavation, grading, or fill?	[ ]	[ ]	[X]	[ ]

The Project could result in erosion of exposed soils and down gradient siltation during the rough construction grading phase of the Project. During the grading phases, vegetation would be removed exposing the soil to rainfall and wind. Soil stockpiles would also be exposed to potential erosive forces. Construction of the Project would require removal of topsoil for the purpose of constructing site access and foundations; however, this area consists of a shallow residual hillside soil that will require limited grading. These soils are not Prime Farmland or otherwise unique soils. The discussion and conclusions under Section V.4, Water, regarding construction and post-construction stormwater quality (i.e., erosion and sedimentation) is equally applicable to this significance criterion. For the reasons discussed in Section V.4, the impact would be less than significant considering standard requirements to implement an erosion and sediment control plan (ESCP) and compliance with standard measures for minimizing erosion per Marin County Code, Title 24, and Section 23.08, Excavation, Grading, and Filling.

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
c) Substantial changes in topography from excavation, grading or fill, including but not necessarily limited to: 1) ground surface relief features; 2) geologic substructures or unstable soil conditions; and 3) unique geologic or physical features? (source #: 1, 5)	[ ]	[ ]	[X]	[ ]

The Project would not result in significant adverse changes in topography or unstable soil conditions at the site due to grading. Pursuant to County requirements, the Project would be designed by a qualified professional engineer and subject to review and approval by DPW in accordance with Marin County Code, Title 24, and Section 23.08, Excavation,

Grading, and Filling. Based on the application materials, the Project would not result in significant impacts to the environment because the residence would be built to conform to the hillside as much as possible, would not substantially reform the natural topography on the site, and would avoid unique geologic features in the area. The Project would result in a less-than-significant impact related to this issue.

4. WATER

Would the proposal result in:

a) Substantial changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? (source #: 7)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Project plans indicate that the proposed access road, residence, and exterior improvements could increase impervious surfaces by approximately 8,500 square feet (from a pre-Project impervious area of 1,400 square feet to a post-Project impervious area of 9,900 square feet). Based on the increase in impervious area, site soil types, and post-Project land surfaces, the site-specific drainage analysis indicated that the Project would increase the curve number1 on site from 73.1 to 76.6 and, as a result, would increase the stormwater runoff volume from 32.52 cubic feet to 105.33 cubic feet in the 85th percentile2 24-hour rain event. The SWRCB Phase II Small MS4 Permit requires that the increase in runoff be captured by an appropriate BMP in this case the increase in runoff is 72.82 cubic feet.

Project plans indicate stormwater runoff from the residence and surrounding area would be directed through gutters and storm drain pipes to a 1,200-gallon (160-cubic-foot) rainwater cistern located beneath the parking structure, which is more than double the anticipated increase post-Project runoff. The tank would allow sediment to settle out, and when full, the tank would slowly release storm flows to Sorich Creek through a 12-foot and 8-inch high-density polyethylene pipe connected to a velocity dissipation device (riprap outlet). Project plans have complied with stream setbacks required by Section 24.04.560 of the Marin County Code (i.e., 20 feet + 2x channel depth), and the footings for the permanent vehicular bridge would be located outside the extent of the 100-year flood determined to be at an elevation of approximately 115 feet asl (about 7 feet deep) by the site-specific drainage study.

Although the impervious surfaces proposed would increase the runoff potential on site by locally decreasing rainfall absorption rates, the Project is designed to handle this increase through installation of a rainwater system designed to capture more than double the anticipated increase post-Project runoff. This design feature prevents

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[1] The curve number, also referred to as the runoff coefficient, is a value that relates to the amount of rainfall runoff generated from an area of land based on factors such as evaporation, absorption, transpiration, and surface storage. It is a larger value for areas with low infiltration and high runoff (pavement, steep gradient) and lower for permeable, well-vegetated areas (forest, flat land).

[2] The 85th percentile storm represents a value of rainfall, in inches, such that 85% of the observed 24-hour rainfall totals within the historical record will be less than that value.

overflow from the cistern from increasing flows in Sorich Creek relative to pre-Project conditions. Furthermore, the vehicular bridge footings have been located outside the 100-year flood plain, thereby avoiding direct impacts on drainage patterns within the creek. Because of the design features of the Project and the Project's compliance with the SWRCB Phase II Small MS4 Permit and Marin County Code, Section 24.04.627, impacts would be less than significant.

b) Exposure of people or property to water related hazards, including, but not necessarily limited to: 1) flooding; 2) debris deposition; or 3) similar hazards? (source #: 6, 7)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The proposed residence would not be located within a 100-year flood hazard area. A flood insurance rate map has been prepared for the lower reaches of Sorich Creek downstream of the Project site, but the Federal Emergency Management Agency has not mapped the section of Sorich Creek adjacent to the Project. However, an analysis of the 100-year flood was performed by Huffman Engineering and Surveying, which found the elevation of the 100-year flood is at the 115-foot elevation contour line on site. The extent of this contour line is within the creek setback required by the Marin County Code, and the footings for the permanent vehicular bridge would be located outside the extent of the 100-year flood. Therefore, the long-term impacts of the Project would not involve exposure of people or property to increased risk from a 100-year flood or similar flood hazard. There would be no long-term impact.

However, construction plans call for a temporary earthen access road to stage materials and complete the first phases of construction (i.e., site clearing, grading, utilities, and permanent bridge crossing). The temporary access road would be placed across Sorich Creek with an 18-inch pipe culvert to convey creek flows, if present. To preclude impacts to waters during the construction phase, the Marin County DPW has requested that the Project develop a comprehensive ESCP, which will also include scheduling of activities to avoid the rainy season and proper sizing of the temporary culvert to accommodate unanticipated storms outside of the rainy season. Under the guidance of the Project-specific ESCP, impacts would be less than significant.

c) Discharge of pollutants into surface or ground waters or other alteration of surface or ground water quality (e.g., temperature, dissolved oxygen or turbidity)? (source #: 7, 8, 9)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

Water quality standards and waste discharge requirements applicable to the site are contained within the Water Quality Control Plan for the San Francisco Bay Basin and SWRCB Phase II Small Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System Permit (SWRCB Order No. 2013-0001-DWQ, as amended). Under the Phase II MS4 Permit, single-family homes that create or replace 2,500 square

feet or more of impervious surface and are not part of a larger plan of development, must implement one or more site design measures to reduce Project site runoff.

The County, through its Stormwater Pollution Prevention Program, ensures compliance with water quality standards and protection of surface water quality by requiring new development and redevelopment projects to submit an ESCP for approval prior to the issuance of certain permits, including all grading permits and most building permits. These requirements are reflected in Section 23.19, Stormwater Runoff Pollution Prevention; Section 24.04.625, Erosion and Sediment Control; and Section 24.04.627, Permanent Stormwater Controls for New and Redevelopment, of the Marin County Code.

The Stormwater Pollution Prevention Program and ESCP (described above) along with a requirement to provide a Stormwater Control Plan provide comprehensive water quality protection for construction and operation of residential development. In this case, a Stormwater Pollution Prevention Plan (often referred to by its acronym, SWPPP) is not required, because the state's Construction General Permit only applies to construction projects that disturb more than 1 acre of soil (SWRCB Order No. 2009-0009-DWQ). The ESCP required by the Stormwater Pollution Prevention Program and the Storm Water Control Plan are designed to protect receiving waters from construction-related pollutant sources and, thus, achieve similar protection.

The Project site is crossed by the upper reach of Sorich Creek, which discharges into San Anselmo Creek, which becomes Corte Madera Creek downstream of its confluence with Ross Creek. Ultimately, creek flows within the Ross Valley Watershed discharge to the San Francisco Bay. The primary issue within the Ross Creek Watershed is flooding caused by insufficient channel capacity, encroachments, and road crossings. As described under Sections V.4 (a) and (b), the Project would not contribute to flooding issues because it is located outside the 100-year flood zones and because it would not result in off-site increases in the rate or volume of runoff. With respect to water quality, the closest downstream waterbody with a Clean Water Act, Section 303(d), impairment is Corte Madera Creek, which is listed as impaired due to the presence of diazinon. Diazinon is a type of pesticide previously used but is now illegal; thus, its source is most likely current or former agricultural lands. The Project site would not contribute to this impairment.

Without implementing standard water quality BMPs, the primary pollutant of concern during construction and operation of the Project would be excessive sediment discharge, which could contribute to turbidity issues in downstream waters. Construction of the Project would require site preparation, grading, and slope-shoring activities with the potential to introduce sediment in stormwater runoff to Sorich Creek. The preparation and implementation of an ESCP as required by the Marin County Code would implement feasible and effective BMPs to control sediment discharges in stormwater runoff. Erosion-control BMPs may include but would not be limited to scheduling and timing of grading activities, timely revegetation of graded areas, use of hydroseed and hydraulic mulches, and installation of erosion-control blankets. Sediment control may include properly sized detention basins, dams, or filters to reduce entry of suspended sediment into the storm drain system and watercourses and installation of construction entrances to prevent tracking of sediment onto adjacent streets. Pollution prevention practices may include designated washout areas or facilities, control of trash and recycled materials, covering of materials stored on site, and proper location of and maintenance of temporary sanitary facilities. The combination of BMPs used, and their execution in the field, must be customized to the site using up-to-date standards and practices.

Compliance with Section 24.04.627 of the County Code requires preparation of a stormwater control plan as a condition of Project approval. The stormwater control plan is different from the ESCP and aimed at permanent (operational) stormwater pollutants and flow controls rather than construction water quality concerns. This plan would formalize site design measures to be implemented by the applicant to control stormwater runoff and would be reviewed by DPW prior to approval to commence construction. The plan must consider the following site design measures established in the County's Stormwater Control Plan for small projects:

- Limit clearing and grading of native vegetation at the site to the minimum area needed to build the Project, allow access, and provide fire protection
- Minimize impervious surfaces by concentrating development on the least-sensitive portions of the site, while leaving the remaining land in a natural undisturbed state
- Reduce runoff (e.g., by dispensing runoff to landscaping or using pervious pavements)
- Conserve natural areas of the site as much as possible consistent with the Marin Countywide Plan
- Comply with stream setback ordinances/requirements
- Protect slopes and channels against erosion

As discussed under Section V.4(a) and (b), the Project has been designed with appropriate BMPs to handle post-construction storm flows, namely the 1,200-gallon rainwater cistern, velocity dissipation devices, appropriate creek setbacks, and a vehicular bridge sited outside the 100-year floodplain. The Project would result in no increase in the volume of storm flows entering Sorich Creek during 85th percentile peak rain events, which are a concern from a water quality perspective due to hydromodification. Therefore, the long-term impact on stormwater quality would be less than significant.

