

**DRAFT**  
**Subsequent Mitigated Negative Declaration**  
**for Emerald Isle Condominium Project**  
**(formerly known as the Emerald Isle Assisted Living Facility Project)**  
**City of Santa Rosa, Sonoma County, California**  
**State Clearinghouse Number: 2017092072**

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## Table of Contents

<b>Acronyms and Abbreviations .....</b>	<b>vii</b>
<b>Section 1: Introduction .....</b>	<b>1</b>
1.1 - Purpose.....	1
1.2 - Background CEQA Documents .....	1
1.3 - Justification for a Subsequent MND .....	1
1.4 - Project Location.....	2
1.5 - Environmental Setting .....	2
1.6 - Project Description .....	7
1.7 - Proposed Modifications for the Emerald Isle Condominium Project.....	24
1.8 - Required Discretionary Approvals .....	25
1.9 - Intended Uses of this Document.....	26
<b>Section 2: Environmental Checklist and Environmental Evaluation .....</b>	<b>31</b>
1. Aesthetics .....	32
2. Agriculture and Forestry Resources .....	45
3. Air Quality.....	48
4. Biological Resources .....	68
5. Cultural Resources and Tribal Cultural Resources .....	76
6. Energy.....	82
7. Geology and Soils .....	90
8. Greenhouse Gas Emissions .....	97
9. Hazards and Hazardous Materials .....	104
10. Hydrology and Water Quality .....	109
11. Land Use and Planning .....	116
12. Mineral Resources .....	121
13. Noise.....	123
14. Population and Housing .....	133
15. Public Services .....	135
16. Recreation .....	139
17. Transportation .....	141
18. Utilities and Service Systems .....	148
19. Wildfire.....	153
20. Mandatory Findings of Significance .....	157
<b>Section 3: List of Preparers.....</b>	<b>159</b>
<b>Appendix A: Air Quality, GHG, and Energy Supporting Information</b>	
A.1 - Air Quality, GHG, Energy, and HRA Data Sheets	
A.2 - Santa Rosa Climate Action Plan New Development Checklist	
<b>Appendix B: Biological Resources Supporting Information</b>	
B.1 - CNPS and CNDDDB Database Results	
B.2 - Arborist Report	
B.3 - Tree Removal Mitigation Summary and Calculations	
B.4 - Soils Map	
<b>Appendix C: Cultural Resources Supporting Information</b>	
C.1 - Non Confidential NWIC Records Search Results	

- C.2 - Confidential Record Search Results
- C.3 - NAHC SFL Search and Tribal Correspondence
- C.4 - Survey Photographs

#### **Appendix D: Geotechnical Supporting Information**

#### **Appendix E: Hydrology and Water Quality Supporting Information**

#### **Appendix F: Noise Supporting Information**

#### **Appendix G: Focused Traffic Study**

### **List of Tables**

Table 1: Project Summary .....	7
Table 2: Comparison of 2017 Project to Emerald Isle Condominium Project .....	24
Table 3: BAAQMD Criteria Pollutant Significance Thresholds—Construction and Operation.....	50
Table 4: Construction Criteria Air Pollutants and Precursor Screening Level Sizes .....	55
Table 5: Annual Construction Emissions (Unmitigated) .....	56
Table 6: Construction Emissions (Unmitigated Average Daily Rate) .....	56
Table 7: Annual Construction Emissions (Unmitigated) .....	57
Table 8: Project Annual DPM Construction Emissions-No Mitigation.....	59
Table 9: Exposure Assumptions for Cancer Risk.....	61
Table 10: Estimated Project Construction Health Risks and Hazards-No Mitigation .....	62
Table 11: Project Annual DPM Construction Emissions-With Mitigation .....	63
Table 12: Estimated Project Construction Health Risks and Hazards-With Mitigation .....	63
Table 13: Estimated Project Construction Fuel Usage .....	87
Table 14: Project’s Annual Operational Energy Consumption .....	88
Table 15: Construction Greenhouse Gas Emissions .....	100
Table 16: Operational Greenhouse Gas Screening Level Sizes.....	100
Table 17: Project Compliance with Santa Rosa Climate Action Plan New Development Checklist .....	101
Table 18: Traffic Noise Model Results Summary .....	119
Table 19: Baseline Traffic Noise Model Results Summary .....	119
Table 20: Future Traffic Noise Model Results Summary .....	120
Table 21: Traffic Noise Increase Summary .....	130
Table 22: Trip Generation Summary .....	143
Table 23: Existing and Existing plus Project Peak Hour Intersection Levels of Service .....	143
Table 24: Baseline and Baseline Plus Project Peak-hour Intersection Levels of Service .....	144
Table 25: Future and Future Plus Project Peak-hour Intersection Levels of Service.....	144

