Initial Study / Mitigated Negative Declaration

Brush Creek Minor Subdivision

PREPARED BY:

HOGAN LAND SERVICES, INC.
1702 4TH STREET
SANTA ROSA, CA 95404

[PAGE INTENTIONALLY LEFT BLANK]

BRUSH CREEK MINOR SUBDIVISION
CEQA ENVIRONMENTAL CHECKLIST AND INITIAL STUDY

Project Title:	Brush Creek Minor Subdivision
Lead agency name and address:	City of Santa Rosa Planning & Economic Development 100 Santa Rosa Ave, Room 3 Santa Rosa, CA 95404
Contact person:	Hogan Land Services c/o Hannah Chiu 1702 4th Street Santa Rosa, CA 95404 (707) 544-2104 hchiu@hoganls.com
Project Location:	2210 Brush Creek Road Santa Rosa, CA 95404 APN: 182-050-004
Project Sponsor/Owner:	Klas Berghede and Nils Welin 2327 Browning Street Berkeley, CA 94702
General Plan Designations:	RR 20 (Sonoma County)
Zoning:	RR B6 20, RC50/25 VOH (Sonoma County)
Description of project:	The proposed project includes the annexation, general plan-amendment, rezone and a 4 lot subdivision with a remainder parcel.
Surrounding land uses and setting:	The project site is surrounded by residentially zoned lots within unincorporated Sonoma County and City of Santa Rosa. The lot has frontage along Brush Creek Road and Lyric Lane.
Other public agencies whose approval is required:	Improvement Plan (City of Santa Rosa) Grading Permit (City of Santa Rosa) Building Permit (City of Santa Rosa) Stormwater Pollution Prevention Plan (DWR)
California Native American tribes traditionally and culturally affiliated with the project area that have requested consultation:	Federated Indians of Graton Rancheria

[PAGE INTENTIONALLY LEFT BLANK]

BRUSH CREEK MINOR SUBDIVISION
CEQA ENVIRONMENTAL CHECKLIST AND INITIAL STUDY

TABLE OF CONTENTS PAGE

LIST OF FIGURES

INTRODUCTION

1.1. PURPOSE AND INTENT

This Initial Study/Mitigated Negative Declaration (IS/MND) is being prepared for the Brush Creek Minor Subdivision project that includes the annexation, general plan amendment, rezone and 4 lot subdivision with a remainder parcel. This initial study and mitigated negative declaration has been prepared by Hogan Land Services, Inc., as a third party agent, in full accordance with the procedural and substantive requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines and the City of Santa Rosa's environmental policies and procedures.

This IS/MND is intended to inform City decision-makers, responsible agencies, interested parties and the general public of the proposed project and its potential environmental effects. This IS/MND is also intended to provide the CEQA-required environmental documents for all city, regional and state approvals or permits that might be required to implement the proposed project.

CEQA Guidelines Section 15063(c) lists the following purposes of an Initial Study:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration.
2. Enable an Applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby possibly enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

The City of Santa Rosa as the lead agency, has conducted an Initial Study to determine the level of environmental review necessary for the proposed project. Consistent with Section 15070(b) of the CEQA Guidelines, the Initial Study identified potentially-significant effects, but revisions in the Project made by or agreed to by the applicant would avoid the effects or mitigate the effects to a point where clearly no significant effect would occur and there is no substantial evidence, in light of the whole record before the City of Santa Rosa, that the Project as revised and with implementation of identified mitigation measures would have a significant effect on the environment. Therefore, as the lead agency, the City of Santa Rosa has determined that a Mitigated Negative Declaration is the appropriate level of environmental review.

1.2. PUBLIC REVIEW

In accordance with CEQA and the state CEQA Guidelines, a 30-day public review period for the project commenced on July 2, 2021, and will conclude on August 2, 2021. This IS/MND has been distributed to interested or involved public agencies, organizations, and private individuals for review. In addition, the IS/MND has been made available for general public review at the following location:

City of Santa Rosa
Planning & Economic Development
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404
Hours: 8:00 am to 5pm, Monday – Thursday and Friday 8 am to 12 pm.

And on the City's web site at:

https://srcity.org/249/Planning-Economic-Development

During the public review period, the public will have an opportunity to provide written comments on the information contained within this IS/MND.

In reviewing the IS/MND and as articulated in Section 15204(a) of the CEQA Guidelines, affected public agencies and interested members of the public should focus on the sufficiency of the document in identifying and analyzing potential impacts on the environment from the proposed project, and ways in which the significant effects of the project are can be avoided or mitigated. Pursuant to Section 15204(b) of the CEQA Guidelines, public agencies and persons should focus on the proposed finding that the project will not have a significant effect on the environment. If a public agency or person believes that the proposed project may have a significant effect, they should:

1. Identify the specific effect;
1. Explain why they believe the effect would occur; and
2. Explain why they believe the effect would be significant.

Finally, per Section 105204(c), reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts.

Comments on the IS/MND should be submitted in writing and received by the City of Santa Rosa prior to the end of the 30-day public review period on August 2, 2021. Written comments should be submitted to:

Kristinae Toomians
City of Santa Rosa
Planning & Economic Development
100 Santa Rosa Ave, Room 3
Santa Rosa, CA 95404

Phone: (707) 543-4692
Email: KToomians@srcity.org

2. PROJECT DESCRIPTION

2.1. PROJECT SETTING

The project site is located on 2210 Brush Creek Road in the City of Santa Rosa near the intersection of Brush Creek Road and Lyric Lane, approximately 350 feet north of Fountaingrove Parkway/Montecito Boulevard. The parcel is commonly referred to as Assessor Parcel No. 182-050-004.

The site is currently within the unincorporated area of Sonoma County.

The parcel is surrounded by lots within County and City jurisdiction. Parcels to the south (APNs 182-050-014 and 182-050-005) are within Sonoma County jurisdiction and zoned RR. The parcels to the north (APNs 182-050-018, -019, -020, -021, -022) are within a PD District.

2.2. GENERAL PLAN AND ZONING

Although the property is currently within the unincorporated area of the County, the City of Santa Rosa's General Plan designates the property as Very Low Density Residential with a development from 0.2 to 2.0 units per gross acre (i.e., 0.5 to 5.0 acres per unit). This density range accommodates rural and hillside developments within the UGB and is intended for single family detached units, but clustered single family attached and multifamily may be permitted.

Because the parcel is in the unincorporated area of the County, the parcel is not within a City zoning district.

2.3. PROJECT DESCRIPTION

The project proposes to annex the property into the City of Santa Rosa. With the annexation, the applicant requests a General Plan Amendment to include the property within the Low Residential General Plan land use designation and to zone the property R-1-6 Single Family Residential. Additionally, the project proposes to split the 1.66-acre parcel and develop 4 new residential lots and a remainder parcel that would include the established 1,470 square foot single-family residence. A 360 square foot accessory structure would exist on Lot 2. The parcels would range in size from 9,665 to 16,702 square feet. The average lot size is 13,260 square feet. Lot 1 is currently access off Brush Creek Road, and Lots 2-5 would be accessed off of Lyric Lane. The remainder of the property consists of trees and vegetation.

The lot slopes downward from Brush Creek Road to Rincon Creek at the eastern boundary. (**Figure 5: Site Plan)**.