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
d) Substantial change in the amount of surface water in any water body or ground water either through direct additions or withdrawals, or through intersection of an aquifer by cuts or excavations? (source #: 10)	[ ]	[ ]	[X]	[ ]

The Project would not result in significant impacts to the environment due to direct water withdrawals or additions. The increase in impervious surface would have minimal impact on groundwater in storage, if any, because creek beds are the primary source of recharge, and the Project would not include any impervious surfaces within the 100-year floodplain of Sorich Creek. Drainage improvements would be required as part of standard building permit requirements. Surface water diversions are not proposed as part of the Project. Impacts related to substantial changes to surface water bodies resulting from direct withdrawals or as a result of intercepting and diverting groundwater that replenishes surface water features (such as seeps, springs, or ponds) would be less than significant.

e) Substantial changes in the flow of surface or ground waters, including, but not necessarily limited to: 1) currents; 2) rate of flow; or 3) the course or direction of water movements? (source #: 7)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would increase impervious areas by approximately 8,500 square feet. Increased impervious area has the potential to increase peak stormwater runoff from the site discharging to Sorich Creek, a tributary to San Anselmo Creek. However, the Project has been designed with a water storage tank to capture more than double the anticipated increase in runoff that would be generated by the Project. This means that the Project would decrease runoff discharging to Sorich Creek during typical peak storm events. In addition, the vehicular access bridge has been designed and located such that it would not interfere with the 100-year floodplain of Sorich Creek because its footings would be located outside of the flood boundaries. In the long term, the Project would not alter the course of a stream or river and would not contribute additional flow to the creek corridor. For these reasons, further discussed under Sections (a) and (b), the impact would be less than significant.

f) Substantial reduction in the amount of water otherwise available for public water supplies? (source #: 10)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

MMWD provides water service to the eastern corridor of the County up to Novato and encompasses 147 square miles. MMWD's water supply comes from a local network of seven rain-fed reservoirs, supplemented by purchases from the Sonoma County Water Agency. In 2015, MMWD updated its Urban Water Management Plan. Single- and multifamily residential homes compose 75% of the district total demand; this amounts to 22,610 acre per year. MMWD predicts the demand to increase to roughly 25,860 acres per year by 2040. The plan noted MMWD is currently meeting its 2020 water use target of 124 gallons per capita per day as the daily per capita water use in 2015 was 110 gallons per capita per day. The population of MMWD's service area is expected to increase 0.46% per year for the 25-year calculation period. Both the 2015 Urban Water Management Plan and Water Resources Plan 2040 prepare and plan for this predicted growth. Therefore, the addition of a single-family home within the service area would be within the expected population growth, and there are sufficient water supplies available. The Project would result in a less-than-significant impact related to this issue.

5. AIR QUALITY

Would the proposal:

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
a) Generate substantial air emissions that could violate official air quality standards or contribute substantially to an existing or Projected air quality violation? (source #: 31, 32)	**[ ]**	**[ ]**	**[X]**	**[ ]**

The Project site is located in unincorporated Marin County within the San Francisco Bay Area (Bay Area) Air Basin. Air quality in the Bay Area Air Basin is governed by the Bay Area Air Quality Management District (BAAQMD). The Bay Area Air Basin is currently classified as non-attainment for the 1-hour state ozone standard as well as for the federal and state 8-hour standards. Additionally, the Bay Area Air Basin is classified as non-attainment for the state 24-hour and annual arithmetic mean PM_{10} standards as well as the state annual arithmetic mean and the national 24-hour $PM_{2.5}$ standards. The Bay Area Air Basin is unclassified or classified as attainment for all other pollutants standards.

The Project would generate criteria pollutant emissions during construction and operation. Construction-related emissions would result from off-road, heavy equipment operating at the Project site to construct any development and from truck trips associated with deliveries and construction workers commuting to and from the Project site. Emissions associated with operation would include those from routine residential activities such as car trips, routine painting, and other maintenance activities.

To determine the significance of the Project impact that would be related to the potential for it to cause or contribute to an air quality standard violation, Marin County utilizes the screening criteria provided in the 2010 CEQA Air Quality Guidelines. The screening criteria for single-family residences is 114 dwelling units for emissions generated during construction of the Project and 325 dwelling units for emissions generated during operation of the Project, provided all basic construction mitigation measures are included during construction. Therefore, construction and operation of the Project would not result in a violation of air quality standard or contribute significantly to an existing or projected air quality violation with implementation of the Marin County Code standards as outlined in Title 22.20.040. Since the Project entails the potential addition of one single-family residence on Lot 2, the associated impact would be less than significant with the implementation of the Dust Control Measures adopted in 22.20.040 of the Marin County Code:

The following dust control measures apply to all projects involving ground disturbance that are subject to environmental review:

1. All unpaved exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.

2. All haul trucks transporting soil, sand, or other loose material off site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour.

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Tile 13, Section 2485 of California of Regulations). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified emissions evaluator.

During construction, County staff conducting routine inspections shall verify that the applicant and contractors are implementing the applicable BAAQMD basic control measures. With the implementation of these best management practices as adopted in Marin County Code Section 22.20.040, the Project would have a less-than-significant impact related to this issue.

b) Expose sensitive receptors to pollutants, such as noxious fumes or fugitive dust? (source #: 32)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The BAAQMD recommends that lead agencies assess the incremental TAC exposure risk to sensitive receptors within a 1,000-foot radius of a project's fence line. Long-term operations associated with the Project would result in no new TAC emissions. However, Project construction activities would generate diesel particulate matter (DPM), which is considered a TAC. The majority of DPM exhaust emissions that would be generated at the Project site would be due to the use of diesel off-road equipment.

The closest sensitive receptors to the Project site would be neighboring residences on Los Angeles Boulevard. The closest residences would be at a distance of approximately 50 feet from the Project activities. The closest schools, Sir Francis Drake High School and San Anselmo Montessori School, are both approximately 0.8 miles from the Project site. TAC exposure is assessed through analysis of the dose sensitive receptors are exposed to, which is the primary factor affecting health risk from exposure to TACs. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance.

According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should

be based on a 70-year exposure period when assessing TACs (such as DPM) that have only cancer or chronic non-cancer health effects. However, such health risk assessments should be limited to the duration of the emission-producing activities associated with the Project. For the Project, DPM emissions that would be generated near the sensitive receptors would be limited to a period of up to a few months. Because these emissions would be minor and occur over a few months in the vicinity of the residences compared to the 70-year exposure used in health risk assessments, Project-related DPM emissions would not be considered substantial and would not result in a significant incremental cancer risk. The Project would result in a less-than-significant impact related to this issue.

c) Alter air movement, moisture, or temperature, or cause any change in climate?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Moderate winds and mild temperatures throughout the year characterize the climate of the area. Implementation of the Project would not result in considerable alterations to climatic conditions because the Project would result in the development of a single-family home, involving a relatively limited area of land. The Project would not significantly influence or cause alteration of air movements, temperature, or change local or regional climates. Therefore, impacts of this kind would be less than significant.

d) Create objectionable odors?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Operation of the Project would not create odorous emissions; however, Project construction would include sources, such as diesel equipment, including tractors, graders, and trucks, which could result in the creation of objectionable odors. Since the construction activities would be temporary and spatially dispersed and generally take place in a less densely populated area, these activities would not affect a substantial number of people. Therefore, the Project would result in a less-than-significant impact related to this issue.

6. GREENHOUSE GAS EMISSIONS

Would the proposal:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would generate GHG emissions during construction and operation. Construction emissions would be generated on site due to the use of large off-road

equipment associated with construction of the proposed residence (e.g., excavators, graders, front loaders, dump trucks, paving equipment). Operational emissions would result from the day-to-day use of the Project site as a residence (car trips and electricity and natural gas consumption).

As discussed under Section V.5(a), the County has opted to use the screening criteria provided in the 2010 CEQA Air Quality Guidelines. The screening criterion for GHG emissions is 56 dwelling units. Because the Project would include the construction and operation of one single-family residence, the Project is not considered cumulatively considerable. The Project would result in a less-than-significant impact related to this issue.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (source #: 4, 26)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The Project would not conflict with certain GHG reduction goals set forth in Assembly Bill 32, including the 39 recommended actions identified by the California Air Resources Board in its Climate Change Scoping Plan. The Project would also not conflict with goals and policies contained in the Marin Countywide Plan and Greenhouse Gas Reduction Plan. The Project would be required to obtain building permits for construction, which would ensure compliance with Title 24 and County Green Building Ordinance requirements. The Project would result in a less-than-significant impact related to this issue.

7. TRANSPORTATION/ CIRCULATION

Would the proposal result in:

a) Substantial increase in vehicle trips or traffic congestion such that existing levels of service on affected roadways will deteriorate below acceptable County standards? (source #: 11)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The level-of-service standards for roadways that are part of the County Congestion Management Program network are intended to regulate long-term traffic increases from operation of new development. There would be minimal new long-term trips associated with the Project because the Project is developing a single-family home. As such, the Project would not exceed level-of-service standards established by the County Transportation Authority for designated Congestion Management Program roadways. The Project would result in a less-than-significant impact related to this issue.

b) Traffic hazards related to:

1) Safety from design features (e.g., sharp curves or dangerous intersections); 2) barriers to pedestrians or bicyclists; or 3) incompatible uses (e.g., farm equipment)? (source #: 11, 12)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not result in significant impacts to traffic-related hazards because the development of a single-family home would introduce no unsafe design features to the Project area. Further, the Project would not alter the physical configuration of the existing roadway network serving the area. The Project would not introduce uses that are incompatible with existing uses already served by the road system that serves the Project area. The Project would result in a less-than-significant impact related to this issue.

c) Inadequate emergency access or access to nearby uses? (source #: 12)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Emergency vehicles could access the Project site through nearby publicly maintained roads such as Sir Francis Drake Boulevard and San Francisco Boulevard. The Project applicant has obtained written verification from the Ross Valley Fire Department that the Project plans meet the minimum requirements needed for apparatus access and turnaround. These requirements include the minimum horizontal and vertical roadway clearance, turnaround dimensions, and bridge design standards. Compliance with these emergency vehicle access standards would result in less-than-significant impacts regarding design hazards or inadequate access.

d) Insufficient parking capacity on site or off site? (source #: 4)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not result in insufficient parking capacity on or off site because it involves the development of a single-family home. The Project has been reviewed by DPW for conformance with development standards and has been found to be in conformance with the requirements, including provisions for parking. The Project would result in a less-than-significant impact related to this issue.

e) Substantial impacts upon existing transportation systems, including rail, waterborne or air traffic systems?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The nearest airport to the Project site is the County airport (or Gnoss Field Airport) located approximately 16 miles north. The Project is not located within an airport land use plan and would not result in any change in, or impact to, air traffic patterns. There are no waterborne or rail transportation systems in the Project area. The Project would result in a less-than-significant impact related to this issue.

8. BIOLOGICAL RESOURCES

Would the proposal result in:

a) Reduction in the number of endangered, threatened or rare species, or substantial alteration of their habitats including, but not necessarily limited to: 1) plants; 2) fish; 3) insects; 4) animals; and 5) birds listed as special status species by State or Federal Resource Agencies? (source #: 13, 14, 15, 16)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[X]	[ ]	[ ]

Balcerak Design prepared a Vegetation Assessment and Arborist Report, and Wildlife Research Associates prepared a Wildlife Habitat Assessment for the Project. These reports characterize the biological resources present or potentially present at the Project site. The reports included review of CDFW's California Natural Diversity Database and fieldwork at the Project site to identify plants, animals, and potential habitats. Subsequently, Dudek biologists visited the Project site and provided a peer review of the Vegetation Assessment and Wildlife Habitat Assessment. Biological resources information regarding specific natural elements and special-status species is summarized below.

Special-Status Plants

To determine the potential occurrence of special-status plant species in the study area, the California Natural Diversity Database was accessed for known occurrences of special-status species in the 7.5-minute U.S. Geological Survey quadrangles of Novato and San Rafael. The California Native Plant Society electronic inventory records were also accessed. Using the available data, the study area was examined to determine if suitable habitats exist to support special-status plant species recorded as existing within the quadrangle.

The probability of occurrence was then evaluated according to the following criteria:

1. Not Present. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (substrate, elevation, hydrology, plant community, site history, disturbance regime). The species has an extremely low probability of being found on the site.

2. Low Potential. Few of the habitat components meeting the species requirements are present, or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species has a low probability of being found on the site.