## List of Exhibits

Exhibit 1: Regional Location Map .....	3
Exhibit 2: Local Vicinity Map, Aerial Base .....	5
Exhibit 3: Site Plan .....	9
Exhibit 4: Site Coverage Plan .....	11
Exhibit 5a: Recreation Building Elevations .....	13
Exhibit 5b: Residential Building Elevations .....	15
Exhibit 5c: Garage Elevations .....	17
Exhibit 6: Landscape Plan .....	21
Exhibit 7: 2017 Emerald Isle Assisted Living Facility Project Site Plan .....	27
Exhibit 8: 2017 Emerald Isle Assisted Living Facility Project Site Coverage Plan .....	29
Exhibit 9: Viewpoint Location Map .....	37
Exhibit 9a: Photo Simulation—View 1 .....	39
Exhibit 9b: Photo Simulation—View 2 .....	41
Exhibit 9c: Photo Simulation—View 3 .....	43

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## ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m <sup>3</sup>	micrograms per cubic meter
ABAG	Association of Bay Area Governments
ADT	Average Daily Trip
AFY	acre-feet/year
ARB	California Air Resources Board
ASCE	American Society of Civil Engineers
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geologic Survey
CHL	California Historic Landmark
CHRIS	California Historical Resources Information Center
CityBus	Santa Rosa CityBus Service
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CTP	Comprehensive Transportation Plan
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel

DOT	United States Department of Transportation
DPM	Diesel Particular Matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
ESA	Environmentally Sensitive Area Fencing
EVA	Emergency Vehicle Access
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GIS	Geographic Information System
gpcd	gallons per capita per day
HCP	Habitat Conservation Plan
HRCQ	Highway Route Controlled Quantities
in/sec	inch per second
ISA	International Society of Arboriculture
ITE	Institute of Transportation Engineers
L <sub>dn</sub>	day/night average sound level
L <sub>eq</sub>	equivalent sound level
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
LLC	Limited Liability Corporation
L <sub>max</sub>	maximum noise/sound level
L <sub>min</sub>	minimum noise/sound level
LOS	Level of Service
LRA	Local Responsibility Area
MM	Mitigation Measure
MND	Mitigated Negative Declaration
mph	miles per hour
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NHMRR	National Hazardous Materials Route Registry
NPDES	National Pollutant Discharge Elimination System

NRHM	Nonradioactive Hazardous Materials
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	California Office of Environmental Health Hazard Assessment
OSHA	California Division of Occupational Safety and Health
PPV	Peak Particle Velocity
RAM	Radioactive Materials
RCRA	Resource Conservation and Recovery Act
RCRC	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SCTA	Sonoma County Transportation Authority
SCWA	Sonoma County Water Agency
SMARA	Surface Mining and Reclamation Act
SRFD	Santa Rosa Fire Department
SRPD	Santa Rosa Police Department
State Water Board	State Water Resources Control Board
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
USFWS	United States Fish and Wildlife Service
USGS	United States Geographical Survey
UWMP	Urban Water Management Plan
VHFHS	Very High Fire Hazard Severity Zones
VMT	vehicle miles traveled
VOC	Volatile Organic Compounds
WUI	Wildland-Urban Interface Zone
WWTP	Wastewater Treatment Plant