FIGURE 1: REGIONAL LOCATION

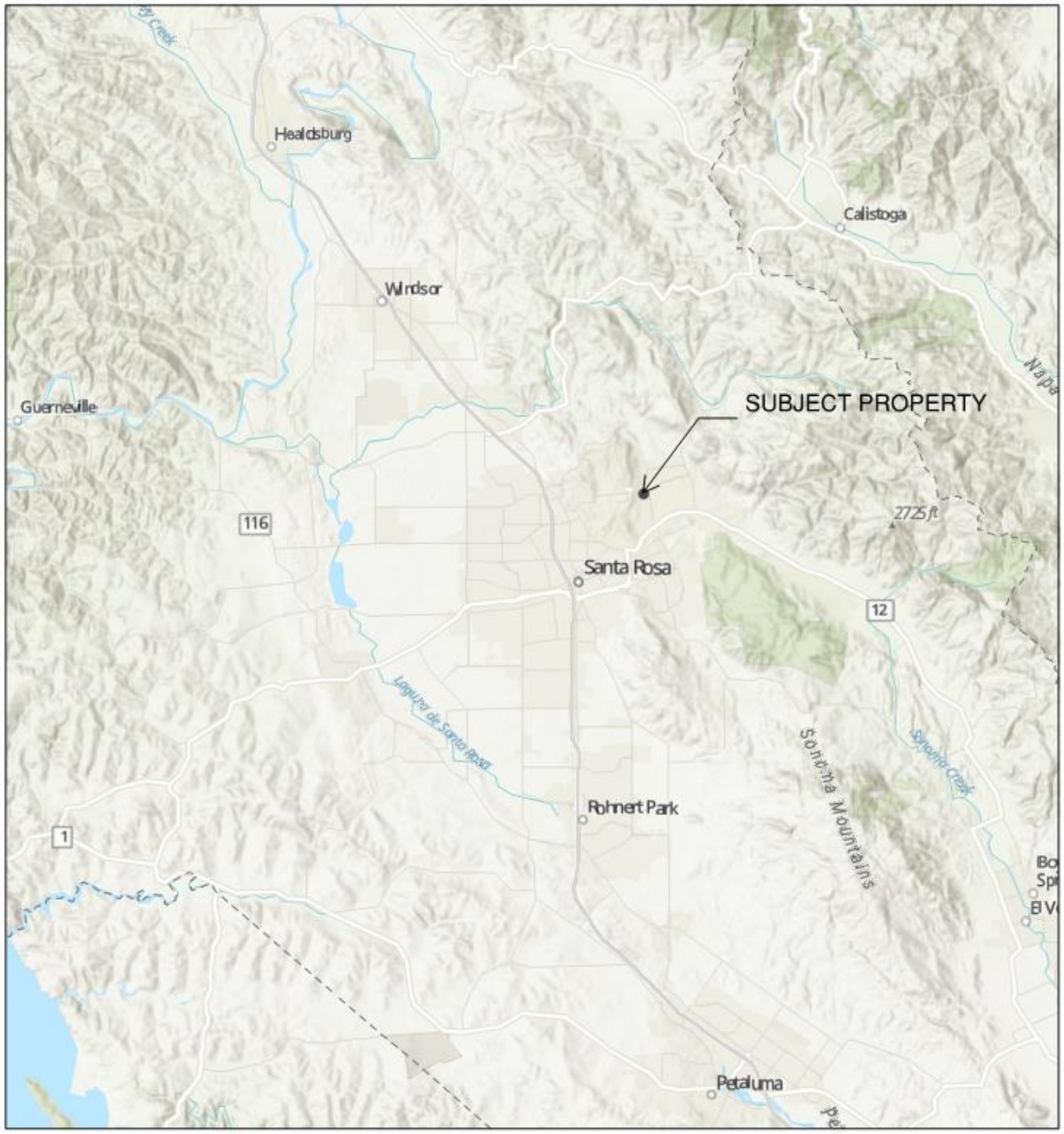


FIGURE 2: PROJECT VICINITY

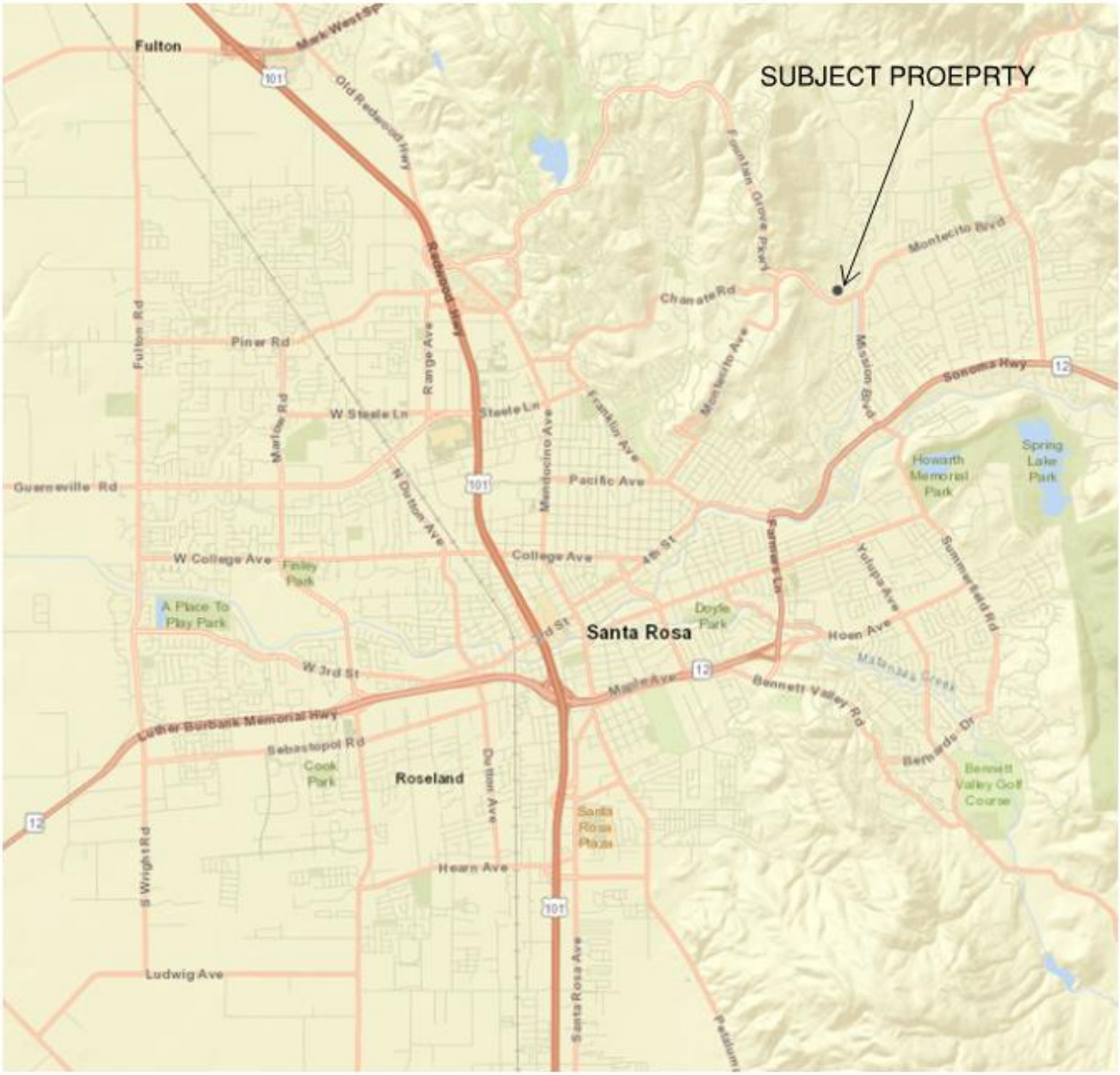


FIGURE 3: GENERAL PLAN LAND USE DESIGNATIONS

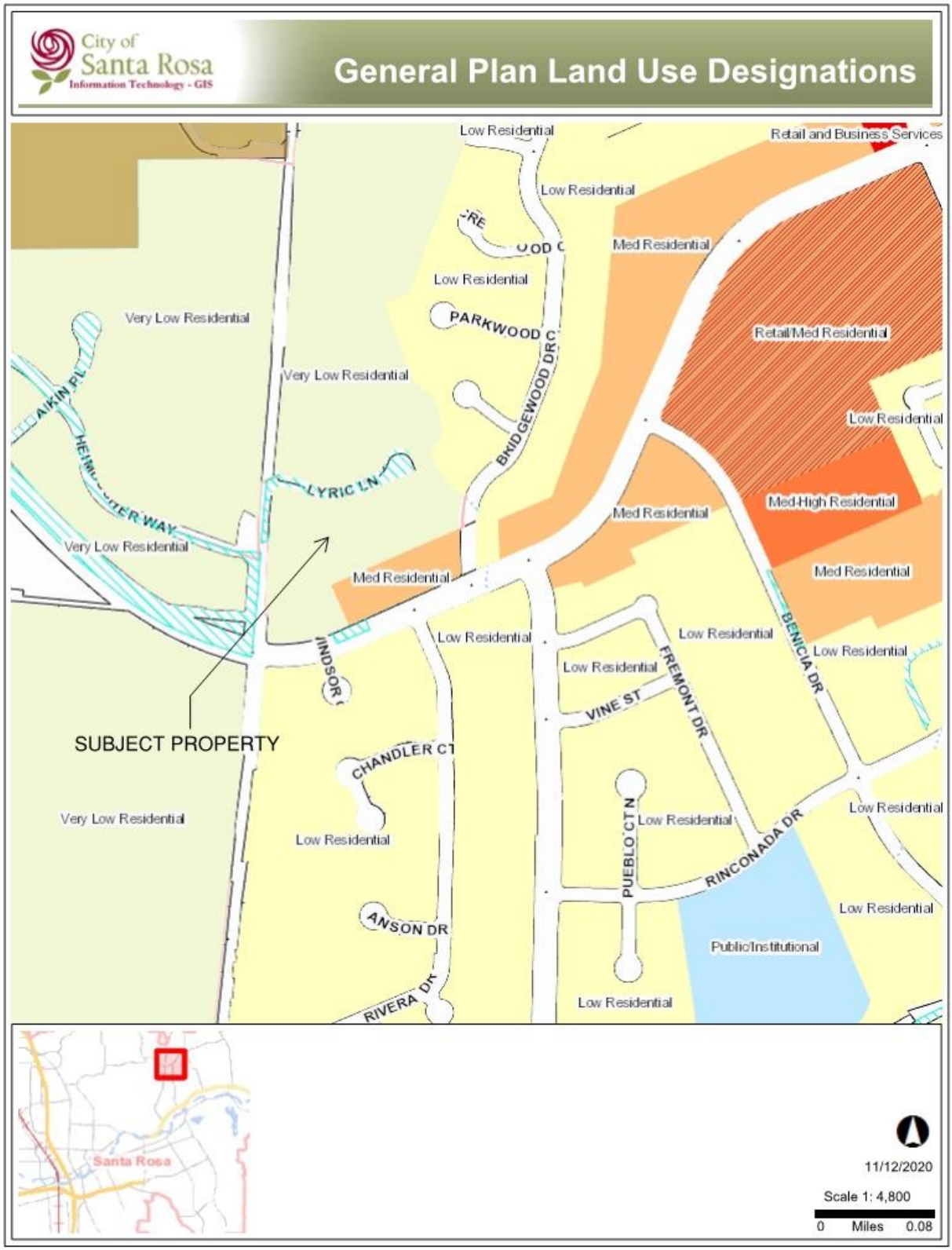


FIGURE 4: ZONING DESIGNATION

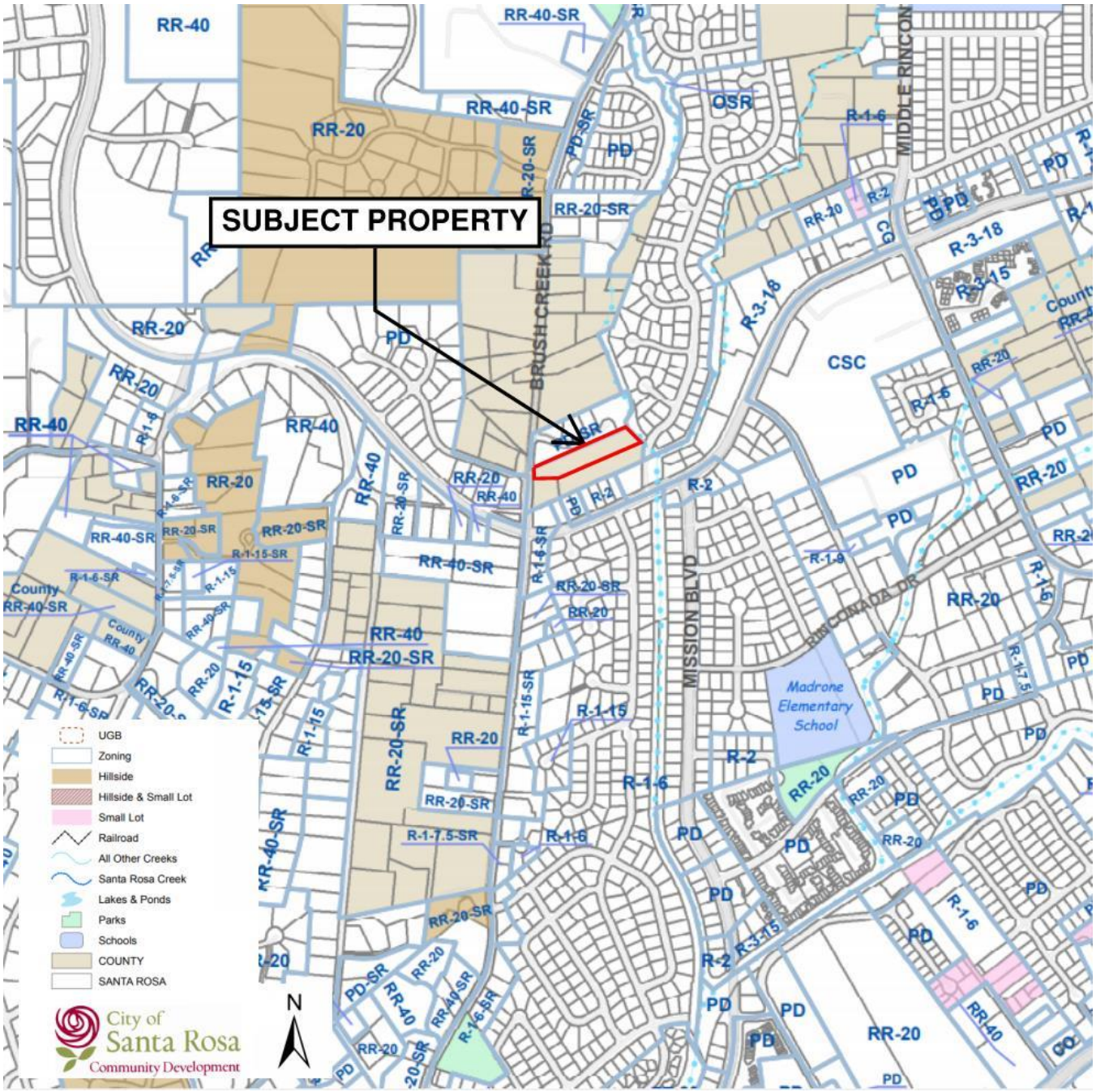
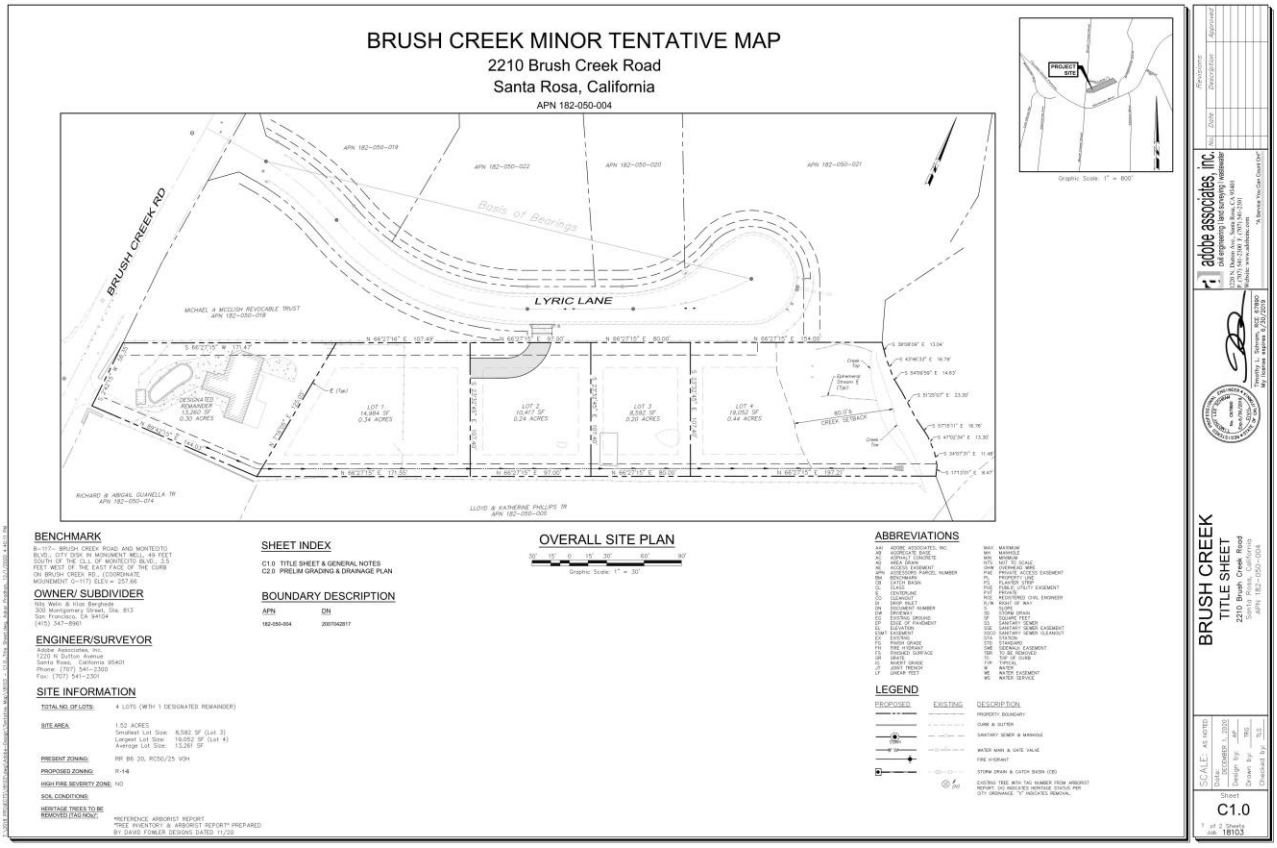