3. Moderate Potential. Some of the habitat components meeting the species requirements are present, or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

4. High Potential. The habitat components meeting the species requirements are present, or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

5. Present. Species is observed on the site or has been recorded (e.g., California Natural Diversity Database, other reports) on the site recently. The habitat components meeting the species requirements are present, or most of the habitat on or adjacent to the site is highly suitable.

A total of 33 special-status plant species have been reported as occurring within the vicinity of the Project area. Appendix A provides a complete list of the plant species and their potential to occur on site. Of these 33 species, 21 were considered to have no potential to occur because the species are restricted to serpentinite, volcanic, or clay soils, which are not present within the study area, or the species occurs in habitats not present within the study area. The remaining 12 species are listed as having a low potential to occur on site based on the site conditions and the vegetation communities present. No special-status plants were observed during the site visits.

The impacts on special-status plant species would be less than significant.

Special-Status Wildlife

Information on special-status wildlife species was compiled through a review of the literature and database search. Database searches for known occurrences of special-status wildlife species focused on the Novato and San Rafael U.S. Geologic Service 7.5-minute topographic quadrangles, which provided a 3-mile radius around the Project site.

Besides the 30 special-status wildlife species identified as potentially occurring in the vicinity of the Project site, including within a 3-mile radius, several additional species were evaluated for their potential to occur within the study area, based on (1) review of the information for planning and conservation for this area of the County, (2) the “Special Animals” list that includes those wildlife species whose breeding populations are in serious decline, and (3) the habitat present on site. See Appendix B for a list of the 75 species evaluated.

Of the 75 species evaluated, 6 species are listed as having the potential to occur (including nesting raptors) on the Project site. Surveys conducted on site found signs of several nests. (Appendix B). Based on the habitats present or within the vicinity of the Project, the following species have the potential to occur:

- Raptors – Cooper's hawk (*Accipiter cooperii*) and Red-shouldered hawk (*Buteo lineatus*)
- Bats – Pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and Western red-bat (*Lasiurus blossevillii*)
- Amphibians – California giant salamander (*Dicamptodon ensatus*)

Birds. Passerines and raptors nesting in the riparian habitat within the Project area could be impacted if construction occurs during the nesting season (March through August). Impacts include direct mortality through nest removal or indirect mortality caused by nest abandonment by adults through nearby disturbance. **Mitigation Measure 8.a-1** would avoid Project impacts to nesting birds species potentially occurring in the Project area.

Mitigation Measure 8.a-1, Protection for Nesting Passerines and Raptors. Before and during construction and prior to grading, tree removal, or issuance of a building permit, the following mitigation measures should be followed to avoid or minimize impacts to passerines and raptors that may potentially nest in the trees:

1. Grading or removal of trees should be conducted outside the nesting season, which occurs between approximately February 15 and August 15.

2. If grading between August 15 and February 15 is infeasible and groundbreaking shall occur within the nesting season, a pre-construction nesting bird (both passerine and raptor) survey of the grasslands and adjacent trees shall be conducted. The Project applicant shall hire a qualified biologist to perform this survey within 7 days of ground breaking. If no nesting birds are observed, no further action is required, and grading shall occur within 1 week of the survey to prevent "take" of individual birds that could begin nesting after the survey.

3. If active bird nests (either passerine and/or raptor) are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.

4. The radius of the required buffer zone can vary depending on the species, (i.e., 75–100 feet for passerines and 200–300 feet for raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with CDFG.

5. To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude. After the fencing is in place, there shall be no restrictions on grading or construction activities outside the prescribed buffer zones, but County staff shall periodically verify that fencing remains in place.

6. Pre-construction surveys shall be documented and provided to the County by the qualified biologist hired by the applicant. If construction fencing is required, photographs of the fencing, directly after installation, shall be emailed to the

County. These photographs shall be updated and sent to the County monthly during project construction.

Bats. Direct mortality of non-volant bats could occur as a result of removal or trimming of trees identified as potential bat habitat, if construction occurs during either the maternity roosting season when pups are unable to fly or are not yet self-sufficiently volant (approximately April 15 through August 31) or during winter months when resident bats are in extended torpor (October through February). Additionally, direct mortality of fully volant bats could occur if trees are not removed in a manner suitable to permit bats to escape prior to removal. Tree removal has the potential to cause mortality of solitary, obligate tree-roosting bats roosting in foliage or bark because they are not readily visible during daytime visual surveys. However, the potential for mortality to the largest number of bats exists with removal of trees containing cavities that could support aggregations of colonial species.

Three trees were identified as containing cavities and crevices suitable to support diverse day-roosting colonial bat species; these trees are numbered 40, 32, and 52, located within 100 feet of the construction area between trees 14 and 15. Two of these trees were blown down by the storms of 2016 and 2017. Other trees may have been damaged, or new habitat may have been recently created.

Solitary bat species that roost in trees in this region are seasonally inactive. However, bats cannot readily be humanely evicted from trees. Conducting visual surveys of tree habitat features is generally highly problematic due to difficulties with access to the entire tree, number of trees, inability to survey entire cavities, or visual clutter from foliage.

As a result, **Mitigation Measure 8.a-2** includes presuming presence, rather than conducting focused presence or absence surveys, and then removing trees only during seasonal periods of bat activity using a two-step process conducted over 2 consecutive days as described below. Two-step removal is conducted only during seasonal periods of bat activity because it relies on the ability of bats to fly, precluding seasonal periods when non-volant young or overwintering adults are present. This method provides the most reasonable and feasible opportunity for bats that could be present to abandon the roost tree prior to cutting, and has been acceptable to CDFW for previous tree removal projects.

Mitigation Measure 8.a-2, Bat Protection. Due to the difficulties in performing accurate surveys, trees containing suitable potential roost habitat, shall be removed using a two-step process. This process removal of suitable potential habitat trees shall only occur between March 1 (or after evening temperatures rise above 45°F or no more than 0.5 inches of rainfall within 24 hours occurs), and April 15 or between September 1 and October 15 (or before evening temperatures fall below 45°F or more than 0.5 inches of rainfall within 24 hours occurs).

<u>Maternity Roost Avoidance.</u> Removal of individual trees shall occur outside the maternity season (April 15 through August 31) when young are non-volant. See below for specifications on tree removal outside the maternity season.

<u>Phased Removal of Trees.</u> When removing trees outside the maternity season, the following shall be conducted:

1. Conduct tree removal only during seasonal periods of activity from March 1 (or when night temperatures are above 45°F and when rains have ceased) through

April 15 (when females begin to give birth to young) or from August 31 (when young bats are self-sufficiently volant) until approximately October 15 (before night temperatures fall below 45°F and rains begin).

2. Fell trees only when no rain has occurred or is forecast to occur for 3 days and when daytime temperatures are at least 50°F.

3. Remove trees using a two-stage process. The two stage process shall be conducted over 2 consecutive days, as follows:

    a. On Day 1, under supervision of a qualified bat expert, selected branches and limbs not containing cavities shall be removed using only chainsaws (no excavators). Specifically, late in the afternoon on Day 1, only small branches (<4 inches in diameter) not containing cavities or fissures shall be removed using chainsaws (no heavy equipment). Only branches with leaves should be removed, which can include the crown or perimeter leafy canopy of each tree.

    b. On the following day (Day 2), the remainder of the tree shall be removed using chainsaws or other equipment. Supervision by a qualified biologist is required to provide identification that branches and limbs are safe for removal and instruction to tree cutters in suitable procedures.

4. No diesel or gas-powered equipment shall be stored or operated directly beneath trees with potential roosts except chainsaws that are used for removal of those trees.

5. The qualified biologist responsible for overseeing the above actions shall complete a memo to verify that these measures have been undertaken and send this memo to the County within three days of work completion.

Amphibians. The California giant salamander uses stream habitats with dense vegetative cover that includes logs and rocks, and is known to forage on the forest floor during rain events. Sorich Creek provides suitable breeding habitat, and the adjacent creek bank and forest provide suitable cover and foraging habitat. This species is known to occur in the County, and there are occurrences within 5 miles of the site, near Larkspur. **Mitigation Measure 8.a-3** would address avoidance of California giant salamander.

Mitigation Measure 8.a-3, California Giant Salamander Avoidance. On the day that work associated with the Sorich Creek crossing begins, the applicant shall hire a qualified biologist to perform a pre-construction survey before ground disturbance commences to identify any California giant salamander (*Dicamptodon ensatus*) that may be present within the Project area. If any California giant salamander are observed within Sorich Creek in the disturbance area, the qualified biologist shall contact the California Department of Fish and Wildlife (CDFW) to request permission to relocate. If CDFW approves relocation, the qualified biologist shall move the California giant salamander according to CDFW instructions. If CDFW does not approve of relocation, California giant salamander shall be avoided and allowed to move outside of the Project site on their own volition. While waiting for the California giant salamander to passively relocate, construction may proceed if it is more than 50 feet from Sorich Creek and the qualified biologist determines the work would not affect the California giant salamander. After the qualified biologist determines no California giant salamander are within the Project area, work near Sorich Creek may resume. The qualified biologist shall submit a report to the County detailing the determination.

Significance with Mitigation

Mitigation Measure 8.a-1 would address impacts to passerines and raptors, **Mitigation Measure 8.a-2** would address impacts to bats, and **Mitigation Measure 8.a-3** would address avoidance of California giant salamander. Implementation of these mitigation measures would reduce potential impacts related to reduction in the number of endangered, threatened, or rare species or the alteration of their habitat to less-than-significant levels.

Riparian Habitat

Riparian vegetation communities are considered sensitive. Riparian habitat may be permanent or ephemeral and can be associated with many terrestrial habitats, including riparian corridors, fresh emergent wetlands, and springs. Within the Project area, the riparian habitat is ephemeral and urbanized, with poison oak (*Toxicodendron diversilobum*) growing along the eastern bank, and willows (*Salix* sp.) growing along the western bank. No pools that would provide breeding habitat for sensitive amphibians were detected. It is likely that common species such as California newt (*Taricha torosa*) and Sierran tree frog (*Pseudacris sierra*) likely breed in the ephemeral Sorich Creek. The urbanized area likely enhances the stream habitat for raccoon (*Procyon lotor*), a species that is accustomed to encountering human activity within their natural habitat. This species often forms dense populations in urban and suburban habitats. ACOE, CDFW, and RWQCB take jurisdiction over the bed and bank of creeks as waters of the state, and CDFW jurisdiction extends to include any riparian tree or shrub communities associated with the creek. The placement of fill soil for the temporary access road and staging area would result in temporary impacts to 2,531 square feet (0.06 acres) of riparian habitat within the creek setback. The creek setback is described in Section 24.04.560 of the Marin County Code. Of the 2,531 square feet, 284 square feet (0.01 acres) of temporary fill soil would be within the ordinary high water mark of the creek. Prior to any impacts to waters of the United States or the placement of any fill within the creek setback area, a Section 404 Permit from ACOE, a Section 401 Water Quality Certification from RWQCB, and a Section 1602 Lake and Streambed Alteration Agreement is anticipated.

To ensure that riparian habitat is protected, **Mitigation Measure 8.a-4**, as follows, shall be implemented:

Mitigation Measure 8.a-4*:* Riparian Habitat Protection.

U.S. Army Corps of Engineers

A Section 404 Permit must be obtained from the ACOE prior to any impacts to waters of the United States. If the total impacts to waters of the United States is less than 0.5 acres, the Project impacts may meet the criteria for a Nationwide Permit. The applicant shall provide evidence to the County that ACOE permitting requirements have been met.

Regional Water Quality Control Board

A Section 401 Water Quality Certification must be obtained from RWQCB for proposed impacts to waters of the state. The applicant shall provide evidence to the County that Regional Water Quality Control Board permitting requirements have been met.