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## SECTION 1: INTRODUCTION

### 1.1 - Purpose

The purpose of this Subsequent Mitigated Negative Declaration (MND) is to identify any potential environmental impacts from implementation of the Emerald Isle Condominium Project (formerly known as the Emerald Isle Assisted Living Facility Project) (Emerald Isle Condominium Project or project) in the City of Santa Rosa, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Santa Rosa (City) is the Lead Agency in the preparation of this MND and any additional environmental documentation required for the project. The City has discretionary authority over the proposed project. The intended use of this document is to identify potential environmental impacts that would occur from implementation of the project and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the project. Section 2 includes an environmental checklist that analyzes the potential impacts that may result from project implementation.

### 1.2 - Background CEQA Documents

#### 1.2.1 - 2017 Mitigated Negative Declaration

In 2016, Oakmont Senior Living, LLC<sup>1</sup> filed an application with the City of Santa Rosa to develop an assisted living/memory care facility on a 12.57-acre site in the Fountaingrove area of the City of Santa Rosa (Emerald Isle Assisted Living Facility Project). The 68,144-square-foot facility would have provided 71 beds within 49 units on 4.14 acres. The remaining 8.03 acres was to be retained as natural open space. Primary vehicular access would have been taken from a driveway connecting to the end of Gullane Drive. A gated Emergency Vehicle Access (EVA) would have provided a connection to Thomas Lake Harris Drive.

In September 2017, the City of Santa Rosa issued an MND (State Clearinghouse No. 201709207) for the Emerald Isle Assisted Living Facility Project (2017 MND). The Santa Rosa Planning Commission adopted the MND and approved the project entitlements on November 30, 2017. Subsequent to adoption of the MND and project entitlements, Oakmont Senior Living withdrew the application. The 2017 MND was never challenged and, therefore, pursuant to CEQA Guidelines Section 15096(e), it is presumed to be legally adequate.

### 1.3 - Justification for a Subsequent MND

As is discussed in detail in Section 1.6, Project Description, the project consists of 82 for-rent multi-family condominium dwelling units. Because the current proposal contemplates (1) a different

<sup>1</sup> Oakmont Senior Living, LLC is a Santa Rosa, California based developer of senior care facilities and age-restricted senior living communities. Oakmont has four existing senior facilities in Fountaingrove (Fountaingrove Lodge, The Terraces, Varenna at Fountaingrove, and Villa Capri). Villa Capri was destroyed by the 2017 Tubbs Fire and is in the process of being rebuilt.

housing product; (2) more development (i.e., 82 apartments versus 71 beds); and (3) is proposed in the aftermath of the 2017 Tubbs Fire, the City of Santa Rosa determined that a Subsequent MND should be prepared to determine whether the previous conclusions remain valid in light of the current proposal or if new analysis is warranted because the current proposal has more impact.

## 1.4 - Project Location

The 12.57-acre project site is located at the eastern end of Gullane Drive in the Fountaingrove area of the City of Santa Rosa, Sonoma County, California (Exhibit 1). The project site consists of two parcels, Assessor's Parcel Numbers (APN) 173-670-016 and APN 173-670-004. The project site is surrounded by the Fountaingrove Golf Course, specifically Holes 11 (east), 12 (north), 13 (west), 16 (southwest), and 17 (south) (refer to Exhibit 2).<sup>2</sup> The project site is located on the Santa Rosa, California, United States Geographical Survey (USGS) 7.5-minute topographic quadrangle map, Township 7 North, Range 8 West, Section 2 (Latitude 38° 29' 18" North; Longitude 122° 43' 17" West).

## 1.5 - Environmental Setting

The project site is located on a small knoll north of Fountaingrove Lake, which is a reservoir fed from the east by Piner Creek. The site is surrounded by the Fountaingrove Golf Course, specifically Holes 11, 12, 13, 16, and 17. A paved path linking the 12<sup>th</sup> and 13<sup>th</sup> holes passes across the western portion of the project site.