FIGURE 5: SITE PLAN



3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, potentially involving at least one impact that requires mitigation to be reduced to a level of "Less Than Significant" as indicated by the Environmental Checklist on the following pages.

☒ Aesthetics	☐ Agriculture and Forestry	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology	☐ Land Use Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

The following Environmental Checklist is used to describe the impacts of the proposed project, as detailed in the project description and the attached plans. Potential environmental impacts are classified as follows:

Potentially Significant Impact: An environmental impact that could be significant and for which no feasible mitigation is known. If any potentially significant impacts are identified in this Checklist, an Environmental Impact report (EIR) must be prepared.

Less Than Significant with Mitigation Incorporated: An environmental impact that requires the incorporation of mitigation measures to reduce that impact to a less-than-significant level.

Less Than Significant Impact: An environmental impact may occur, however, the impact would not be considered significant based on CEQA environmental standards.

No Impact: No environmental impacts would occur.

I. AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting: The project site is located near the intersection of Fountaingrove Parkway/ Montecito Boulevard. The site is not within any Scenic Resources. The surrounding neighborhood includes single family dwelling units to the north, south, east and west.

The property is overgrown with dense stands of trees along the property lines, especially the South. Many of the trees are non-native, such as the Eucalyptus and Privets. The site also consists of Coast Live Oaks, Valley Oaks, and Coastal Redwood. Several large Redwood trees grow along the northern property line (Lyric Lane).

Landscaping for the project will include planting Coast Live Oaks or Valley Oaks to be planted on each proposed lot. Street landscaping will include street trees and sidewalks.

I. a) Less than Significant Impact. The project site is not located within or along a designated scenic corridor nor does it contain scenic resources, nor does the project affect a scenic vista or a scenic highway.

I. b) Less than Significant Impact. Trees along the proposed property lines will be affected from water and storm drain trenching. An arborist report and tree inventory was conducted by David Fowler on November 12, 2020, recommending that the trees along the property line should be removed for safety. The report recommends three 24" box Coast Live Oaks or Valley Oaks be planted on each proposed lot. The project will not conflict with any local policies or ordinances protecting scenic resources and will result in less than significant impact with mitigation incorporated.

I. c) Less than Significant Impact. The parcel is surrounded by single family dwelling units to the north, south, east, and west. The existing 1,470 SF single family dwelling unit to remain on the remainder parcel is visible from Brush Creek Road and meets the objectives of the City's Design Guidelines pertaining to neighborhood design and single-family residential development. The dwelling unit is to remain along with a 360 SF accessory structure on Lot 2. Locations of the proposed dwelling units are to be determined. The arborist report indicates large Redwood trees along the

northern boundary line to remain to maintain privacy along Lyric Lane. The project will not substantially degrade the existing visual character or quality of the site, resulting in a less than significant impact.

I. d) Less than Significant Impact. The City of Santa Rosa Zoning Code (Code Section 20-30.080) requires that lighting fixtures be shielded or recessed to reduce light bleed to adjoining properties, and that each light fixture be directed downward and away from adjoining properties and public rights-of-way, so that no on-site light fixture directly illuminates an area off the site. The project shall demonstrate that lighting has been designed to adequately illuminate only the property to ensure compliance with City requirements. Compliance with these requirements will ensure that the project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area and therefore, will not result in any significant impacts.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting: The site has not been cultivated or used for active farming. The property is designated as "Urban and Build-Up Land" by California Department of Conservation Division of Land Resources Protection, Farmland Mapping and Monitoring Program (2012).

II. a, e) No Impact**.** The project site is not designated Prime Farmland, unique Farmland, or Farmland of Statewide Significance on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The project site is located within the Santa Rosa's Urban Growth Boundary and zoned for residential development. Upon annexation, the site would be designated within the R-1-6 Single Family Residential zoning district. Adjacent properties to the south are within Sonoma County jurisdiction and zoned RR. The parcels to the north are within City of Santa Rosa jurisdiction and within a PD district. All adjacent parcels are currently developed residential uses with limited agricultural capability. The project is expected to have no impact on conversion of farmland or existing agricultural uses.

II. b) No Impact**.** The project site is not under a Williamson Act contract. The proposed subdivision would designate the lots for low density single family residential and would not be eligible for a Williamson Act Contract. Therefore, the project would not impact existing agricultural zoning or Williamson Act contract for the property.

II. c - d) No Impact. The site is in an urban area that is projected for development with 45 tagged trees on-site and no forest resources on or near the site. Therefore, the project would have no impact to forest resources.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Setting: The project site is located in the City of Santa Rosa, within the boundaries of the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional agency with regulatory authority over stationary sources in the San Francisco Bay Area Air Basin, while the California Air Resources Board (CAR) has regulatory authority over mobile sources such as construction equipment, trucks, and automobiles throughout the state. The BAAQMD has the primary responsibility to meet and maintain the state and federal ambient air quality standards in the Bay Area. The Bay Area meets all ambient air quality standards for all state standards except ground-level ozone, respirable particulate matter (PM_{10}) and find particulate matter ($PM_{2.5}$) as the Air basin has been in attainment since 1998. The air basin meets all other ambient air quality standards.

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NOx). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic air contaminants or TACs are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, and fuel combustion. TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and Federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

Regulatory Environment

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet 2010 or later engine standards that have much lower DPM and $PM_{2.5}$ emissions. This regulation will substantially reduce these emissions between 2013 and 2023. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there

are more cleaner vehicles on the road or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads sooner.

In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of their CEQA Guidelines. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions will cause significant environmental impacts under the CEQA and were posted on BAAQMD's website and included in the Air District's updated CEQA Guidelines (BAAQMD 2017a). The significance thresholds identified by BAAQMD, as shown below in Table III-1, represent an appropriate approach and are used as a guideline in this analysis.

Table III-1: Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG	54	54	10
NOx	54	54	10
PM10	82 (Exhaust)	82	15
PM2.5	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for Single Sources			
Excess Cancer Risk	>10 per one million		
Hazard Index	>1.0		
Incremental annual $PM_{2.5}$	>0.3 µg/m^3		
Health Risks and Hazards for Combined Sources (Cumulative from all sources within 1,000-foot zone of influence.			
Excess Cancer Risk	>100 per one million		
Hazard Index	>10.0		
Annual Average $PM_{2.5}$	>0.8 µg/m^3		
Note: ROG=reactive organic gases, NOx=nitrogen oxides, PM_{10}=course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$=fine particulate matter or particulates with an aerodynamic diameter of 2.5 µm or less			

The City of Santa Rosa's Open Space and Conservation Element contains policies meant to improve and maintain air quality and impacts to the community from air pollution. Specific policies applicable to Project include:

OSC-J-1 Review all new construction projects and require dust abatement actions as contained in the CEQA Handbook of the Bay Area Air Quality Management District

OSC-J-3 Reduce particulate matter emissions from wood burning appliances through implementation of the city's Wood Burning Appliance code.

Consistent with the Santa Rosa 2035 General Plan recommendations, the Project shall be required to include the City's dust abatement conditions of approval and/or the BAAQMD's dust abatement mitigations. No wood burning fireplaces are allowed in new construction.

III. a) Less than Significant. The Bay Area is considered a non-attainment area for ground-level ozone and PM2.5 under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM10 under the California Clean Air Act, but not the Federal act. The area has attained both State and Federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM10, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. The main purpose of an air quality plan is to bring the area into compliance with the requirements of federal and state air quality standards. To bring the San Francisco Bay Area region into attainment, the BAAQMD developed the 2017 Bay Area Clean Air Plan (BAAQMD 2017b). BAAQMD's 2017 Clean Air plan focuses on protecting public health and protecting the climate. The project will not conflict with the applicable air quality plan, therefore there will be no impact.

III. b, c) Less than Significant Impact with Mitigation Incorporated. The project will include construction activities that will result in minimal short-term air quality impacts from combustion emissions and fugitive dust emissions that would not be expected to result in adverse air quality impacts. With the implementation of standard city conditions related to dust control measures stemming from project construction activities, the potential for construction-period dust (particulate matter) impacts would be less than significant with mitigation measures.

Mitigation Measure:

Implement Bay Area Air Quality Management District construction management standards during all on-and-off site construction activities.