California Department of Fish and Wildlife

A Section 1602 Lake and Streambed Alteration Agreement must be obtained from the California Department of Fish and Wildlife (CDFW) prior to the placement of any fill within the creek setback area.

Typically a habitat mitigation and monitoring plan shall be prepared by the applicant as part of the Section 1602 Lake and Streambed Alteration Agreement with CDFW. The habitat mitigation and monitoring plan typically include the following elements:

1. A planting plan that describes tree replacement (as required by the County and described below), a weed control plan to eliminate invasive species, and a discussion of methods to ensure survival of planted material. The applicant shall demonstrate to the County that they have met CDFW's permitting requirements, as determined by that agency.

Significance with Mitigation

With implementation of **Mitigation Measure 8.a-4**, potential impacts to riparian habitat would be less than significant.

Protected Trees

The Project would require the removal of 39 trees over 2 inches in diameter and upland of the creek setback. Out of a total of 19 trees defined as protected by the County, 6 of these are heritage trees. The 39 trees include 4 Oregon white oak, 13 coast live oak, 15 California bay (Umbellularia californica), 4 California buckeye, and 3 cherry plum (Prunus cerasifera). Replacement of the trees would be recommended at a 2:1 ratio wherever possible as per the standards identified in Marin County Code Section 22.26.040. If needed, replacement trees would be planted and selected in accordance with the Ross Valley Fire Department standards, and the replanting and tree replacement would be verified during the Building Permit Phase. Therefore, the impacts associated with this Project would be less than significant related to this issue.

b) Substantial change in the diversity, number, or habitat of any species of plants or animals currently present or likely to occur at any time throughout the year? (source #: 14, 15)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[X]**	**[ ]**	**[ ]**

Although undeveloped, the site is surrounded by suburban developed properties. Debris throughout the study area indicates that the Project site has been used for human recreation purposes, and the presence of exotic plant species indicates that the ecosystem has been altered from what it was prior to European inhabitants. Trees on the Project site are nearly all native species, but the understory is dominated by exotic species. The somewhat degraded nature of the site suggests low diversity, and use by animals is likely primarily common wildlife and nesting birds during the breeding season (and possibly bats as described above). Common wildlife would likely avoid the

area during construction but return post-construction. **Mitigation Measures 8.a.-1 through 8.a-4** would address impacts to birds and other potential species that could be on site. The Project would result in a less-than-significant impact with mitigation incorporated related to this issue.

c) Introduction of new species of plants or animals into an area, or improvements or alterations that would result in a barrier to the migration, dispersal or movement of animals? (source #: 14, 15)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project is not likely to result in the introduction of new plant species into the area. Activities associated with construction of the new residence would be limited to lower portions of the property, which already support non-native under-story. The Project would not result in the introduction of new wildlife species into the area or result in a barrier to wildlife movement. The site is located within an existing developed residential neighborhood. Thus, domesticated pets, such as cats and dogs have been associated with the Project site and surrounding neighborhood. Although vacant properties are often used as refuge areas by feral animals and wildlife species, construction and inhabitance of the new residence would not serve as a significant barrier to the dispersal, migration, or movement of animal species. The openness of the neighborhood to wildlife movement would remain the same. The Project would result in a less-than-significant impact related to this issue.

9. ENERGY AND NATURAL RESOURCES

Would the proposal result in:

a) Substantial increase in demand for existing energy sources, or conflict with adopted policies or standards for energy use? (source #: 5, 34)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Project construction and the operation of one single-family home under the Project would consume energy in the form of electricity and natural gas and gasoline associated with car trips. However, this increase would be minor. The Project would be required to meet the minimum requirements of the County Building Code, Section 19, including Section 19.04.110, Green Building Requirements. The green building requirements meet or exceed applicable mandatory measures of the 2016 California Green Building Standards Code (Title 24, Part 11), known as CALGreen. These requirements increase energy efficiency in buildings, encourage water and resource conservation, and reduce waste generated by construction projects. Therefore, this impact would be less than significant.

b) Use of non-renewable resources in a wasteful and inefficient manner?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Construction and operation of the Project would consume non-renewable resources including diesel fuel, gasoline, natural gas, and electricity. However, the Project involves a relatively small residential structure and would be required to meet the requirements of the County Building Code and CALGreen to reduce the amount of energy consumed. Therefore, the Project would not result in the use of non-renewable resources in a wasteful and inefficient manner, and this impact would be less than significant.

c) Loss of significant mineral resource sites designated in the Countywide Plan from premature development or other land uses which are incompatible with mineral extraction? (source #: 4, 18, 19)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The California Department of Conservation, Division of Mining and Geology, implements the Mineral Land Classification program, which divides land into four categories called Mineral Resource Zones based on the quality of geologic information available on a given geographic area and the estimated economic value of the resource. The Marin Countywide Plan identifies eight sites that have been designated by the state as having significant mineral resources for the North Bay region. The Project site is not located within or immediately adjacent to any of the eight areas identified as mineral resource sites. The Mineral Land Classification Map from the Division of Mines and Geology designates the area as MRZ-1, or areas where adequate information indicates that no significant mineral deposits are present. Therefore, the Project would not result in the loss of availability of any significant mineral resource sites and would result in a less-than-significant impact related to this issue.

10. HAZARDS

Would the proposal result in:

a) A risk of accidental release of hazardous substances including, but not limited to: 1) oil, pesticides; 2) chemicals; or 3) radiation? (source #: 4)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Construction of the bridge and single-family home may involve the temporary transport, use, and disposal of hazardous materials. Heavy equipment would be required for grading, excavation, and construction. Construction activities would not include the use of such substances in quantities that would present a significant hazard to the public or the environment, and the use, storage, transport, and disposal of these materials would be required to comply with all existing local, state, and federal regulations. Once constructed, the single-family home would not create a risk of accidental release of hazardous substances and would result in a less-than-significant impact related to this issue.

b) Possible interference with an emergency response plan or emergency plan? (source #: 12)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The Project site is located at the end of Los Angeles Boulevard off San Francisco Boulevard. Construction activities associated with the Project would not occur on any major arterials or highways and would not block or interfere with emergency access or evacuation. Furthermore, the applicant obtained written confirmation and approval from the Ross Valley Fire Department, and other applicable departments to ensure the site design provides adequate emergency vehicle access and appropriate signage and complies with the requirements of the County Code. Therefore, the Project would not interfere with or impair implementation of an adopted emergency response or emergency evacuation plan and would result in a less-than-significant impact related to this issue.

c) The creation of any health hazard or potential health hazard?	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The Project would include construction activities that employ the use of hazardous chemicals, such as gasoline, diesel fuel, oils and lubricants, paints and thinners, solvents, and other chemicals. Numerous federal, state, and local laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials. Project contractors would be required to comply with hazardous materials laws and regulations for the transport, use, and disposal of hazardous materials. The Project would result in a less-than-significant impact related to this issue.

d) Exposure of people to existing sources of potential health hazards? (source #: 20)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code, Section 65962.5 (Cortese List), which requires the California Environmental Protection Agency to develop, at least annually, an updated list. It is

unlikely that soil contamination is present beneath the site, since the Project site is located in a residential neighborhood that has existed in this area since the 1930s, where releases of petroleum waste or hazardous waste into the subsurface is unlikely. The Project would result in a less-than-significant impact related to this issue.

e) Increased fire hazard in areas with flammable brush, grass, or trees? (source #: 12, 21)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The California Department of Forestry provides wildland fire protection services to the Project area, which is located in a state responsibility area. A state responsibility area refers to an area in which the state has financial responsibility for wildland fire protection. California Department of Forestry maps Fire Hazard Severity Zones, which identify areas of significant fire hazards based on fuels, terrain, weather, and potential damage a fire can inflict. The Fire Hazard Severity Zones Map for the County identifies the Project site as “moderate.”

The Project site is also located in a WUI. A WUI represents areas where structures are in proximity to or intermixed with wildland or open space areas. New development in a WUI is subject to the preventive fire safety requirements of the 2016 California Building Code, Chapter 7A, and 2016 California Residential Code, Chapter R337, as noted in the Ross Valley Fire Department Review. The Ross Valley Fire Department and County Fire Department reviewed the Project and gave conditional approval. The Project is required to conform to applicable fire and building code regulations and implement conditions imposed by the fire departments. Therefore, although the Project site is in a “moderate” Fire Hazard Severity Zone and a WUI, the Project would not expose people or structures to substantial risk related to wildland fires. The Project would result in a less-than-significant impact related to this issue.

11. NOISE

Would the proposal result in:

a) Substantial increases in existing ambient noise levels? (source #: 5, 33)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would result in elevated ambient noise levels in the Project vicinity due to construction activities. On-site equipment, vehicles accessing the construction site (workers, supply deliveries, and trucks used for import or export of soils), and general activity on the site would result in added noise. The vehicles would be limited in number and would result in the generation of occasional low levels of noise. During the two years of construction, noise levels would vary considerably, with most periods having very limited or no construction noise and only limited times when there is constant or near-constant noise. Construction activity would be regulated through Marin County Code, Section 6.70.030, which controls permitted hours of activity and permitted noise levels.

The code states that construction noise is allowed from 7:00 a.m. to 6:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on Saturdays. Loud noise-generating construction-related equipment (e.g., backhoes, generators, jackhammers) can operate from 8:00 a.m. to 5:00 p.m. on weekdays. Construction activities are prohibited on Sundays and holidays.

Because the Project includes development of a single-family residence, it would create a new permanent source of noise. However, this would not be substantial and would keep with ambient noise levels. Because construction noise associated with the Project would be temporary and intermittent and would not expose people to significant noise levels or conflict with adopted noise policies or standards, increases in ambient noise due to Project construction would be less than significant.

b) Exposure of people to significant noise levels, or conflicts with adopted noise policies or standards? (source #: 5, 33)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

As discussed above, the Project would not expose the population in the area to significant noise levels. The noise generated from Project construction would be periodic and temporary in nature and would occur during certain hours of the day. No significant additional noise would occur after Project completion. As noted above, construction activity would be regulated through Marin County Code, Section 6.70.030. Therefore, the Project would not conflict with adopted noise policies or standards. The Project would result in a less-than-significant impact related to this issue.

12. PUBLIC SERVICES

Would the proposal have an effect upon, or result in a need for new or altered government service in any of the following areas:

a) Fire protection? (source #: 4, 12, 22)	**Significant Impact**	**Potentially Significant Unless Mitigated**	**Less Than Significant Impact**	**Not Applicable**
	[ ]	**[ ]**	**[X]**	**[ ]**

Fire services in the County are provided by 16 fire protection districts, including the County Fire Department. The County Fire Department provides fire protection to the unincorporated areas of the County not protected by fire protection districts or federal park agencies. Most of the fire protection districts have mutual aid agreements. The Ross Valley Fire Department serves Ross, San Anselmo, Sleepy Hollow, and Fairfax. Ross Valley Fire Stations 19, 20, and 21 are within 2 miles of the Project site. Construction of the Project would be short term and would not significantly increase demand on these facilities. The Project would not result in a substantial demand for fire protection services and would be a less-than-significant impact.

b) Police protection? (source #: 4)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The County Sheriff's Office is responsible for crime prevention and law enforcement in the unincorporated areas of the County; the Project site lies within the Upper Ross Valley Planning Area, which is composed of three local police departments. The Kentfield substation of the County Sheriff's Office, located at 831 College Avenue in Kentfield, would serve the project site. Construction and operation of the Project would not be expected to significantly affect the County Sheriff's ability to maintain service ratios, response times, and other performance objectives or require new facilities. The Project would result in a less-than-significant impact related to this issue.

c) Schools?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Ross Valley School District provides public education to residents of San Anselmo and Fairfax. The Project would not result in the increased need for new schools because the construction of a single-family residence would not result in a substantial increase in service needs. The Project would result in a less-than-significant impact related to this issue.

d) Maintenance of public facilities, including roads?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not result in the increased need for or maintenance of public facilities or roads since the construction activities would be short term and would involve a limited workforce. Project construction and the single-family home would not generate the vehicle traffic necessary to significantly increase the demand on such facilities. Therefore, the Project would have a less-than-significant impact on public facilities.

e) Other governmental services?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not impact other government services, such as parks or libraries, since the construction of a single-family home would not substantially increase the population

that requires such services. The Project would result in a less-than-significant impact related to this issue.