The project site is currently undeveloped with tree-covered slopes of native oak and fir descending from a relatively flat center. Site elevations range from approximately 460 to 575 feet above sea level. There are no existing structures on the site and no paved or unpaved driveways on the project site.

The project site was affected by the 2017 Tubbs Fire. Following the fire, the trees within the development area<sup>3</sup> within the project site were inventoried and it was determined that of the 927 trees (not including the hundreds of saplings, mostly oaks 4 inches and greater, located outside the development area), 243 were damaged or destroyed by the fire. After the Tubbs Fire, and in accordance with prior approval by the City of Santa Rosa, 311 trees were removed from the site.<sup>4</sup> Of the 311 trees removed, 143 trees were fire-damaged or dead, and the remaining 168 were undamaged but removed with prior approval. Currently, 616 trees remain on-site (100 of which are damaged because of the Tubbs Fire). Additional discussion regarding on-site trees is provided in Section 2.4, Biological Resources, and biological resources supporting information is provided in Appendix B. Surrounding properties, including single-family residential uses to the northwest (Oaks Unit 1) and northeast (Lake Pointe and Skyfarm), as well as the Oakmont of Villa Capri senior care facility to the east, were damaged or destroyed by the Tubbs Fire.<sup>5</sup>

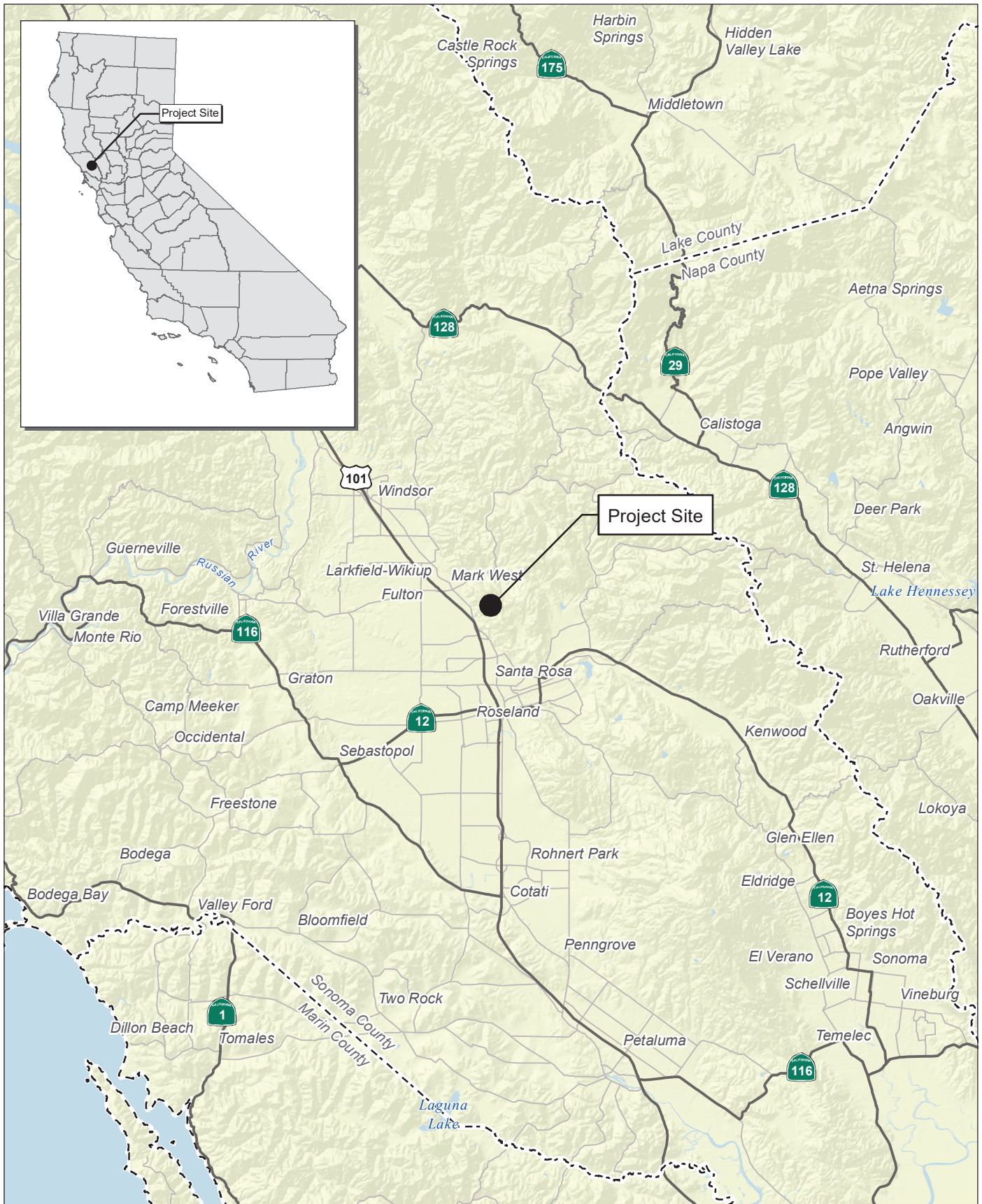
<sup>2</sup> The aerial is from September 2018 and shows conditions subsequent to the Tubbs Fire.