- Water all active construction areas at least twice daily and more often during windy periods to prevent visible dust from leaving the site; active areas adjacent to windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
- Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment before leaving the site.
- Pave, apply water at least three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas.
- Sweep daily (or more often if necessary) to prevent visible dust from leaving the site (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality.
- Sweep streets daily, or more often if necessary (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.

III. d) Less than Significant Impact. The project construction and operation will not generate any permanent source of new odors or subject sensitive receptors to new significant permanent odors. During construction, odors will be generated by construction equipment; these odors will be present only temporarily during construction. Therefore, the project will result in less than significant impacts under criterion.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the Ca. Dept. of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the Ca. Dept. of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Setting: A complete biological resources report was prepared for the project by Sol Ecology in November 19, 2020. This report and inventory include results of plant communities, special status plant and wildlife species, presence of essential habitat elements for special status plant or wildlife species,

and the presence of wetland and non-wetland waters. An arborist's report was prepared by David Fowler on November 12, 2020, including a tree inventory.

Sol Ecology biologists conducted a biological survey on September 24, 2020, identifying all plant and wildlife species, and vegetation communities within the Study Area. The biologist's assessments of impacts under CEQA were based on changes resulting from the project relative to the existing conditions within the Study Area.

IV. a, b, c) Less than Significant. There are sensitive natural communities within the Project Study Area, including Rincon Creek and associated riparian mixed hardwood habitat. The parcel is within the Riparian Corridor Combining Zone (RC 50/25) and subject to a minimum streamside conservation area of 50 feet from the creek's top of bank, and 30 feet outward from the two ephemeral streams. Project activities are prohibited within any stream channel, riparian habitat, or streamside conservation area. No project activities are proposed to occur within the streamside conservation area, therefore there is no significant impact resulting from the project. There are no other sensitive natural communities within the project area.

Congested-headed hayfield tarplant, a special status species, has a low potential for occurrence within the project area. There are no documented occurrences of congested-headed hayfield tarplant within the Project, and no congested-headed hayfield tarplant was observed during the biologist's site visit, which took place during the special status plant's blooming period. It is unlikely that congested-headed hayfield tarplant occurs within the project area given that the nearby occurrences are associated with vernal pool habitat. Impacts to special status plant species is less than significant given that no special status plants were observed.

California giant salamander, and foothill yellow-legged frog (FYLF), two special status amphibians, have the potential to be present in the study area. Western Pond Turtle (WPT) also has the potential to be present. These species are most likely to occur within Rincon Creek and the riparian mixed hardwood habitat and thus are not likely to be affected by the proposed project.

IV. d) Less than Significant with Mitigation. Migratory nesting birds in grassland and riparian areas may potentially be impacted by the proposed project if activities occur during the nesting season, February 1 through August 31. Noise, dust, or visual disturbances may result in nest abandonment or mortality to eggs and chicks. To avoid significant impacts, mitigation measures are recommended.

There are 4 bat species that have the potential to occur within the project area. These species may roost in the trees or in the attic of the existing residential house on site. Removal of bat roost habitat may result in significant impacts. To avoid significant impacts, prior to tree removal and/or building demolition or alteration mitigation measures are recommended.

Mitigation Measures:

1. All construction activities should be performed outside the migratory nesting season between September 1 and January 31 to avoid significant impact Proposed project activities shall not occur during nesting season, February 1 through August 31.
2. If work must be performed during nesting season, a pre-construction nesting bird survey should be performed in all areas within 250 feet of proposed activities.

3. If nests are found, an appropriately sized no-disturbance buffer should be placed around the nest directed by the qualified biologist conducting the survey. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.
4. Prior to activities in areas where bat roosts may be present, a qualified bat biologist shall perform a pre-construction roost survey (dusk emergence survey) no more than 10 days prior to the start of activities with potential to disturb bats or their habitat during the maternity season between April and September to avoid potential impacts to active maternity sties and/or pregnant females.
5. If no maternity roost is found, any felled trees should be left overnight prior to removal from the site or on-site chipping to allow any solitary bats to exit the roost.

IV. e) No Impact. The project does not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

IV. f) No Impact. The project does not conflict with any adopted habitat conservation or natural community conservation plans within the City of Santa Rosa. There are also no approved local, regional or state habitat conservation plans related to or affected by this project.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Pub. Res. Code §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Setting: An Archaeological Survey Report was conducted by Alta Archaeological Consulting in September 2020 to identify any cultural resources within the project area. The project is located within the foothills of the Sonoma Mountains, known as Rincon Valley. The property is located west of Rincon Creek, adjacent to the eastern boundary of the parcel. Rincon Creek is a narrow drainage that bisects housing parcels on either side of the banks. Native riverine vegetation is extant at the edge of the corridor, including Bay trees. Prehistoric populations are known to have exploited the plant and animal resources along the creek system.

V. a) No Impact. The existing structure on the property is not proposed to be altered or removed. The structure will remain on the remainder parcel of the proposed subdivision. A review of historic registers and inventories indicate that no historical resources are present in the project area. There are no National Register listed or eligible properties located within a 0.5 mile visual area of the project area. Therefore, no historic resources are impacted.

V. b & c) No Impact. The archaeological site and survey maps revealed 17 cultural resource studies that have been performed within a 0.5 miles radius of the project area. The project area had been previously surveyed for archaeological reasons in 1991. The survey did not identify any cultural resources, unique paleontological resources, or unique geologic features. Therefore, there is no impact.

V. d) Less than Significant Impact with Mitigation Incorporated. The proximity to Rincon Creek suggests the project area may have been favorable to human activity. The proposed project is not expected to have an adverse effect on cultural resources; however, mitigation measures are recommended to ensure that cultural resources are not adversely affected by the proposed project.

Mitigation Measures:

Unanticipated subsurface archaeological finds in the Sonoma County are common; indeed, the proximity to Rincon Creek suggests the project area may have been favorable to human acidity. Therefore, the following recommendations are provided as mitigation to ensure that cultural resources are not adversely affected by the proposed project. The project as presently designed is not expected to have an adverse effect on cultural resources. The project should be allowed to proceed given the following recommendations.

1. Unanticipated Discovery of Cultural Resources- If previously unidentified cultural resources are encountered during project implementation, avoid altering the materials and their stratigraphic context. A qualified professional archaeologist should be contacted to evaluate the situation. Project personnel should not collect cultural resources. Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.
2. Encountering Native American Remains- Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

a) Result in a potentially significant environmental impact due to wasteful inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Setting: Most of the energy consumed in Santa Rosa is produced from traditional sources and delivered to the city through established distribution networks. Pacific Gas and Electric Company (PG&E) provides electrical services and natural gas within the Urban Growth Boundary, and gasoline and other petroleum products are sold through private retailers throughout the city. City of Santa Rosa adopted an all-electric "reach code" (Ord. 2019-019). Natural gas connections and appliances for new dwelling units are not allowed for building permit applications submitted after January 1, 2020.

New buildings, including homes, constructed in California must comply with the standards contained in Title 20, Public Utilities and Energy, and Title 24, Building Standards Code, of the California Code of Regulations (CCR). These efficiency standards apply to new construction of both residential and nonresidential buildings, and both 20 CCR and 24 CCR regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process.

The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Standards include improvements for attics, walls, water heating, and lighting. Installation of photovoltaic systems is now mandatory for new dwelling units.

In 2010, the City adopted CALGreen Tier 1 standards which apply to all new buildings and to additions and alterations of residential and non-residential buildings. The Tier 1 standards exceed the basic level of requirements of the CALGreen Building Code. This program supports the City's efforts to reduce greenhouse gases to reach the local, regional, and state targets outlined in the City's Climate Action Plan. The City adopted CAP in 2012 and a Municipal Climate Action Plan (MCAP) in 2013. The CAP examines community-wide sources of GHG emissions and outlines strategies for reducing these emissions. The MCAP addresses greenhouse gas emissions from the City's municipal operations. In 2019, the City adopted the all-electric reach code. CALGreen Tier 1 was adopted except for the energy code section.

The City of Santa Rosa General Plan addresses energy use and efficiency in all elements by including goals and policies for improving energy efficiency and reducing waste. The General Plan seeks to reduce energy consumption through minimizing vehicle trips and approving land use patterns that support increased density in areas where there is infrastructure to support it, increased opportunities for transit, pedestrians, bicycles, and through green building and land development conservation strategies.

VI. a, b) Less than Significant Impact. Project construction will occur for approximately 15 months and will consume energy through the operation of heavy off-road equipment, trucks, and worker vehicle traffic. Electricity will be used to power tools, lighting, and electric machinery. Operation of the 4 residences will consume electricity, water, and natural gas. Electricity and natural gas will be used for lighting, heating, and appliances.

The project will be required to comply with the applicable measures identified in the CAP New Construction Checklist including policies related to energy efficiency as a standard condition of approval. Details on CAP compliance for construction and operation of the project are provided in Section VII Greenhouse Gases. Compliance with the City of Santa Rosa CAP, including but not limited to compliance with the City's CalGreen Tier 1 Standards and California Energy requirements under Title 24 and installation of real-time energy monitors will ensure the Project will not result in wasteful, inefficient, or unnecessary consumption of energy during construction and operation of the Project.

The project must comply with California requirements under Title 20 and Title 24 will require the compliance with state building energy requirements. These requirements are enforced during the City's permit approval and will reduce impacts on wasteful, inefficient, or unnecessary consumption of energy during operation of the project. Therefore, impacts related to wasteful, unnecessary energy consumption and compliance with renewable or energy efficiency plans will be less than significant.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined by the Uniform Building Code, creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Setting: PJC & Associates conducted a geotechnical investigation in January 2021. The project is located in the Coast Ranges Geomorphic Province of California. This province is characterized by northwest trending topographic and geologic features. The structure of the northern Coast Ranges region is complex due to the continuous tectonic deformation.

Geologic structures in the region are primarily controlled by northwest trending faults. There are no known active faults passing through the site. The site is not located in the Alquist-Priolo Earthquake Fault Studies zone. The closest potentially active fault is the Rodgers Creek, approximately 2 miles to the southwest. The site is located within a zone of high seismic activity.

VII. a.i.) Less than Significant Impact. There are no known active fault passes through the site. The site is not located in the Alquist-Priolo Earthquake Fault Studies Zone. PJC & Associates determined that the three closes potentially active faults to the site to be Rodgers Creek, Maacama, and West Napa faults. The Rodgers Creek fault is located two miles to the southwest, the Maacama fault is located seven miles north, and the West Napa fault is located 17 miles southeast of the site.

Rupture of the ground surface is expected to occur along known active fault traces. No evidence of existing faults or previous ground displacement on the site due to fault movement has been indicated. Therefore, the likelihood of the ground rupture at the site due to faulting is considered to be low.

VII. a.ii.) Less than Significant Impact. The site is located within a zone of high seismic activity related to active faults that transverse through the surrounding region. Future damaging earthquakes could occur on any of these fault systems during the lifetime of the proposed project. The intensity of ground shaking at the site will depend upon the distance to the causative earthquake epicenter, the magnitude of the shock, the response characteristics of the underlying earth materials and the quality of construction.

The site has been subjected in the past to ground shaking by earthquakes on the active fault systems that travers the region. It is believed that earthquakes with significant ground shaking will occur in the region within the next several decades. Therefore, the subject site is expected to be subjected to strong ground shaking during the design life of the project. The City building codes would require the project to be designed and constructed in accordance with current standards for earthquake-resistant construction. Therefore, this impact is less than significant.