13. UTILITIES AND SERVICE SYSTEMS

Would the proposal result in a need for new systems, or substantial alterations to the following utilities?

a) Power or natural gas? (source #: 4, 12, 22)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

PG&E is the electrical provider for the Project area. The Project would not result in significant impacts to the environment due to an increased need for new power and natural gas services since the Project site is limited to a single-family home. The new residence will be served by extending service from the existing power servicing neighboring properties. Marin County Code, Section 22.20.110, requires undergrounding of utilities that serve new developments. The Project would result in a less-than-significant impact related to this issue.

b) Communication systems?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would establish service connections to existing communications systems that currently extend to Los Angeles Boulevard. Connection to existing communication systems would not result in substantial alterations to the existing service infrastructure; therefore, this impact would be less than significant.

c) Local or regional water treatment or distribution facilities? (source #: 27, 28)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Wastewater services would not be available on the Project site during construction activities; there would be no impact to wastewater treatment during construction. The operation of the Project would generate wastewater from flushing, bathing, clothes washing, dish washing, and leaks associated with a single-family home. The Project site would be served by the Ross Valley Sanitary District, which operates under the authority and regulations of the San Francisco Bay RWQCB. Wastewater in the Ross Valley Sanitary District is treated at the facility overseen by CMSA. The Project would not require new or expanded wastewater treatment facilities because the anticipated wastewater generation from the Project is within projected capacity of the CMSA. Therefore, the

Project would not result in an exceedance of wastewater treatment requirements or distribution facilities, and the impact would be less than significant.

d) Sewer or septic tanks?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not significantly increase the need for sewer facilities or septic tanks. The Project would be connected to Ross Valley Sanitary District facilities to serve the property. The Project would result in a less-than-significant impact related to this issue.

e) Stormwater drainage? (source #: 10)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

Project plans indicate stormwater runoff from the residence and surrounding area would be directed through gutters and storm drain pipes to a 1,200-gallon (160-cubic-foot) rainwater cistern located beneath the parking structure, which is more than double the anticipated increase in post-Project runoff. The Project would result in a less-than-significant impact related to this issue.

f) Solid waste disposal? (source #: 29)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not create a significant increase in solid waste production, and existing solid waste collection services are adequate. Waste collected from the Project site would be taken to the Redwood Landfill, located in Novato. The Redwood Landfill is permitted to receive 2,300 tons of waste per day; it has a remaining capacity of approximately 12,900,000 cubic yards and is expected to reach its permitted capacity in 2039. The Project would not exceed the landfill's permitted daily tonnage or deplete substantial long-term capacity. The Project would also comply with the applicable local, state, and federal regulations concerning solid waste. The Project would result in a less-than-significant impact related to this issue.

14. AESTHETICS/ VISUAL RESOURCES

Would the proposal:

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
a) Substantially reduce, obstruct, or degrade a scenic vista open to the public or scenic highway, or conflict with adopted aesthetic or visual policies or standards? (source #: 4, 13, 23, 24, 30)	[ ]	[ ]	[X]	[ ]

The Project consists of the construction and occupancy of a single-family home, vehicle bridge, driveway, and decks. Scenic vistas are singular vantage points that offer unobstructed views of valued viewsheds, including areas designated as official scenic vistas along major highways or designated visual resources. There are no state scenic highways in the vicinity of the Project.

The Marin Countywide Plan mapped Ridge and Upland Greenbelt Areas and identifies them as a scenic resource. The Marin Countywide Plan requires development near or on these ridgelines to be located in the least visually prominent areas possible. The Project site is not located within a Ridge and Upland Greenbelt Area. Any further potential visual impacts to the Project site would be reduced through compliance with Chapter 22.26.040 of the Marin County Code, the Single-Family Residential Design Guidelines, and the mandatory findings for design review approval. An Arborist Report evaluated the on-site trees and outlines measures to reduce potential impacts to mature trees, maintaining the quality of the site. Overall, the proposed improvements have been sited with adequate setbacks to surrounding property lines and would not significantly impact the views, light, or privacy of adjoining properties, thus ensuring compliance with the identified policies. Therefore, consistency with these policies would be achieved. The Project would result in a less-than-significant impact related to this issue.

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
b) Have a demonstrable negative aesthetic effect by causing a substantial alteration of the existing visual resources including, but not necessarily limited to: 1) an abrupt transition in land use; 2) disharmony with adjacent uses because of height, bulk or massing of structures; or 3) cast of a substantial amount of (source #: 4)	[ ]	[ ]	[X]	[ ]

The Project would result in a less-than-significant impact to the existing visual resources as the new residence would be compatible with the surrounding neighborhood. The Project would change the existing visual resources of the Project site because the site is currently undeveloped. The site is heavily covered in existing trees and vegetation, which would partially screen the new residence from view by neighbors. The residence would be set back from Los Angeles Boulevard up a slope, further reducing visibility. The Design Review process evaluates if the design of the Project is consistent with the community character and ensures that it is consistent with the Single-Family Residential Design Guidelines and the requirements of the zoning district regarding height, size, and location. The Project would result in a less-than-significant impact related to this issue.

15. CULTURAL RESOURCES

Would the proposal:

a) Disturb paleontological, archaeological, or historical sites, objects, or structures? (source #: 5, 17)	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

A records search and pedestrian archaeological survey were conducted for the Project site by the Anthropological Studies Center in 2016. The survey included an archaeological records and literature search, contact with the Native American Heritage Commission (NAHC), and pedestrian archaeological survey of the Project site.

The Project area primarily lies within pre-Quaternary bedrock and deposits, although a small portion of the access road from Sacramento Avenue lies within Holocene alluvium. Landforms that developed in the pre-Quaternary period have little potential for buried archaeological remains as the surface formed prior to human occupation of North America. The portion of the site within the Holocene alluvium may contain buried archaeological remains, as they formed during the time humans were present.

The Archaeological Resources Study concluded there is no evidence that the Project would disturb paleontological resources and there are no historic structures on the site that would be affected by the Project. The records search completed for the Project identified no previously recorded cultural resources in the Project area. However, the records search did identify a record of two ground stone artifacts about 500 feet northeast of the Project area. A later survey returned to document the locations where the tools had been collected; no additional cultural resources were observed during that survey.

Marin County Code, Section 22.20.040(d), addresses potential accidental discovery of archaeological and historical resources during construction. In the event that archaeological or historic resources are discovered during any construction, construction activities shall cease, and the Community Development Agency shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with state and federal law. The disturbance of an Indian midden may require the issuance of an Excavation Permit by DPW, in compliance with Chapter 5.32 (Excavating Indian Middens) of the Marin County Code. With adherence to these Code requirements, the potential for Project construction to result in disturbance of archaeological or historical resources would be less than significant.

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
b) Have the potential to cause a physical change which would adversely affect unique ethnic cultural values, or religious or sacred uses within the project area? (source #: 17)	[ ]	[ ]	[X]	[ ]

Neither the records search, pedestrian archaeological survey or review of the Sacred Lands File indicate the presence of unique ethnic, cultural values, or religious or sacred uses within the Project area. The Project would result in a less-than-significant impact related to this issue.

16. TRIBAL CULTURAL RESOURCES

Would the proposal result in:

	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: 1. 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). 2. 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.	[ ]	[ ]	[X]	[ ]

On June 5, 2017, the Marin County Planning Department staff initiated contact under Assembly Bill 52 consultation with the two affected tribes that have requested tribal cultural resource consultation on projects that occur within their areas of interest in Marin County. Of the two tribes that requested to receive Assembly Bill 52 consultations, only the Federated Indians of Graton Rancheria (FIGR) responded and requested formal consultation on the Project via a letter dated July 7, 2017. Results of the record search, geotechnical analysis and additional Project-related technical reports were sent to FIGR on May 13, 2016, prior to the phone consultations. The tribal cultural consultation was completed with two phone calls between Ms. McQuillen and Gene Buvelot, representing FIGR and County staff discussing the Project, potential impacts, and County policies in place to ensure protection of potential cultural resources that could be found on the Project site (but that have not been recorded). FIGR representatives provided no additional information or evidence regarding the presence or potential presence of unique ethnic cultural resources or religious or sacred uses within the Project area, but asked that, should any cultural materials be discovered during construction, that FIGR be notified.

17. SOCIAL AND ECONOMIC EFFECT

Would the proposal:

Any physical changes which can be traced through a chain of cause and effect to social or economic impacts?	Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	Not Applicable
	[ ]	[ ]	[X]	[ ]

The Project would not result in a significant increase in the costs of providing limited County services to the Project area nor would it result in adverse physical effects on the environment. The Project would result in a less-than-significant impact related to this issue.

V. MANDATORY FINDINGS OF SIGNIFICANCE.

Pursuant to Section 15065 of the state EIR Guidelines, a project shall be found to have a significant effect on the environment if any of the following are true:

		Yes	No	Maybe
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? *As described in Section V, any potential environmental impacts from the Project would be mitigated to a less-than-significant level.*	[ ]	[X]	[ ]
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? *As described in Section V of this Initial Study, any potential environmental impacts from the Project would be mitigated to a less-than-significant level.*	[ ]	[X]	[ ]
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects). *As described in Section V of this Initial Study, any potential environmental impacts from the Project would be mitigated to a less-than-significant level.*	[ ]	[X]	[ ]
d)	Does the project have environmental effects which will cause substantial adverse impacts on human beings, either directly or indirectly? *As described in Section V of this Initial Study, any potential environmental impacts from the Project would be mitigated to a less-than-significant level.*	[ ]	[X]	[ ]

VI. DETERMINATION: (To be Completed by the Lead Agency)
On the basis of this initial evaluation:

[ ] I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

[X] I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

[ ] I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

[ ] I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

[ ] I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Rachel Reid Date: 10/29/18

Printed Name: Rachel Reid For: _____

VII. PROJECT SPONSOR'S INCORPORATION OF MITIGATION MEASURES:

Acting on behalf of the project sponsor or the authorized agent of the project sponsor, I (undersigned) have reviewed the Initial Study for the Rogers Project Design Review and have particularly reviewed the mitigation measures and monitoring programs identified herein. I accept the findings of the Initial Study, including the recommended mitigation measures, and hereby agree to modify the proposed project applications now on file with Marin County to include and incorporate all mitigation measures and monitoring programs set out in this Initial Study.

(Project Sponsor's Name or Representative) Cecily Rogers	10/26/18 Date
(Project Sponsor's Name or Representative)	Date

VIII. REFERENCES

1. Miller Pacific Engineering. 2016. Geotechnical Investigation, Proposed Single-Family Residence and Private Vehicular Bridge, 308 Los Angeles Boulevard, San Anselmo, California. Prepared for Mela Construction Company. May 5, 2016.

2. CDC (California Department of Conservation). 2007. "Marin County Important Farmland 2006" [map]. CDC, Division of Land Resource Protection. February 2007. Accessed July 2018. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2006/mar06.pdf.