<sup>3</sup> The 927 trees included in the inventory were mostly within the proposed development area of the site. Some trees at the edges of grading or other construction activity, or near property lines that may be potentially impacted were included.

<sup>4</sup> Oakmont Senior Living withdrew the application subsequent to the 2017 Tubbs Fire.

<sup>5</sup> A total of 1,586 single-family dwelling units in the Fountaingrove area were destroyed by the Tubbs Fire.





Source: Census 2000 Data, The CaSIL

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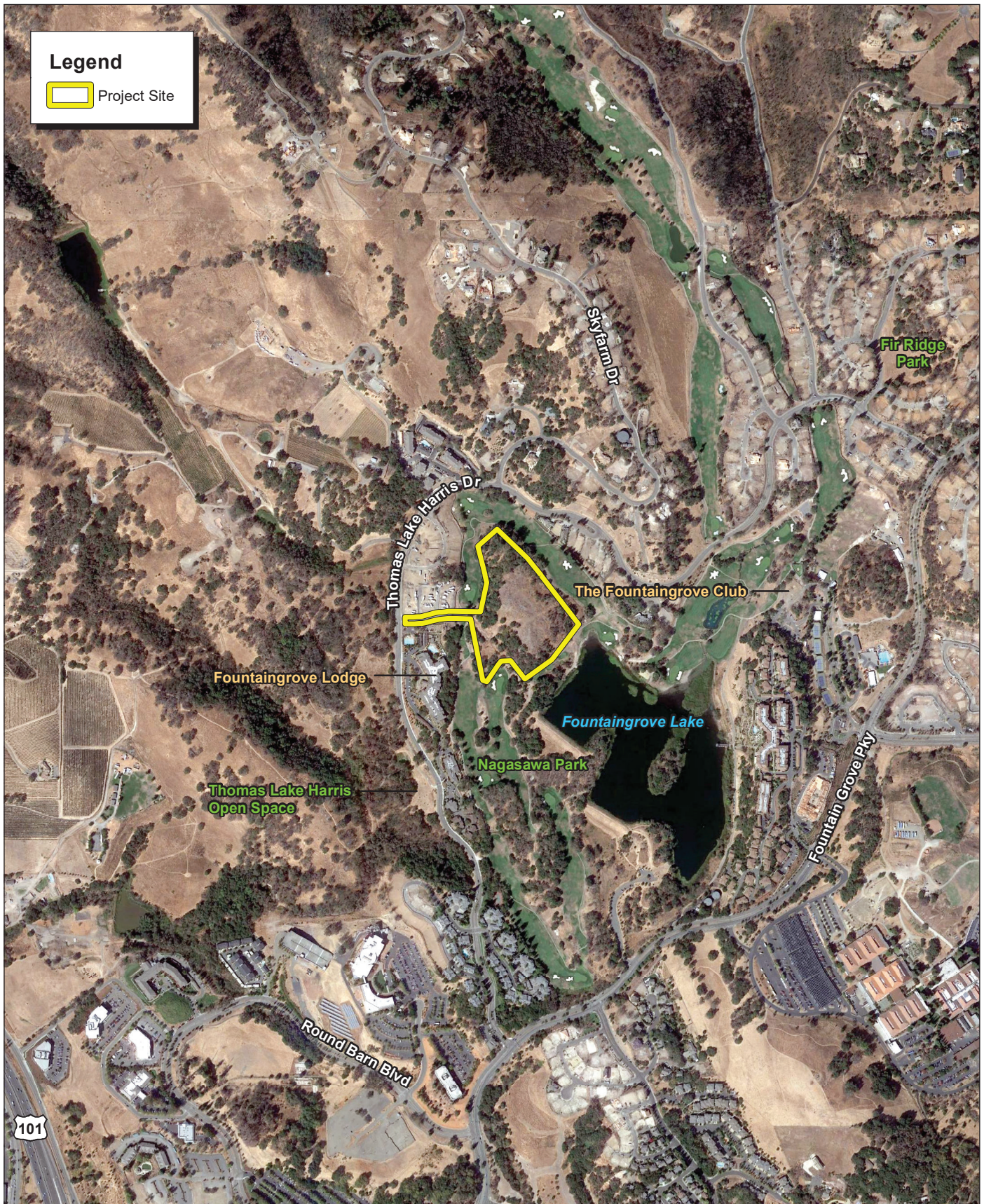