VII. a.iii.) Less than Significant Impact. PJC & Associates drilled a borehole with a depth of 50.5 feet below the existing ground surface to assess the liquefaction potential at the site. No loose, saturated, granular soil stratums were revealed within 50.5 feet of the ground surface at the site. The subsurface conditions consisted primarily of fine-grained soils, and the granular deposit that was encountered was dense and contained significant fines contents. Therefore, it is judged that the risk of soil liquefaction at the site is low and a less than significant impact.

VII. a.iv.) Less than Significant Impact. The eastern portion of the site, within proposed lot 4, is bordered to the east by the banks of Rincon Creek. The banks of the creek are approximately ten feet tall, heavily vegetated, and appeared relatively stable, with no signs of major erosional sloughing or slumping. Additionally, the proposed riparian setback for structures adjacent to the creek banks is 80 feet, a sufficient setback distance to avoid significant distress due to potential seismically induced creek bank instability. Therefore, the potential for landslides present a less than significant impact on the site.

VII. b) Less than Significant Impact with Mitigation Incorporated. Site grading is anticipated to consist of cuts and fills on the order of feet and less to achieve the desired pad grades and to provide adequate gradients for site drainage. Mitigation measures are described below:

Mitigation Measure:

1. Earthwork and Grading- Select Import Building Pads

   Stripping- Structural areas should be stripped of the surface vegetation, old fills, debris, underground utilities, etc. These materials should be moved off site; some of them, if suitable could be stockpiled for later use in landscape areas. If underground utilities pass through the site, we recommend that these utilities be removed in their entirety or rerouted where they exist outside an imaginary plane sloped one horizontal to one vertical (1H:1V) from the outside bottom edge of the nearest foundation element. Voids left from the removal of utilities or other obstructions should be replaced with compacted engineered fill under the observation of the project geotechnical engineer. All wells, septic systems, and leach fields should be abandoned and plugged according to regulations set forth by the Sonoma County Healthy Department. Excavation and Compaction- Following site stripping, areas to receive fill should be prepared by removing the unsuitable surface and near surface soils and exposing firm native soils, as determined by the geotechnical engineer in the field during construction. Areas that are scheduled to receive fill should be scarified to a minimum depth of eight inches , moisture conditioned to at least three percent over optimum moisture content, and recompacted to at least 90 percent of relative maximum dry density as determined by ASTM D-1557 test procedures.

   All fill material should be placed and compacted in accordance to the recommendations presented in Table VII-1 below. It is recommended that any import fill to be used on site be of a low to non-expansive nature and should meet the following criteria:

Plastic Index	less than 12
Liquid Limit	less than 35
Percent Soil Passing #200 Sieve	between 15% and 35%
Maximum Aggregate Size	4 inches

The existing on-site soils, free of organics and rocks larger than six inches in dimension, are suitable for use as compacted engineered fill. All fills should be placed in lifts no greater than eight inches in loose thickness and compacted to the general recommendations provided for engineered fill.

Table VII-1

SUMMARY OF COMPACTION RECOMMENDATIONS

Area	Compaction Recommendations*
General Engineered Fill (Import)	In lifts, a maximum of eight inches loose thickness, compact to a minimum of 90 percent relative compaction near optimum moisture content.
General Engineered Fill (Native)	In lifts, a maximum of eight inches loose thickness, compact to 90 percent relative compaction at least three percent over optimum moisture content.

*All compaction requirements stated in this report refer to dry density and moisture content relationships obtained through the laboratory standard described by ASTM D-1557

All site preparation and fill placement should be observed by a representative of PJC. It is important that during the stripping, subexcavation and grading/scarifying processes, a representative from PJC & Associates be present to observe whether any undesirable material is encountered in the construction area.

Generally, grading is most economically performed during the summer months when on-site soils are usually dry of optimum moisture content. Delays should be anticipated in site grading performed during the rainy season or early spring due to excessive moisture in the on-site soils. Special and relatively expensive construction procedures should be anticipated if grading must be completed during the winter and early spring.

Cut and fill slopes should be no greater than the two horizontal to one vertical (2H:1V). Slopes steeper than 2H:1V should be retained. Disturbed slopes should be planted with deep rooted groundcover to control erosion.

2. Foundations: Drilled Cast-In-Place Piers

Vertical Loads- The structures may be supported by a drilled, concrete cast-in-place pier and grade beam foundation system extending through the weak and compressible soils, zone of significant moisture variation, and into the underlying firm native soils. The drilled piers should have a minimum diameter of 12 inches and be spaced at least three pier diameters center to center. The piers will derive their support through peripheral friction. Perimeter and interior piers should extend at least nine feet below the finish ground surface and at least six feet into firm native soils. The piers should be reinforced and designed by the project structural engineer. Perimeter and interior peris supporting continuous wall loads should be tied together with grade beams. The grade beams should be designed to span between the piers in accordance with structural requirements.

The portion of the piers extending at least three feet beneath the finished ground surface may be designed using an allowable dead plus live skin friction of 600 pounds per square foot (psf). This value may be increased by one-third for short duration wind and seismic loads. End bearing should be neglected because of difficult in cleaning out small diameter pier holes and the uncertainty of mobilizing skin friction and end bearing simultaneously. A value equal to one-half the downward capacity of the pier

may be used to resist uplift forces. An uplift swelling pressure of 1500 psf should be used for the design of the grade beam.

Lateral Loads- Lateral loads resulting from wind or earthquake can be resisted by the pier through a combination of cantilever action and passive resistance of the soils surrounding the pier. A passive equivalent fluid pressure of 250 psf/ft acting on two pier diameters should be used. The upper three feet of soil should be neglected for passive resistance.

Settlement- The maximum and differential settlements of the piers is estimated to be small and within tolerable limits. If groundwater is encountered, it may be necessary to de-water the holes and/or place concrete by the tremie method. If caving soils are encountered, it may be necessary to case the holes.

3. Foundations: Conventional Spread Footings

Vertical Loads- Provided the earthwork and grading recommendations for the select import building pads are performed, the structures may be adequately supported by conventional spread footings extending at least 12 inches into imported, non-expansive compacted engineered fill. All footings should be reinforced. The recommended soil bearing pressures, depths of embedment and minimum width of spread footings are presented in Table VII-2 below.

Table VII-2

FOUNDATION DESIGN CRITERIA

Footing Type	Bearing Pressure (psf)*	Minimum Embedment (in)**	Minimum Width (in)
Continuous Wall	2000	12	12
Isolated Column	2500	12	18

*Dead plus live load
** Depth into engineered fill.

Lateral Loads- Resistance to lateral forces may be computed by using friction or passive pressure. A friction factor of 0.35 is considered appropriate between the bottom of the concrete structures and engineered fill. A passive pressure equivalent to that exerted by a fluid weighing 350 pounds per square foot per foot of depth (psf/ft) is recommended. Unless restrained at the surface, the upper six inches should be neglected for passive resistance.

Footing concrete should be placed neat against engineered fill. Footing excavations should not be allowed to dry before placing concrete. If shrinkage cracks appear in the footing excavations, the soil should be thoroughly moistened to close all cracks prior to concrete placement.

Settlement- Total settlement of individual foundations will vary depending on the width of the foundation and the actual load supported. Foundation settlements have been estimated based on the bearing values provided. Maximum settlements of shallow foundations designed and constructed in accordance with the preceding recommendations are estimated to be less than one footings are expected to be less than one-half of one inch. The majority of the settlement is expected to occur during construction and placement of dead loads.

4. Slab-On-Grade

All interior slabs-on-grade should be constructed entirely on 30-inch thick blanket of imported, non-expansive compacted, engineered fill prepared in accordance with the earthwork and grading recommendation for select import building pads contained in this report. All slab should be supported on at least six inches of clean gravel or crushed rock to provide a capillary moisture break and provide uniform support for the slab. The rock should be graded so that 100 percent passes the one-inch sieve and no more than five percent passes the No. 4 sieve.

PJC & Associates recommend that the gravel be placed as soon as possible after compaction of the subgrade to prevent drying of the subgrade soils. If the subgrade is allowed to dry out prior to slab-on-grade construction, the subgrade soils should be moisture conditioned by sprinkling prior to concrete placement.

The slabs should be at least 5 inches thick and designed and reinforced as determined by the project structural engineer. Special care should be taken to ensure that reinforcement is placed at the slab mid-height.

For slabs-on-grade with moisture sensitive surfacing, we recommend that an impermeable membrane be placed over the rock to prevent migration of moisture vapor through the concrete slab. Furthermore, the slabs-on-grade should be provided with underslab drains to prevent hydrostatic uplift and control seepage.

5. Seismic Design

Geologic structures in the region are primarily controlled by northwest trending faults. No known active fault passes through the site. The project site should be subjected to seismic shaking resulting from earthquakes on the active faults primarily in the Coast Ranges. For design, a site class type D, spectral accelerations of Ss of 2.524 g and S1 of 0.964 g are recommended.

6. Utility Trenches

Larger earth moving equipment should be used for deeper excavations. WE expect the walls of trenches less than five feet deep, excavated into engineered fill or native soils, to remain in a near vertical configuration during construction provided no equipment or excavated soil surcharges are located near the top of the exaction. Where trenches extend deeper than five feet, the excavation may become unstable. All trenches regardless of depth, should be evaluated to monitor stability prior to personnel entering the trenches. Shoring or sloping of any deep trench wall may be necessary to protect personnel and to provide stability. All trenches should conform to the current CAL-OSHA requirements for worker safety.

Trenches should be backfilled with granular import fill and compacted to at least 90 percent of maximum dry density. The moisture content of compacted backfill soils should be within two percent of optimum moisture content. Jetting should not be used.

Special care should be taken in the control of utility trench backfilling in pavement areas. Poor compaction may cause excessive settlements resulting in damage to the pavements. In pavement areas, the top eight inches of trench backfill should be compacted to at least 95 percent relative compaction.

7. Drainage

   All final grades should be provided with positive gradients away from foundations to provide rapid removal of surface water runoff to an adequate discharge point. No ponding of water should be allowed on the building pads or adjacent to foundations.

   The use of continuous roof gutters is recommended to reduce the possibility of soil saturation adjacent to the buildings. Downspouts from gutters should be discharged onto an impermeable surface such as pavement or into a closed conduit discharging a minimum of eight feet away from the structures.

   Foundation subdrains are recommended to be placed adjacent to all foundations, except the downhill foundation. The foundation subdrains should extend at least 12 inches below the interior subgrade. The subdrain should consist of a heavy walled four-inch diameter perforated pipe. The bottom of the trench should be sloped to drain by gravity and lined with a few inches of three quarter to one-and-a-half-inch drain rock. The trench should then be backfilled to within six inches of finished surface with drain rock. The upper few inches should consist of compacted soil to reduce surface water inclusion. We recommend that a drainage filter cloth be placed between the soil and the drain rock or Class II permeable material be used in lieu of the filter fabric and drain rock. Furthermore, slabs-on-grade should be provided with underslab drains to prevent hydrostatic uplift and control seepage. Roof downspouts and surface drains must be maintained entirely separate from subdrains.

VII. c & d) Less than Significant Impact with Mitigation Incorporated. There is a presence of weak, compressible, and expansive surface and near surface soils that are not suitable for support of fills, foundations, or slabs. Under new construction, these soils could experience significant settlement local areas of fill potentially occur on the property. Based on observations and lab testing, PJC determined that the surface and near surface have a moderate to very high expansion potential. Shrinking and/or swelling of these materials due to loss or increase of moisture content can cause ground movement, distress, and damage to foundations. The project is currently in preliminary design stages. Depending on the proposed building envelopes and design concepts, the geotechnical engineer should review and if necessary, revise the recommendations accordingly. The proposed project would have a less than significant impact utilizing the following geotechnical recommendations presented in PJC & Associates' geotechnical report as well as the current edition of the CA Building Code.