3. CDC. 2016. Marin County Williamson Act FY 2015/2016. CDC, Division of Land Resource Protection. Accessed July 2018. ftp://ftp.consrv.ca.gov/ pub/dlrp/wa/Marin_15_16_WA.pdf.

4. Marin County Community Development Agency. 2007. Marin Countywide Plan 2014. Accessed July 2018. https://www.marincounty.org/-/media/files/departments/cd/ planning/currentplanning/publications/county-wide-plan/cwp_2015_update_ r.pdf?la=en&hash=81ED0C4269F662BB3AEC00782F7C2CCCF7340A30.

5. Marin County. 2018. Marin County Code, Title 22.

6. FEMA (Federal Emergency Management Agency). 2014. Flood Insurance Rate Map (FIRM). Marin County, California and Unincorporated Areas. Map Panel 06041C0452E. Revised March 17, 2014.

7. Huffman Engineering and Surveying. 2017. Drainage Analysis for Lands of Rogers. January 12, 2017.

8. USGS (U.S. Geological Survey). 2018. "National Map" [map]. National Hydrography Dataset and Watershed Boundary Dataset. Web Map. Accessed July 2018. https://viewer.nationalmap.gov/advanced-viewer.

9. SWRCB (State Water Resources Control Board). 2012. Final California 2012 Integrated Report (303(d) List/305(b) Report). Web Application. Accessed July 2018. https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml.

10. Marin Municipal Water District. 2017. Water Resources Plan 2040. Accessed July 2018. https://www.marinwater.org/DocumentCenter/View/5095/Final-Water-Resources-Plan-2040.

11. Transportation Authority of Marin. 2017. Congestion Management Plan Update. Accessed July 2018. http://2b0kd44aw6tb3js4ja3jprp6-wpengine.netdna-ssl.com/wp-content/uploads/2018/03/2017-TAM-CMP-Update_Final.pdf.

12. Ross Valley Fire Department. 2017. Fire Department Plan Review. January 23, 2017.

13. Balcerak Design. 2017. Arborist's Report: 308 Los Angeles Boulevard. April 27, 2017.

14. Balcerak Design. 2017. Vegetation Assessment: 308 Los Angeles Boulevard. April 27, 2017.

15. Wildlife Research Associates. 2017. Wildlife Habitat Assessment: Rogers Residence and Creek Crossing Project. April 24, 2017.

16. Dudek. 2018. Peer Review of the Wildlife Habitat Assessment and Vegetation Assessment for the Rogers Residence and Creek Crossing Project. March 5, 2018.

17. Anthropological Studies Center of Sonoma State University. 2016. An Archeological Resources Study of 308 Los Angeles Boulevard. Prepared by Kyle Rabellino. May 2016.

18. CDC. 1998. Guidelines for Classification and Designation of Mineral Lands.

19. CDC. 1982. "Mineral Land Classification Map: Marin County" [map]. 1982. CDC, Division of Mines and Geology. Accessed July 2018. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_146-3/SR-146_Plate_3.15.pdf.

20. DTSC (California Department of Toxics Substances Control). 2018. Hazardous Waste and Substances Site List. Accessed July 2018. http://www.envirostor.dtsc.ca.gov/?surl=hkmwp

21. CALFIRE (California Department of Forestry and Fire Protection). 2007. "Very High Fire Hazard Zones in SRA, Adopted by CALFIRE on November 7, 2007" [map]. Accessed July 2018. http://frap.fire.ca.gov/webdata/maps/marin/fhszs_map.21.pdf

22. Ross Valley Fire Department. 2018. "Fire Stations." Accessed July 2018. http://www.rossvalleyfire.org/about/fire-stations.

23. Marin County Community Development Agency. 2005. Single Family Residential Design Guidelines. July 2005. Accessed July 2018. https://www.marincounty.org/~/media/files/departments/cd/planning/currentplanning/publications/singlefamilydesignguidelines/sfrdg_bos_finalguidelines.pdf.

24. Caltrans (California Department of Transportation). 2011. California Scenic Highway Mapping System: Marin County. September 7, 2011.

25. USGS (U.S. Geological Survey). 1998. San Francisco Bay Region Landslide Information: Summary Distribution of Slides and Earth Flows. Accessed July 2018. http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndsld.

26. Marin County Community Development Agency. 2006. Marin County Greenhouse Gas Reduction Plan.

27. Marin Municipal Water District. 2016. Water Availability – Single Family Dwelling with Detached Second Unit at 308 Los Angeles Boulevard. August 4, 2016.

28. Marin Local Agency Formation Commissions. 2017. Central Marin Wastewater Services Study. July 2017.

29. Cal Recycle (California Department of Recycling and Recovery). 2018. Facility/Site Summary Details: Redwood Landfill. Accessed July 2018. http://www.calrecycle.ca.gov/SWFacilities/Directory/21-AA-0001/Detail.

30. Marin County. 2018. “Marin County Map Data.” Accessed July 2018. http://gisopendata.marincounty.org/datasets/d811e491145c47959990d2749911b079_104.

31. BAAQMD (Bay Area Air Quality Management District). 2012. California Environmental Quality Act Air Quality Guidelines. Updated May 2012. Accessed July 2018. http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_Final_May%202012.ashx?la=en.

32. BAAQMD. 2017. California Environmental Quality Act Air Quality Guidelines. Updated May 2017. Accessed July 2018. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

33. Marin County. 2018. Marin County Code, Section 6.70.030. Enumerated Noises.

34. Marin County Community Development Agency. 2016. Green Building Requirements Fact Sheet. Accessed July 2018. https://www.marincounty.org/~/media/files/departments/cd/planning/sustainability/green-building/2016_standards_for_compliance_county-of-marin.pdf?la=en.

35. USGS. 1998. San Francisco Bay Region Landslide Information: Summary Distribution of Slides and Earth Flows. Accessed July 2018. http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndsld.

Appendix A

Plant Species Observed in Study Area

APPENDIX B – Potentially Occurring Special Status Plants

Scientific Name	Common Name	Status: Federal/State / CNPS Rank	Flowering Period	Suitable Habitat for Species	Potential for Occurrence
Amorpha californica var. napensis	Napa false indigo	None/None/1B.2	March - June	Broadleaf upland forest (openings); chaparral; cismontane woodland. 120 - 2000 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Amsinckia lunaris	bent-flowered fiddleneck	None/None/1B.2	May - June	Coastal bluff scrub; cismontane woodland; valley and foothill grassland. 3 – 500 meters. (CNPS 2017)	**Low.** Closest recorded occurrence east of Cascade Canyon Open Space Preserve, approx. 3.1 miles. (Calflora 2017)
Arctostaphylos montana ssp. montana	Mount Tamalpais manzanita	None/None/1B.3	February - April	Serpentinite, rocky soils. Chaparral; valley and foothill grassland. 160 - 760 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no serpentinite soils.
Arctostaphylos virgata	Marin manzanita	None/None/1B.2	January - March	Sandstone or granitic soils. Broadleaf upland forest; closed-cone coniferous forest; Chaparral; North Coast coniferous forest. 60 - 700 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Calamagrostis crassiglumis	Thurber's reed grass	None/None/2B.1	May - August	Freshwater marsh and coastal scrub. 10 - 60 meters (CNPS 2017)	**None.** No suitable habitat located within the study area.
Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	None/None/1B.2	June - October	Marshes and swamps (coastal salt). 0 - 10 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower	None/None/1B.2	April - July	Sandy soil. Coastal bluff scrub; coastal dunes; coastal prairie; coastal scrub. 3 - 215 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.

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Cirsium hydrophilum var. vaseyi	Mount Tamalpais thistle	None/None/1B.2	May - August	Serpentinite soils. Broadleaf upland forest; chaparral; meadows and seeps. 240 - 620 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no serpentinite soils.
Eriogonum luteolum var. caninum	Tiburon buckwheat	None/None/1B.2	May - September	Serpentinite, sandy to gravelly soils. Chaparral; cismontane woodland; coastal prairie, valley and foothill grassland. 0 - 700 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no serpentinite soils.
Fissidens pauperculus	minute pocket moss	None/None/1B.2	NA	North Coast coniferous forest (damp coastal soil). 10 - 1024 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Fritillaria lanceolata var. tristulis	Marin checker lily	None/None/1B.1	February - May	Coastal bluff scrub; coastal prairie; coastal scrub. 15 - 150 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Fritillaria liliacea	fragrant fritillary	None/None/1B.2	February - April	Cismontane woodland; coastal prairie; coastal scrub; valley and foothill grassland; often serpentinite soils. 3 - 410 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no serpentinite soils.
Gilia millefoliata	dark-eyed gilia	None/None/1B.2	April - July	Coastal dunes. 2 – 30 meters (CNPS 2017)	**None.** No suitable habitat located within the study area.
Helianthella castanea	Diablo helianthella	None/None/1B.2	March - June	Usually rocky, axonal soils. Often in partial shade. Broadleafed upland forest; chaparral; cismontane woodland; coastal scrub; riparian woodland; valley and foothill grassland. 60 - 1300 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.

APPENDIX B – Potentially Occurring Special Status Plants

Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	None/None/1B.2	April - November	Valley and foothill grassland; sometimes roadsides. 20 - 560 meters. (CNPS 2017)	**Low.** Closest recorded occurrence west side of Boyd Memorial Park, approx. 1.6 miles. (Calflora 2017)
Hesperolinon congestum	Marin western flax	FT/CT/1B.1	April - July	Serpentinite soils. Chaparral; valley and foothill grassland. 5 - 370 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no serpentinite soils.
Holocarpha macradenia	Santa Cruz tarplant	FT/CE/1B.1	June - Oct	Coastal prairie; coastal scrub; valley and foothill grassland. 10 - 220 meters. (CNPS 2017)	**Low.** Closest recorded occurrence in Ross Station, approx. 2.9 miles. (Calflora 2017)
Horkelia tenuiloba	thin-lobed horkelia	None/None/1B.2	May - July	Broadleafed upland forest; chaparral; valley and foothill grassland. 50 - 500 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Kopsiopsis hookeri	small groundcone	None/None/2B.3	April - Aug.	North Coast coniferous forest. 90 - 885 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no host species present.
Lessingia micradenia var. micradenia	Tamalpais lessingia	None/None/1B.2	July - Oct.	Usually serpentinite soils. Chaparral, valley and foothill grassland; often roadsides. 100 - 500 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.)
Microseris paludosa	Marsh microseris	None/None/1B.2	April - June	Closed-cone coniferous forest; cismontane woodland; coastal scrub; valley and foothill grassland. 5 - 355 meters. (CNPS 2017)	**Low.** Closest recorded occurrence in Baltimore Canyon Open Space Preserve approx. 3.0 miles. (Calflora 2017)

APPENDIX B – Potentially Occurring Special Status Plants

Navarretia rosulata	Marin County navarretia	None/None/1B.2	May - July	Serpentinite, rocky soils. Closed-cone coniferous forest; chaparral. 200 - 635 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Pentachaeta bellidiflora	white-reyed pentachaeta	FE/CE/1B.1	March - May	Often serpentinite soils. Cismontane woodland; valley and foothill grassland. 35 - 620 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area; no serpentinite soils.
Plagiobothrys glaber	hairless popcornflower	None/None/1A	March - May	Meadows and seeps (alkaline); marshes and swamps (coastal salt). 15 - 180 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Pleuropogon hooverianus	North Coast semaphore grass	None/CT/1B.1	April - June	Broadleafed upland forest; meadows and seeps; North Coast coniferous forest. 10 - 671 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Polygonum marinense	Marin knotweed	None/None/3.1	May - Aug.	Marshes and swamps (coastal salt or brackish). 0 - 10 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Quercus parvula var. tamalpaisensis	Tamalpais oak	None/None/1B.3	March - April	Lower montane coniferous forest. 100 - 750 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area. Known only from Mt. Tamalpais. (CNPS)
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom	None/None/1B.2	April - Sept.	Marshes and swamps (freshwater, near coast). 3 - 75 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Sidalcea hickmanii ssp. viridis	Marin checkerbloom	None/None/1B.1	May - June	Serpentinite soils. Chaparral. 50 - 430 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.