Mitigation Measures:

1. If raised wood floors are desired in living areas, it would be necessary to extend the foundations through the zone of significant moisture variation, and into the underlying native soils. If slabs-on-grade are utilized in living areas, all structures should be supported on a 30-inch thick blanket of imported, non-expansive compacted engineered fill.

VII. e) No Impact. The proposed project would convey wastewater generated onsite to the existing municipal wastewater system and wastewater associated with wine production would be stored onsite and periodically transported to a landfill. Septic tanks would not be employed at the project site. Therefore, no impacts to soils due to the use of septic systems are anticipated.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Setting: On December 4, 2001 the Santa Rosa City Council adopted a resolution to become a member of Cities for Climate Protection (CCP), a project of the International Council on Local Environmental Initiatives (now called ICLEI Local Governments for Sustainability). Since that time all eight Sonoma County municipalities and Sonoma County have become members. By becoming a member, local governments commit to completing five milestones: 1) conduct a GHG emissions analysis; 2) set a target for emissions reduction; 3) draft a local action plan for meeting the target; 4) implement the action plan; and 5) monitor and report on the progress. The City adopted the Climate Action Plan in 2012. A project that is in compliance with a Qualified GHG Reduction Strategy (such as the City of Santa Rosa's Climate Action Plan) would be considered as having a less than significant impact.

The BAAQMD has established screening criteria to provide lead agencies with a conservative indication of whether a project could result in significant GHG impact during operations (i.e., occupancy). The operational screening criterion for GHG for single family residential uses is 56 units. This Project proposes 4 new single-family residences, well below the screening criteria.

VII. a - b) Less than Significant Impact. The project will be subject to the applicable Climate Action Plan measures:

- 1.1.1. Require new development to comply with the current provisions, as amended, of CALGreen, part 11 of the California Green Building Standards Code.
- 1.4.1 Develop a tree inventory that identifies the types, ages, number, and locations of trees in Santa Rosa.
- 1.4.2 Implement the City's tree preservation ordinance.
- 1.4.3. Require new development to supply adequate number of street trees and private trees.
- 1.5 Require new sidewalks, crosswalks, and parking lots to be made of cool paving materials with a high solar reflectivity.

Project-specific increases in GHG emissions are expected to be negligible due to the relatively small number of vehicle trips per day and increasingly stringent state building code energy conservation requirements. Additionally, state-mandated water efficiency measures would help minimize GHG emissions. This negligible increase does not exceed the thresholds suggested by BAAQMD and is consistent with measures from the City's Climate Action Plan, therefore having a less than significant impact.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

IX. a, b) Less than Significant Impact. Hazardous materials would be used during construction, including fuels for vehicles and equipment, and construction materials including concrete and solvents. The use of such materials is common on construction projects, and therefore a less than significant impact is expected.

Project construction activities would include the use of materials such as fuels, lubricants, paints and solvents. Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. Because contractors are required to comply with laws pertaining to the handling of hazardous materials, the impacts would be less than significant.

IX. c- f) No Impact. The project would not be located within one-quarter mile of an existing school. The exposure to a significant or even measurable amount of hazardous material is highly unlikely. The project is not located on a hazardous materials site compiled pursuant to Government Code § 65962.5. There is no indication that contamination would be mobilized or encountered during construction. The project is not located within an airport land use plan or within two miles of an airport. Therefore, there would be no impacts.

IX. g, h) No Impact. The site development will not interfere with any adopted emergency response or evacuation plan and will have no impacts related to emergency response impairment.
Wildland fires are of a concern particularly in expansive areas of native vegetation of brush, woodland, grassland. Upon annexation, the project site would be located within the City's Urban Growth Boundary. The project site is located on urban land in zones designated as "Non-Fire Hazard" by the California Department of Forestry and Fire Protection. However, the site is adjacent to parcels zoned within the fire wildland-urban interface.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including	☐	☐	☒	☐

through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche or mudflow?	☐	☐	☐	☒

Setting: The project site is located on relatively level to gently sloping topography, with the exception of the steeply sloping banks of Rincon Creek. No creeks or seasonal drainage swales pass through the site. The western bank of Rincon Creek runs along the eastern boundary of the site.

X. a) Less than Significant Impact. The proposed project would connect and discharge domestic waste from all buildings into the City's wastewater collection system. The project would not violate any City water quality standards or waste discharge requirements. Therefore, there is no impact.

X. b) Less than Significant Impact. The project would be connected and served by the City's water system. No subsequent effect to the groundwater is anticipated resulting from the proposed development. Therefore, less than significant impact would be anticipated.

X. c, d & e) Less than Significant Impact. The proposed project would not substantially alter the on-site drainage pattern or cause a significant increase in erosion or siltation on or off site, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding. The project

would incorporate erosion control measures appropriate to its maximum slope to manage onsite surface drainage and erosion of onsite soils during construction and winter months (October to April). By incorporating these measures, alteration of drainage patterns or increase in erosion or siltation on or off site is expected to be a less than a significant impact.

X. f) No Impact. There are no other factors in this proposal that would otherwise substantially degrade water quality.

X. g, h, i) No Impact. The project is not within a 100- year flood hazard area or 100-year floodplain. There are no levees or dams nearby the site.

X. j) No Impact. The project site is not located within any area that would be subject to seiche, tsunami or mudflow

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Setting: The project is located within the unincorporated area of Sonoma County. Upon annexation into the City of Santa Rosa, the property will amend the land use designation to Very Low Residential, and the zoning designation to R-1-6 Single Family Residential. The parcel is surrounded by lots within County and City jurisdiction. Parcels to the south are within Sonoma County and zoned RR. The parcels to the north are within Santa Rosa and zoned within a PD District.

XI. a) No Impact. No aspects of the project would physically divide an established community. The project is surrounded by residentially zoned land with single family dwellings.

XI. b) No Impact. The project proposes to subdivide a 1.66 acre lot into 4 new parcels with a designated remainder. Each lot would be approximately 0.22 to 0.38 acres. This density range accommodates the City's General Plan designation of Very Low Residential (0.2 to 2.0 units per gross acre).

XI. c) No Impact. There are no habitat conservation plans or natural community conservation plans applicable to the project area.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Setting: The Surface Mining and Reclamation Act (SMARA) of 1975 identifies specific areas of mineral resources in the North San Francisco Bay Region including Santa Rosa. The project is not located within one of the listed aggregate deposits in the SMARA report as shown on Santa Rosa Quadrangle.

XII. a - b) No Impact. The development of the project site will not create an adverse impact upon locally or regionally significant resources as the City of Santa Rosa's General Plan does not identify any locally important mineral resource locations in the vicinity of the proposed project.

XIII. NOISE

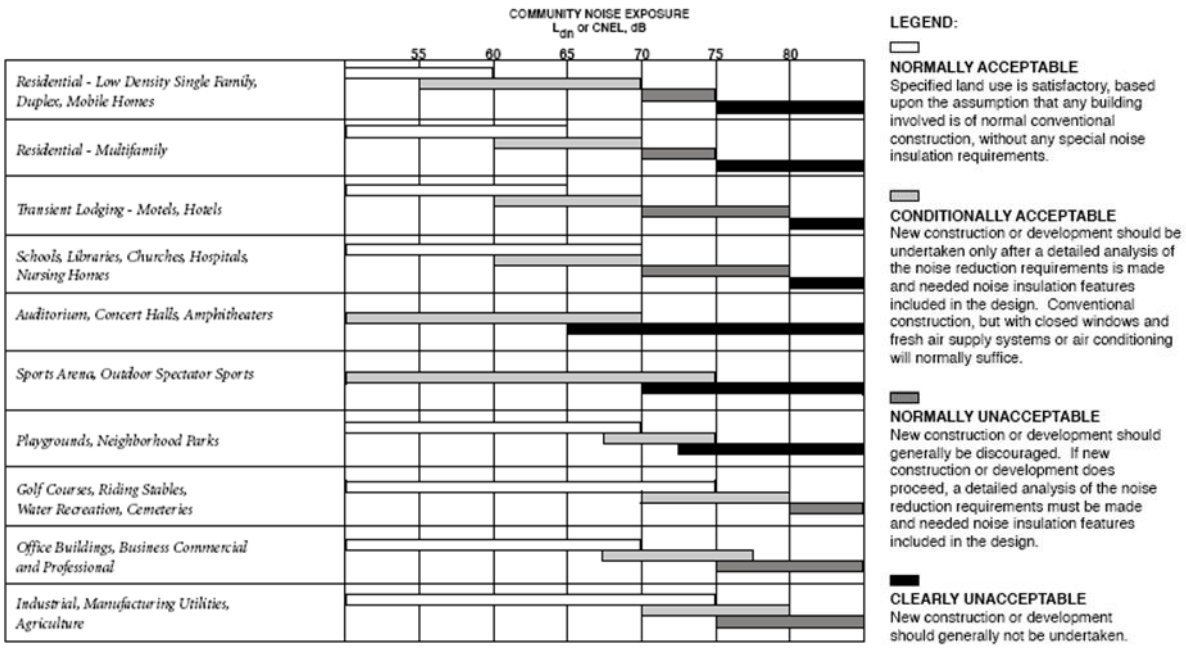
Would the project result in:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting: The project will result in short-term noise impacts related to site grading and construction activity, and local traffic. The project site is approximately 500 feet from the Fountaingrove Parkway/Montecito Boulevard intersection, a regional/arterial street in Santa Rosa. The site is surrounded by residences along Lyric Lane and Brush Creek Road.

The City of Santa Rosa's General Plan includes the Noise and Safety Element, which provides guidelines to achieve the goal of maintaining an acceptable community noise level. The City's Noise Guidelines as they relate to land use compatibility are found in Table XIII-1 below.

Table XIII-1: Land Use Compatibility Standards, City of Santa Rosa General Plan



The ambient base noise levels for residential, office, commercial, and industrial areas are established in Section 17-16.030. The applicable ambient noise level criteria are shown below:

TABLE XIII-2: Santa Rosa Noise Ordinance Ambient Base Noise Levels

Land Use Zone	Daytime Level (7:00 am - 7:00 pm)	Evening Level (7:00pm - 10:00pm)	Nighttime Level (10:00pm - 7:00am)
Single-Family Residential (R1 and R2)	55 dBA	50dBA	45 dBA
Multi-Family Residential	55 dBA	55 dBA	50 dBA
Office and Commercial	60 dBA	60 dBA	55 dBA
Intensive Commercial	65 dBA	65 dBA	55 dBA
Industrial	70 dBA	70 dBA	70 dBA

Source: Santa Rosa Noise Ordinance 17-16.030

XIII. a - b) Less than Significant. The proposed project could potentially generate noise in excess of standards established in the City's Municipal Code at the nearby sensitive receptors, which unless mitigated could be substantial. Sec. 17-16.120 of the City's Noise Ordinance limits noise levels produced by stationary mechanical equipment to 60 dBA during daytime hours (7:00 a.m. to 7:00 p.m.), to 55 dBA during evening hours (7:00 p.m. to 10:00 p.m.), and to 50 dBA at night (10:00 p.m. to 7:00 a.m.) at single-family residential property lines. Typically, these noise limits do not apply to construction activities, and the "unlawful" noise statement in Section 17-16.120 does not indicate construction noise as included in these noise thresholds.

Construction activities would occur during the daylight hours between 7 am and 7 pm on weekdays- normal waking hours and construction vehicles would be properly muffled, Therefore, noise generated during this time is not anticipated to be significant. All construction activities would be conducted in compliance with the City's Noise Ordinance. Construction noise may result in short-term ground borne vibrations and noise levels. However, there is a relatively low potential for noise impacts from the construction site as conditioned, thus resulting in a less than significant impact.

XIII. c - d) Less then Significant. Noise from the proposed residential lots would be typical of a residential neighborhood, similar to surrounding uses. The project would not increase ambient noise levels beyond what is normally acceptable of residential land uses (50-60 dBA). Therefore, there would be no significant impacts.

XIII. e - f) No Impact. The project is not located within an airport land use plan or within two miles of a public airport, and is not located in the vicinity of a private airstrip. Therefore, the project would not expose people to excessive aircraft noise levels.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact

		Incorporated		
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Setting: Changes in population (and housing) in and of themselves are generally characterized as social and economic effects and are not considered physical effects on the environment. CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic changes are connected to physical environmental effects.

XIV. a - c) Less than Significant Impact**.** The proposed project would not induce substantial population growth, displace existing housing, or people. The project site currently supports a 1,470 square foot single-family residence, to remain, and provide 4 new residential lots, approximately 0.22 to 0.38 acres. The project proposes to annex the property into the City of Santa Rosa and proposes a land use designation of Very Low Residential (0.2 to 2.0 units per gross acres), allowed by the City of Santa 2035 General Plan. All increases in housing numbers, along with the accompanying infrastructure to serve this development, were anticipated and analyzed in the City of Santa Rosa 2035 General Plan. Therefore, since the project is consistent with the General Plan, the potential for induced growth is not considered significantly impactful.

XV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				

Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Setting: The City of Santa Rosa provides Police Protection and Fire Protection services within City boundaries. The Police Department provides neighborhood-oriented policing services, comprising eight patrol teams and roughly 251 employees. The Police Department is located at 965 Sonoma Avenue.

The Fire Department has a staff of approximately 146 employees serving a community population of over 181,000 residents. There are ten fire stations strategically located around the city. General Plan policy PSF-E-1 sets a 5-minute travel time for emergency response within the city. According to the General Plan, two new fire stations would be constructed in the future, one of which would be located at the corner of Kawana Springs Road and Franz Kafka Avenue. The project's addition of vehicle trips to the adjacent grid street network is not expected to cause a reduction in travel speeds that would result in significant delays for emergency vehicles. A 5-minute response time is expected to be achieved due to various approach accesses and the ability of emergency response vehicles to override traffic controls.

The City's public school system is made up of eight public school districts, 33 elementary schools, 5 middle schools, five comprehensive high schools, and one continuation high school, serving an estimated 16,698 students from kindergarten through 12th grade. According to the General Plan, four new elementary schools and two new middle schools are anticipated in order to accommodate buildout.

The City's Recreation and Parks Department operates, manages, and maintains a total of 12 community parks, 52 neighborhood parks, three special purpose parks, and three trail parks. The Sonoma County Regional Parks maintains a number of regional parks and trails in the general vicinity of the Penstemon Project site. The closest of which are Taylor Mountain Regional Park, Spring Lake Regional Park, Colgan Creek Trail, and Hunter Creek Trail.

The City charges impact fees on new development such as the proposed project in order to offset the cost of improving or expanding City facilities. Impact fees are used to fund the construction or expansion of needed capital improvements associated with buildout of the General Plan. The City's impact fees include the Capitol Facilities Fee and School Impact Fees to finance required public facilities and service improvements.

XV. a, b) Less Than Significant Impact. Fire Station #5, located on Parker Hill Road, is approximately 1.9 miles to the west of the project site, and Fire Station #6, located on Calistoga Road, is approximately 2.4 miles to the southeast. The project site is located within the Santa Rosa Police Beat 1 patrol area. The proposed 4 new residential lots and existing dwelling unit would result in a minimal increase in the demand for the City's public services. The increase would not trigger the need for an expansion of services, staffing, or otherwise affect required service ratios. Increasing demands on public services were previously anticipated as part of the General Plan build out and are funded by impact fees that provide funding for the incremental expansion of services.

According to the Santa Rosa General Plan EIR, compliance with the City's General Plan goals and policies related to police services would ensure impacts would be less than significant. Revenues and taxes generated from the new development would contribute to funding for facilities and services that have been identified by the police and fire departments as needed for services in the future resulting in a less-than-significant impact to police protection services.

XV. c) Less Than Significant Impact. The project site is located within the Santa Rosa City High School District and the Rincon Valley Union Elementary District. The project will likely generate 3-4 new students throughout the K-12 school system. The students attending public schools will be served by the closest City schools (Madrone Elementary, Rincon Valley Middle School , Maria Carrillo High School). Pursuant to SB 50, the project applicant would be required to pay school impact fees at the time of building permit application submittal. Payment of the development fee would provide funding for new school construction, improvements, and expansion to existing schools as needed. Payment of the required school impact fees would ensure satisfaction of the Proposition 1A/SB 50 statutory requirements and the impact would be less than significant.

XV. d, e) Less Than Significant Impact. The Project will not generate a substantial increase in demands that warrant the expansion or construction of new public park facilities as there are numerous existing parks and trails that provide recreational opportunities. While the 4 new residential lots would create a slight increase in the use of surrounding parks, the existing park facilities will be sufficient to meet active and passive recreational demands of the new residents. Rinconada Park is the closest neighborhood park, approximately 2.17 acres in size, it is located on Culebra Ave within a mile of the project site. There are no other aspects of the Project that would result in adverse impacts to existing parks or necessitate additional park development or potentially impact other public facilities Therefore, impacts to parks and other facilities will be less than significant. (See also Section XVI Recreation.)

XVI. RECREATION

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Setting: The City of Santa Rosa provides recreational opportunities, including public plazas and gathering places and neighborhood, community, citywide and special purpose parks and facilities

throughout the city. The City has several parks on the east side of the City, and new parks are being developed in order to meet the needs of the community. According to the Santa Rosa General Plan, the City has a total of approximately 531 acres of neighborhood and community parks, 170 acres of undeveloped parkland, and 14 community and/or recreational facilities (as of 2008). Additionally, the City of Santa Rosa is located in close proximity to regional parks operated by the County of Sonoma and State of California including Spring Lake (Sonoma County Regional Park), Taylor Mountain Regional Park and Open Space Preserve (Sonoma County Regional Park) and Annadel (State Park), which offer a variety of passive and active recreational opportunities.

The City's General Plan identifies a parkland ratio of 3.5 acre per 1,000 residents. Based on the 2035 buildout population of 233,520 and the proposed parks facilities that will occupy 864.15 acres, the city park facilities will achieve a ratio of 3.7 acres at General Plan build-out, thereby exceeding the parks ratio standard.

XVI. a - b) Less than Significant Impact. The proposed 4 new residential lots would minimally impact the use of existing neighborhood and regional parks, and other recreational facilities. Accelerated physical deterioration of the facilities are not anticipated.

XVII. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program?	☐	☐	☒	☐
c) Result in a change in air traffic patterns that result in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature or incompatible uses?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒

f) Conflict with adopted policies, plans or programs supporting alternative transportation?	☐	☐	☐	☒

Setting: The project site is located along Brush Creek Road and Lyric Lane, approximately 500 feet from the Fountain grove Parkway/Montecito Boulevard intersection, an arterial roadway in Santa Rosa. Fountain Grove Parkway has two 12-foot travel lanes, as well as a bicycle lane and pedestrian sidewalk. The closest transit service to this project is the corner of Mission and Montecito with a 30-minute frequency served by bus route 4/4b.

XVII. a, b) Less than Significant Impact. The project does not generate an amount of traffic that would be a concern as far as Level of Service gores. Additionally, the 4 new residential lots would be below the 110 vehicle trips per day, therefore it would cause no impact.

XVII. c) No Impact. Construction would be completed using ground-based vehicles. The project would not exceed the height of a two-story structure and would therefore not affect air traffic patterns or result in safety risks.

XVII. d) No Impact. The project would not substantially increase any hazards due to a design feature or incompatible use.

XVII. e) No Impact. The proposed residential lots would be accessed via Lyric Lane, an existing fire safe cul-de-sac serving existing residential dwellings.

XVII. f) No impact. The project does not conflict with adopted policies, plans or programs supporting alternative transportation.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020. 1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in	☐	☐	☐	☒

subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.

Setting: An archaeological survey report was conducted by Alta Consulting in September 2020, requested by Lytton Rancheria. The report documents the findings of the cultural resources assessment that was conducted for the proposed project.

XVIII. a, b) No Impact. A review of archaeological site and survey maps revealed that 17 cultural resource studies have been previously performed within a half-mile radius of the current project area, and had been previously surveyed for archaeological resources. The survey did not identify any cultural resources.

The site is not listed on the California Register of Historical Places or on any local register of historical resources. The City of Santa Rosa General Plan 2035 and adopted EIR does not identify any cultural or historical resources of significance on the project site. However, the potential to uncover cultural resources during construction is a possibility, therefore if human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting: Upon annexation, the project will be located within the City of Santa Rosa's city limits and the Urban Growth Boundary with access to the City's services.

XIX. a, c) Less than Significant Impact. According to the City's General Plan, wastewater treatment is generally sufficient to meet anticipated housing development needs through 2035. The existing water supplies, facilities and infrastructure are sufficient to meet the demands of the 4 residential lots, and existing single-family dwelling without new construction of water supply facilities.

XIX. b) Less than Significant Impact. Project will utilize water obtained from the City's water system to meet onsite water demands. Water would be accommodated via the installation of new water laterals that would connect to the proposed residential lots.

XIX. d, e) Less than Significant Impact. The City of Santa Rosa currently contracts with Recology to provide solid waste collection and recycling. Recology collects and transports commercial and solid waste to Central Landfill at 500 Meacham Road north of Petaluma. The amount of solid waste generated by the project would be considered minimal and is consistent with the service needs anticipated by the General Plan. The project will be required to adhere to all regulations governing the disposal of solid waste. Construction- related waste will be reduced through the development of a construction waste management plan. Submittal of a construction waste management plan is a mandatory measure of CALGreen requirements that have been adopted by the City. The plan shall be prepared after selection of the actual building materials.

Because the project will not exceed local capacity and will be in compliance with City requirements, the project will not conflict with local or state management reduction statutes and impact will be less than significant.

XIX. f) Less than Significant Impact. The anticipated volume of solid waste generated by construction activities and project residents would be served by Central Landfill. Therefore, no significant impact would occur from the disposal of solid waste generated by the project.

XIX. g) Less than Significant Impact. The project includes on-site trash and recycling collection, and would be required to contract for the collection of project trash, recycling and yard waste.

XX. WILDFIRE

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Substantially impair and adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or on ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks including down slope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Setting: The City of Santa Rosa is located within an area susceptible to wildland fires with expansive areas of chaparral, woodland, grassland, and scrub vegetation communities as well as steep slopes, and climatic conditions. The project is located within the City's Urban Growth Boundary (UGB). The project site is adjacent to the Wildlife Urban Interface Zones boundary.

In October 2017, the Tubbs Fire (Central LNU Complex) burned approximately 36,807 acres in the northern and eastern portions of the City. In 2019 the Kincade fire burned areas to the north of Santa Rosa. Residents were exposed to direct effects of the wildfire, such as the loss of a structure, and to the secondary effects of the wildfire, such as smoke and air pollution. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter

(soot, tar, water vapor, and minerals) and gases (carbon monoxide, carbon dioxide, nitrogen oxides). Public health impacts associated with wildfire include difficulty in breathing, odor, and reduction in visibility.