APPENDIX B – Potentially Occurring Special Status Plants

Stebbinsoseris decipiens	Santa Cruz microseris	None/None/1B.2	April - May	Sometimes serpentinite soils. Broadleafed upland forest; closed-cone coniferous forest; chaparral; coastal prairie; coastal scrub; valley and foothill grassland. 10 - 500 meters. (CNPS 2017)	**Low.** Closest recorded occurrence in Baltimore Canyon Open Space Preserve approx. 3.0 miles. (Calflora 2017)
Streptanthus batrachopus	Tamalpais jewelflower	None/None/1B.3	April - July	Serpentinite soils. Closed-cone coniferous forest; chaparral. 305 - 650 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Streptanthus glandulosus ssp. pulchellus	Mount Tamalpais bristly jewelflower	None/None/1B.2	May - July	Serpentinite soils. Chaparral; valley and foothill grassland. 150 - 800 meters. (CNPS 2017)	**None.** No suitable habitat located within the study area.
Trifolium amoenum	two-fork clover	FE/None/1B.1	April - June	Sometimes serpentinite soils. Coastal bluff scrub; valley and foothill grassland. 5 - 415 meters. (CNPS 2017)	**Low.** Closest recorded occurrence in Baltimore Canyon Open Space Preserve approx. 3.0 miles. (Calflora 2017)

Status Codes:

Federal Status

FE – Federally listed as endangered.

FT – Federally listed as threatened.

State Status

CE – State listed as endangered.

CT – State listed as threatened.

CR – State listed as rare.

California Native Plant Society (CNPS) Rank

1A – Plants presumed extinct in California.

1B – Plants rare, threatened, or endangered in California and elsewhere.

2 – Plants rare, threatened, or endangered in California, but more common elsewhere.

3 – Plants about which we need more information – a review list.

4 – Plants of limited distribution – a watch list.

APPENDIX B – Potentially Occurring Special Status Plants

CNPS threat code extensions:
1 - Seriously endangered in California.
2 - Fairly endangered in California.
3 - Not very endangered in California.

Sources:

CalFlora: Information on California Plants for Education, Research, Conservation. Berkeley, California. The CalFlora Database. 2017. http://www.calflora.org/

California Natural Diversity Data Base (CNDDB). 2017. Reported Occurrences For The Novato and San Rafael 7.5-Minute Topographic Quadrangles. Wildlife Conservation Division. Sacramento, California. 2017.

California Native Plant Society (CNPS). Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, California. 2017.

California Soil Resource Lab (CSRL). 2017 http://casoilresource.lawr.ucdavis.edu/

Jepson Online Interchange California Floristics. University of California at Berkeley. 2017. http://ucjeps.berkeley.edu/interchange/

Appendix B

Potentially Occurring Special-Status Animal Species in the Study Area

Appendix B: Potentially Occurring Special-Status Animal Species in the Project Area

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
		Invertebrates	
Opler's longhorn moth *Adela oplerella*		Serpentine grasslands with *Platystemon californicus.*	**None**: No suitable habitat present
Tomales isopod *Caecidotea tomalensis*	-/-	Inhabits localized fresh-water ponds or streams with still or near still water.	**None**: No suitable habitat present.
Marin blind harvestman *Calicina diminua*	-/-	Occurs in dry, nutrient-poor, serpentine soil grasslands under rocks	**None**: No suitable habitat present.
San Bruno elfin butterfly *Callophrys mossii bayensis*	FE/-	The adult flight period is late February to mid-April, with the peak flight period occurring in March and early April. Eggs are laid in small clusters or strings on the upper or lower surface of broadleaf stonecrop (*Sedum spathulifolium*).	None: No suitable habitat present.
Marin elfin butterfly *Callophrys mossii marinensis*	-/-	Found only in the redwood forest areas of Marin County. Larvae collected and reared on Sedum spathulifolium.	**None**: No suitable habitat present.
Sandy beach tiger beetle *Cicindela hirticollis gravida*	-/-	Inhabits areas adjacent to non-brackish water along the cost of California on clean, dry light-colored sand in the upper zone. Subterranean larvae prefer moist sand no affected by wave action.	None: No suitable habitat present.
Monarch butterfly *Danaus plexippus*	-/-	Roosts during winter migration in dense stands of large trees such as eucalyptus and Monterey pines that provide shelter from the wind. Roosts in groves close to nectar and water sources.	**None**: No suitable habitat present.
Ricksecker's water scavenger beetle *Hydrachara ricksecker*i	SC/-	This aquatic species has been recorded in lakes, lagoons and vernal pools. Members of this Family (Hydrophilidae) are scavengers whose larvae are predaceous. Nothing is known about the habits specific to this taxon.	**None**: No suitable habitat present.
Mission blue butterfly *Icaricia icarioides missionensis*	FE	Larvae host plants include bush lupine (*Lupinus albifrons),* varied lupine (*Lupinus variicalor*) and summer lupine. Adult nectar plants include coast buckwheat (*Eriogonum latifolium*), *Chrysopsis villosa, Brodiaeo pulchella,* and *Brodiaeo taxa*), hairy false golden aster (*Heterotheca villosa*), ookow (*Dichelostemma congestum*) and Ithuriel's spear (*Triteleia laxa*)	**None**: No suitable habitat present
Robust walker *Pomatiopsis binneyi*	-/-	Freshwater springs. Reported at Potrero Meadow Spring (CNDDB 2015).	**None**: No suitable habitat present.

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
Western bumblebee *Bambus occidentalis*	-/-	Generalist foragers. They do not depend on any one flower type but they favor Melilotus, Cirsium, Trifolium, Centaurea, Chrysothamnus, Eriogonum. Historically from the Pacific coast to the Colorado Rocky Mountains; severe population decline west of the Sierra-Cascade Crest.	**None**: No suitable habitat present
Myrtles silverspot butterfly *Speyeria zerene myrtleae*	FE	Restricted to the foggy, coastal dunes of the Point Reyes peninsula. Larval food plant is *Viola adunca*, with nectar sources of thistles and gum weed (*Grindelia rubicaulis*).	**None**: No suitable habitat present
California freshwater shrimp *Syncaris pacifica*	FE/CE	Endemic to Marin, Napa and Sonoma counties in low elevation and low gradient streams with moderate to heavy riparian cover.	None: No suitable habitat present.
Ubick's gnaphosid spider *Talanites ubicki*		Serpentine endemic. Known only from Mount Burdell.	**None**: No suitable habitat present
A leaf cutter bee *Trachusa gummifera*	-/-	Found on Carson Ridge (CNDDB 2015).	**None**: No suitable habitat present.
Mimic tryonia *Tryonia imitator*	-/-	Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types and able to withstand a wide range of salinities.	**None**: No suitable habitat present.
Marin hersperian *Vespericola marinensis*	-/-	Found in moist spots in coastal brush and chaparral in Marin County. Under leaves of cowparsnip, around spring seeps, in leafmold along streams, in alder woods and mixed evergreen forest. Found near San Geronimo Creek (CNDDB 2015).	**None**: no suitable habitat occurs on the site.
Ubick's gnaphosid spider *Talanites ubicki*	-/-	Serpentine endemic. Known only from Mount Burdell (CNDDB 2015).	**None**: No suitable habitat present.
		Fish	
Tidewater goby *Eucyclagobius newberryi*	FE/SSC	Occurs discontinuously throughout California, along areas of precipitous coastlines that preclude the formation of lagoons at stream mouths have created three natural gaps in the distribution of the goby.	**None**: No suitable habitat present.
Delta smelt *Hypomesus tronspacificus*	FT/-	Sacramento-San Joaquin delta. Seasonally in Suisun Bay, Carquinez Strait & San Pablo Bay. Seldom found at salinities > 10ppt. Most often at salinities <2ppt.	**None**: No suitable habitat present
Tomales roach *Lavinia symmetricus ssp. 2*	-/SSC	Habitat generalists, found in warm intermittent streams as well as cold, well-aerated streams.	**None**: No suitable habitat present.

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
Coho salmon - Central California Coast ESU *Onchorhynchus kisutch*	FT/SE	Occurs from Punta Gorda, in northern California, to the San Lorenzo River, in Santa Cruz County, and includes coho salmon populations from several tributaries of San Francisco Bay (e.g., Corte Madera and Mill Valley Creek).	**None**: No suitable habitat present.
steelhead - Central California Coast ESU *Onchorhynchus mykiss*	FT/-	Requires beds of loose, silt-free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen. Occurs in 3 tributaries to Monterey Bay (Pajaro, Salinas and Carmel Rivers), in the small streams of the Big Sur Coast and small intermittent streams in San Luis Obispo County, south to Point Conception.	**None**: No suitable habitat present.
longfin smelt *Spirinchus thaleichthys*	FC/ST	Pacific coast of North America from Sacramento-San Joaquin estuary and (extirpated?). Well documented declines in California. Spawns in sandy-gravel, rock, or aquatic plants, Dec. – Feb. in CA, in coastal waters near shore, bays, estuaries, and rivers. Some populations anadromous close to ocean.	None: No suitable habitat present
Amphibians			
California giant salamander *Dicamptodon ensatus*	-/-	Known from wet coastal forests near streams and seeps. Larvae found in cold, clear streams and adults knowns from wet forests under rocks and logs near streams and lakes	**None**: No suitable habitat present
foothill yellow-legged frog *Rana boylii*	-/SSC	Prefers permanent stream pools, and creeks with emergent and/or riparian vegetation.	None: No suitable habitat present.
California red-legged frog *Rana draytonii*	FT/-	Prefers semi-permanent and permanent stream pools, ponds and creeks with emergent and/or riparian vegetation. Occupies upland habitat especially during the wet winter months. Species occurs more than 5 miles W (CNDDB 2015).	**None**: No suitable habitat present.
Reptiles			
western pond turtle *Actinemys marmorata*	-/SSC	Prefers permanent, slow-moving creeks, streams, ponds, rivers, marshes and irrigation ditches with basking sites and a vegetated shoreline. Requires upland sites for egg-laying.	**None:** No suitable habitat present.
Birds (All birds protected under MBTA)			
Cooper's hawk *Accipiter cooperi*	-/SSC	Nests primarily in deciduous riparian forests. May also occupy dense canopied forests from gray pine-oak woodland to ponderosa pine. Forages in open woodlands.	**High**: Potential nests observed in project area.
sharp-shined hawk *Accipiter striatus*	-/SSC	Dense canopy pine or mixed conifer forest and riparian habitats. Water within one mile required.	**High**: Potential nests observed in project area.