XX. a) Less than Significant Impact. Project site is located within the UGB and will be included in the City's Emergency Operation Plan. Therefore, in the event of a wildfire the proposed project is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts will be less than significant.

XX. b-d) Less than Significant Impact. The project site is relatively flat to gently sloping, with the exception of the steeply sloping banks of Rincon Creek. There are no mapped landslides at the project site. The proposed structures will require a building permit and built in compliance with the California Building Code in affect at the time of Building Permit submittal.

There are no other factors, such as steep slopes or prevailing winds that will exacerbate fire risk, or expose project occupants to the uncontrolled spread of a wildfire, pollutant concentrations from a wildfire, post- fire slope instability, or post-fire flooding. Therefore, impacts will be less than significant.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) 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.)	☐	☐	☒	☐

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

XXI(a) Less Than Significant with Mitigation Incorporated. The project is located within the City's Urban Growth Boundary and potential impacts associated with its development have been anticipated by the City's General Plan and analyzed in the General Plan EIR. Upon annexation and General Plan amendment, the project would be consistent with the General Plan Land Use designation, goals, policies, and programs. All potential impacts to biological resources have been mitigated to levels less than significant, as identified in Section IV Biological Resources. The mitigation identifies measures the protection of nesting birds and bats to ensure no impacts result in degradation or reductions of plants or animals.

The arborist report determined the site to be overgrown with dense stands of trees along the property lines, many of which were non-native (Eucalyptus and Privets). He recommended to preserve as many of the mature Coast Live Oaks, Valley Oaks, and Coastal Redwoods as possible. He recommended to plant three 24" box Coast Live Oaks or Valley Oaks on each proposed lot to mitigate any potential disturbance.

Section V assessed the potential for cultural resources at the site. There are no historically significant buildings and protective state and locally mandated measures described in Section V will ensure that any potential impacts to subsurface cultural resources related to construction are avoided.

With implementation of mitigation measures, set forth in the sections on air quality (mitigation to reduce the potential for fugitive dust and TAC's), hazards/hazardous materials (to avoid exposure to asbestos and lead based paint), noise (construction-related noise), and transportation and circulation (intersection improvements), all potentially significant impacts are all reduced to levels of less than significant. The project's adherence to Santa Rosa's development standards, and the Conditions of Approval will ensure the project's potential impacts on the quality of the environment would be reduced to levels of less than significant.

XXI(b) Less Than Significant. CEQA Guidelines (Section 15355(a)(b)) defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or increase in environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the proposed project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

The analysis of cumulative impacts for each environmental factor can employ one of two methods to establish the effects of other past, current, and probable future projects. Projections from an adopted general plan or related planning documents or from a prior environmental document that has been adopted or certified, providing these adopted documents describe or evaluate the regional or area-wide conditions contributing to the cumulative impact. This Initial Study evaluates cumulative impacts using the General Plan EIR. As described in the analysis above, potential environmental impacts are expected to remain at, or be mitigated to, less than significant

levels. The project does not increase the severity of any of the cumulatively considerable impacts from the levels identified and analyzed in the General Plan EIR.

The Project does not have the potential to create impacts which are individually limited but cumulatively considerable. The environmental effects of the Project are typical of residential developments and will all be reduced to less that significant levels through the implementation of standard conditions of approval, or through mitigation measures contained in this Initial Study/Mitigated Negative Declaration.

All other potentially cumulative impacts (agricultural resources, air quality, greenhouse gases, drainage, noise, public services and utilities, and transportation) are either less than significant or are also mitigated such to levels of less than significant or reduced through the City's Standard Conditions of Approval or by the implementation of development standards, such that they will not add to a cumulatively considerable impact.

XXI(c) Less Than Significant with Mitigation Incorporated. The project does not present adverse impacts upon human beings, either directly or indirectly. The project has the potential to result in adverse impacts to humans due to air quality, biological resources, cultural resources, hazards/ hazardous materials, noise, transportation and circulation, and tribal cultural resources. With implementation of the mitigation measures set forth in this Initial Study, the project will have less than significant environmental effect that would directly or indirectly impact human beings onsite or in the project vicinity.

SOURCES

- 2019 CA Building Code
- Alta Archaeological Consulting, Archaeological Survey Report, September 2020
- BAAQMD CEQA Guidelines, May 2010, updated 2011
- BAAQMD Website and Significance Thresholds, 2011
- California Code of Regulations (CCR), Title 20 and Title 24
- California Department of Conservation Division of Land Resources Protection, Farmland Mapping and Monitoring Program (2012).
- City of Santa Rosa Design Guidelines, September 2005 (updated in 2010, 2011)
- City of Santa Rosa General Plan/ Final EIR, 2009
- City of Santa Rosa Zoning Code, 2006
- David fowler Designs, Arborist Report, November 12, 2020
- PJC & Associates, Inc, Geotechnical Investigation, February 3, 2021
- Santa Rosa Climate Action Plan, adopted June 2012
- Sol Ecology, Biological Resources Report, November 19, 2020
- State of California, Surface Mining and Reclamation Act (SMARA) of 1975, updated in 1977

ENVIRONMENTAL DETERMINATION

The project site is located in close proximity to existing sensitive receptors including existing surrounding residential uses to the north, south, east, and west of the project site. Madrone Elementary School is within 0.6 miles of the site. With implementation of mitigation measures set forth in the Air Quality and Noise sections, construction activities associated with the development would result in short-term air quality emissions and noise levels that fall below levels of significance and would cease once construction is finished. In addition to mitigation measures set forth in this Initial Study, the project will be conditioned to achieve city standards with respect to noise, safety, and drainage. Building and improvement plans will be reviewed to ensure compliance with applicable building codes and standards. With implementation of mitigation measures, conditions of approval, and the City's development standards, the project does not present potentially significant impacts that may have an adverse effect upon human beings, either directly or indirectly. Therefore, the project will have less than significant impacts due to substantial adverse environmental effects.

Potential impacts related to hazardous materials will be mitigated to insignificant levels. The project will be conditioned to make City standard improvements or provide mitigations with respect to roadways, storm drainage and other impacts. Building and improvement plans will be reviewed to ensure compliance with applicable building codes and standards.

Therefore, 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.

☒ 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: Date:

Printed Name: Kristinae Toomians, Senior Planner

Mitigation Monitoring Checklist

Brush Creek Minor Subdivision

2210 Brush Creek Road

Air Quality (AQ) Mitigation Measure	Implementing Procedure	Monitoring Responsibility	Monitoring Schedule	Verification
AQ-1: The project is required to Implement Bay Area Air Quality Management District construction management standards during all on-and-off site construction activities. 1. Water all active construction areas at least twice daily and more often during windy periods to prevent visible dust from leaving the site; active areas adjacent to windy periods; active areas adjacent to existing land uses shall be kept damp at all times or shall be treated with non-toxic stabilizers or dust palliatives. 2. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard. 3. Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment before leaving the site. 4. Pave, apply water at least three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas 5. Sweep daily (or more often if necessary) to prevent visible dust from leaving the site (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality.	Incorporate into project design and print on construction documents. On-site observation	Santa Rosa Planning and Building Department Project Applicant Contractor	Prior to issuance of a grading permit. Ongoing throughout project construction	

	6. Sweep streets daily, or more often if necessary (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.				
	Biological Resources (BIO) Mitigation Measure	**Implementing Procedure**	**Monitoring Responsibility**	**Monitoring Schedule**	**Verification**
BIO-1:	1. All construction activities should be performed outside the migratory nesting season between September 1 and January 31 to avoid significant impact Proposed project activities shall not occur during nesting season, February 1 through August 31. 2. If work must be performed during nesting season, a pre-construction nesting bird survey should be performed in all areas within 250 feet of proposed activities. 3. If nests are found, an appropriately sized no-disturbance buffer should be placed around the nest directed by the qualified biologist conducting the survey. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.	Conduct a pre-construction nesting bird survey by a qualified biologist if construction would occur during bird nesting season. The City shall be provided with the resume of the qualified biologist demonstrating nesting bird survey and detection experience. The qualified biologist shall have minimum of 2 years for experience implementing the CDFW 2012 survey methodology resulting in detections. If necessary, establish a protection buffer zone.	Santa Rosa Planning and Building Department Project Applicant Contractor Qualified Biologist	Prior to construction activities Ongoing throughout project construction	

BIO-2:	4. Prior to activities in areas where bat roosts may be present, a qualified bat biologist shall perform a pre-construction roost survey (dusk emergence survey) no more than 10 days prior to the start of activities with potential to disturb bats or their habitat during the maternity season between April and September to avoid potential impacts to active maternity sties and/or pregnant females. 5. If no maternity roost is found, any felled trees should be left overnight prior to removal from the site or on-site chipping to allow any solitary bats to exit the roost.	Conduct a pre-construction dusk emergence survey by a qualified bat biologist if construction would occur during maternity season. The City shall be provided with the resume of the qualified biologist demonstrating roosting bat survey and detection experience If necessary, establish a protection buffer zone. If no maternity roost is found, any felled trees should be left overnight prior to removal.	Santa Rosa Planning and Building Department Project Applicant Contractor Qualified Bat Biologist	Prior to construction activities Ongoing throughout project construction	
CULTURAL RESOURCES (CUL) **Mitigation Measure**		**Implementing Procedure**	**Monitoring Responsibility**	**Monitoring Schedule**	**Verification**
CUL-1:	Unanticipated subsurface archaeological finds in the Sonoma County are common; indeed, the proximity to Rincon Creek suggests the project area may have been favorable to human acitivity. Therefore, the following recommendations are provided as mitigation to ensure that cultural resources are not adversely affected by the	Incorporate into project design and print on construction documents	Santa Rosa Planning and Building Department	Prior to issuance of a demolition and/or grading permit.	

	proposed project. The project as presently designed is not expected to have an adverse effect on cultural resources. The project should be allowed to proceed given the following recommendations. 1. Unanticipated Discovery of Cultural Resources- If previously unidentified cultural resources are encountered during project implementation, avoid altering the materials and their stratigraphic context. A qualified professional archaeologist should be contacted to evaluate the situation. Project personnel should not collect cultural resources. Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.	Conduct a preconstruction meeting with key construction personal. On-site observation.	Project Applicant Contractor Qualified Archaeologist Native American Heritage Commission	During ground disturbance activities.	
CUL-2:	Encountering Native American Remains- Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains is provided.	Incorporate into project design and print on construction documents Conduct a preconstruction meeting with key construction personal. On-site observation.	Santa Rosa Planning and Building Department Project Applicant Contractor Qualified Archaeologist	Prior to issuance of a demolition and/or grading permit. During ground disturbance activities.	

		Native American Heritage Commission Most likely Descendants County Coroner		
GEOLOGY AND SOILS (GEO) **Mitigation Measure**	**Implementing Procedure**	**Monitoring Responsibility**	**Monitoring Schedule**	**Verification**
GEO-1: All applicable recommendations in the Geotechnical Investigation Report (PJC & Associates) prepared for the subject property, including, but not limited to grading, drainage, excavation, trenching, foundations systems, and compaction specifications shall be incorporated. Final grading plan, construction plans, and building plans shall demonstrate that recommendations set forth in the Geotechnical reports have been incorporated into the design of the project and to the satisfaction of the City of Santa Rosa's City Engineer,	Incorporate into project design and print on construction documents	City of Santa Rosa Engineering Division Project Applicant Geotechnical Consultant	Prior to issuance of grading permit.	