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
tricolored blackbird *Agelaius tricolor*	BCC/ SSC	Nests primarily in dense freshwater marshes with cattail or tules, but also known to nest in upland thistles. Forages in grasslands.	**None**: No suitable habitat present
Bell's sage sparrow *Amphispiza belli*	BCC	Nests in dense stands of chamise and chaparral on xeric sites.	**None**: No suitable habitat present.
Great egret *Ardea alba*	-/-	Nests colonially in large trees near water	**None**: No suitable habitat present.
Great blue heron *Ardea herodius*	-/-	Nests colonially in large trees near water	**None**: No suitable habitat present.
Short-eared owl *Asio flammeus*	BCC/-	Nests in open areas in grasslands, marshes, or dunes on the ground sheltered by tall grasses, reeds or bushes.	**None**: No suitable habitat present
burrowing owl *Athene cunicularia hypugea*	SC, MB/SSC	Open, dry grasslands, deserts, prairies, farmland and scrublands with abundant active and abandoned mammal burrows. Prefers short grasses and moderate inclined hills.	**None**: No suitable habitat present.
Oak titmouse *Baeolophus inornotus*	BCC/ SSC	Breeds in cavities in oak woodlands, gleaning insects from the bark. Occurs from southern Oregon to northern Mexico along the Central Valley and xeric coastal foothills.	**Moderate**: suitable potential habitat occurs on-site.
Red-shouldered hawk *Buteo lineatus*	-/-	Nests in trees along riparian corridors and open fields.	**Low**: Suitable habitat present.
marbled murrelet *Brachyramphus marmaratus*	FT/SE	Nests in old growth forests and can migrate up to 20 miles inland. This species nests in mature conifer forests with open crown canopies or slopes to provide easy access, and large limbs in trees such as Douglas-fir, western hemlock, Sitka spruce, coastal redwood and mountain hemlock. Observed on Skagg's Springs Road, Stewart's Point (Audubon 2014)	**None**: No suitable habitat present
Red knot *Calidris canutus ssp. roselaari*	BCC/	Winters along the coast of California in intertidal mudflats.	**None**: No suitable habitat present
Anna's hummingbird *Calypte anna*		Nests in a variety of habitats including oak woodlands and riparian areas.	**High**: Suitable nesting habitat occurs on site.
Costa's hummingbird *Calypte costa*	BCC/-	Resident of the Sonoran and Mojave Deserts	**None**: No suitable habitat present
olive-sided flycatcher *Contopus borealis*	BCC/ SSC	Nests in open conifer or mixed oak woodland. Nests on horizontal branches, among a cluster of twigs and needles.	**Moderate**: suitable potential habitat occurs on-site.
Western snowy plover *Charadrius olexandrinus nivosus*	FT/-	Nests typically occur in flat, open areas with sandy or saline substrates. Vegetation and driftwood are usually sparse or absent	**None**: No suitable habitat present.

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
northern harrier *Circus cyaneus*	-/SSC	Nests and forages in grasslands and open marshland, both salt and fresh. Nests consist of a thin to thick layer of small sticks and reeds, lined with grasses.	**None**: No suitable habitat present.
Black swift *Cypseloides niger*	-/-	Nests made of moss bound with mud or simply a cushion of grass or bare mud, are often built on small ledges with overhanging moss or grass near seashore and waterfalls.	**None**: No suitable habitat present.
California yellow warbler *Dendroica petechia brewsteri*	BCC/SSC	Nests in riparian areas dominated by willows, cottonwoods, sycamores or alders and in mature chaparral. May also inhabit oak and coniferous woodlands and urban areas near stream courses.	**Moderate:** suitable potential habitat occurs on-site.
Snowy egret *Egretta thula*	-/-	Nest in colonies on thick vegetation in isolated places—such as barrier islands, dredge-spoil islands, salt marsh islands, swamps, and marshes. They often change location from year to year. During the breeding season Snowy Egrets feed in estuaries, saltmarshes, tidal channels, shallow bays, and mangroves.	**None**: No suitable habitat present.
White-shouldered kite *Elanus leucurus*	-/CFP	Inhabits low rolling foothills and valley margins with scattered oaks and river bottom- lands or marshes adjacent to deciduous woodlands. Prefers open grasslands, meadows and marshes for foraging close to isolated, dense-topped trees for nesting and perching	**None**: No suitable habitat present.
Pacific-slope flycatcher *Empidanax difficilis*	-/SSC	Found in a variety of habitats including cliff, conifer, forest, hardwood, mixed, and woodland. Nests along streams, in tree cavities, in cliffs, crotch of branch, earth banks, or buildings.	**Moderate:** suitable potential habitat occurs on-site.
American peregrine falcon *Folco peregrinus anatum*	BCC/FP	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers or marshes. Forages on shorebirds and small passerines.	**None**: No suitable habitat present.
saltmarsh common yellowthroat *Geothylpis trichas sinuosa*	-/SSC	Nests in fresh and salt marshes in tall grasses, tule patches and willows and forages in thick, continuous cover down to the water surface.	**None**: No suitable habitat present.
Black oystercatcher *Haematopus bachmani*	BCC	Nests on the ground on rocky seacoasts and islands, less commonly on sandy beaches.	**None**: No suitable habitat present.
loggerhead shrike *Lanius ludovicianus*	BCC/SSC	Nests in woodland and scrub habitats at margins of open grasslands. Often uses lookout perches such as fence posts. Resident and winter visitor in lowlands and foothills throughout California.	**None**: No suitable habitat present.
California black rail *Laterollus jamaicensis caturniculus*	-/ST	Inhabits saltwater, brackish, and freshwater marshes. Known from the San Francisco Bay area and the delta of the Sacramento and San Joaquin rivers south along the coast to northern Baja California and in Yuba County.	**None**: No suitable habitat present.

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
Short-billed dowitcher *Limnodromus griseus*	BCC/-	Winters on coastal mud flats and brackish lagoons. In migration prefers saltwater tidal flats, beaches, and salt marshes. Found in freshwater mud flats and flooded agricultural fields.	**None**: No suitable habitat present.
Marbled godwit *Limoso fedoa*	BCC	Breeds in marshes and flood plains on the ground.	**None**: No suitable habitat present.
San Pablo song sparrow *Melospiza melodia samuelis*	-/SSC	Inhabits tidal sloughs in the Salicornia marshes, nesting in Grindelia bordering slough channels along the north side of the San Francisco and San Pablo bays.	**None**: No suitable habitat present.
Lewis's woodpecker *Melanerpes lewis*	BCC/SSC	Found in open forest and woodland, often logged or burned, including oak, coniferous forest, riparian woodland, orchards, less often pinyon-juniper. Closely associated with open ponderosa pine forest in western North America. Most commonly uses pre-made or natural cavities. Wintering areas must provide storage sites for grain or mast.	**None**: No suitable habitat present.
long-billed curlew *Numenius americanus*	BCC/SSC	Nests at high elevations in grasslands adjacent to lakes or marshes. Winters along the coast on mudflats or in interior valleys in grasslands and agricultural fields.	**None**: No suitable habitat present.
Whimbrel *Numenius phaeopus*	BCC/	Winters along the coast of California.	**None**: No suitable habitat present.
Fox sparrow *Posserella iliaca*	BCC/-	Nests in forests and chaparral on the ground or in low crotches of bushes or trees.	**None**: No suitable habitat present.
Nuttall's woodpecker *Picoides nuttallii*	BCC/-	Found primarily in oak woodlands and riparian woods. Cavity nester.	**None**: No suitable habitat present.
California clapper rail *Rallus langirostris obsoletus*	FE/SE	Occur in south and central San Francisco Bay and along the perimeter of San Pablo Bay. Occupies salt and brackish marshes dominated by pickleweed (*Salicornia virginico*) and Pacific cordgrass (*Spartina foliosa*).	**None**: No suitable habitat present.
Allen's hummingbird *Selaspharus sasin*	BCC/-	Nests in wooded areas, meadows, or thickets along shaded streams, on a branch low down on stem, although placement height varies between 10 inches and 90 feet.	**None**: No suitable habitat present
California least tern *Sternula antilarum browni*	FE/SE	Nests on sandy open beaches and feeds in shallows of San Francisco Bay.	**None**: No suitable habitat present.
western meadowlark *Sturnella neglecta*	-/-	Nests in grasslands removed from trees and shrubs. Nest is domed in structure.	**None**: No suitable habitat present.

Common Name *Scientific Name*	Status USFWS/ CDFW	Habitat Affinities and Reported Localities in the Project Area	Potential for Occurrence
northern spotted owl *Strix occidentalis caurina*	FT, BCC/-	Dense coniferous and hardwood forest, shaded, steep sided canyons.	**None**: No suitable habitat present.
Lesser yellowlegs *Tringa flavipes*	BCC/-	Breeds in open boreal forest with shallow wetlands. Winters in wide variety of shallow fresh and saltwater habitats.	**None**: No suitable habitat present.
		Mammals*	
Pallid bat *Antrozous pallidus*	-/SSC WBWG:H	Day roosts include rock outcrops, mines, caves, buildings, bridges, and hollows and cavities in a wide variety of tree species. High reliance on oak woodland habitat in many portions of its range in California. Forages on larger prey taken on the ground or in the air, usually within 6-km of the day roost.	**High**: suitable habitat present.
Point Reyes Mountain beaver *Aplodontia frufa phaea*	-/SSC	Live in underground burrows dug in forest openings and dense thickets, feeding on various plants, including nettles, blackberry, poison oak, and coyote brush. Found on cool, moist, north-facing slopes in moderately dense coastal scrub.	**None**: No suitable habitat present.
Townsend's big-eared bat *Corynorhinus townsendii*	-/CPT, WBWG:H	Roosting sites include caves, mine tunnels, abandoned buildings and other structures. Forages in a variety of plant communities including coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands and deserts.	**None**: No suitable habitat present.
Western red bat *Lasiurus blossevillii*	-/SSC WBWG:H	Roosts singly (except female-young association) in broad leaved trees, especially cottonwoods and willows in the foothills and lower mountains of the southwest and in the fruit and nut orchards of the west. Winters along California coast, some move inland in summer; sexes separate zonally. Significant loss of breeding areas in California has elevated this to CSC species.	**High**: suitable habitat present.
Hoary bat *Lasiurus cinereus*	-/-, WBWG:M	Roosts singly except when females are with young (from 2 to 4 are born) in dense foliage of medium to large coniferous and deciduous trees. Highly migratory, occurs from sea level to tree line in Sierra Nevada. Summer records predominantly male. Forages along stream and river corridors, open water bodies, meadows, and open forest above canopy.	**High**: suitable habitat present.
Salt-marsh harvest mouse *Reithrodontamys raviventris*	FE/SE	Prefers dense cover of native pickleweed (*Salicornia virginica*). Seldom found in cordgrass or alkali bulrush. Will use upper zone of peripheral halophytes (salt-tolerant plants) to escape the higher tides, and also move into the adjoining grasslands during the highest winter tides.	**None**: No suitable habitat present.

* Includes bat species expected to occur in the project region and vicinity based on known roosting ecology and habitat relationships, but not reported in the CNDDB

U.S. FISH AND WILDLIFE SERVICE

FE = federally listed Endangered
FT = federally listed Threatened
FC = federal candidate for listing
BCC = Bird of Conservation Concern
MBTA = Migratory Bird Treaty Act.

CALIFORNIA DEPT. OF FISH AND WILDLIFE

CE = California listed Endangered
CT = California listed as Threatened
SSC = Species of Special Concern

WESTERN BAT WORK GROUP - PRIORITY

California includes multiple regions where a species may have different WBWG Priority ranks, therefore the CNNDB includes categories for Medium-High, and Low-Medium Priority

Appendix C: Wildlife species observed during site visit, November 18, 2015.

Scientific Name	**Common Name**
Pseudacris regilla	Pacific treefrog
Calypte anna	Anna's hummingbird
Aphelocoma californica	Western scrub jay
Corvus brachyrhynchos	American crow
Poecile rufescens	Chestnut backed chickadee
Junco hyemalis	Dark-eyed junco
Pipilo crissalis	California towhee
Pipilo maculatus	Spotted towhee