5 2.5 0 5  
Miles

## Exhibit 1 Regional Location Map

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Source: Google Earth Pro Aerial Imagery. Sonoma County GIS Parcel Data. September 2018

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1,000 500 0 1,000  
Feet

## Exhibit 2 Local Vicinity Map Aerial Base



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## General Plan and Zoning

The Santa Rosa General Plan 2035 designates the project site as Low Density Residential, which allows for a residential density of 2 to 8 units per gross acre. This designation would allow a maximum of 100 units on the 12.57-acre site; however, pursuant to Section VII C of the Fountaingrove Ranch Planned Community District Policy Statement, 18 units were transferred to the Canyon Oaks project within the Fountaingrove Ranch. The transfer of density reduced the allowable density from 100 to 82 dwelling units.

The project site is zoned PD72-001 and is subject to Fountaingrove Planned Development Policy Statement PD-72-001. The policy statement's Development Concept Plan designates the project site as a Cluster Residential (CR) Land Use Area. Permitted uses include single-family attached, or detached, units on small lots, as well as duplexes and multi-family dwellings including apartments, group dwelling, boarding, and lodging houses. Project density is established by Use Permit, which shall take into consideration site topography, vegetation, and other site design constraints.

## 1.6 - Project Description

### 1.6.1 - Development and Land Use Activities

Oakmont Senior Living, LLC (applicant) is proposing to develop an age-restricted, multi-family residential development on the project site. The project would consist of 82 for-rent multi-family condominium dwelling units<sup>6</sup> allocated among seven residential buildings and the second level of a recreation center. Additionally, the project would include recreational amenities, parking and common areas, and on-site and off-site infrastructure improvements. Approximately 46 percent of the site would be left as natural open space, and approximately 11 percent would be landscaped area. Table 1 summarizes the project. Exhibit 3 depicts the conceptual site plan and Exhibit 4 depicts the project site coverage plan.

**Table 1: Project Summary**

Use	Description	Characteristics
Residential	82 multi-family dwelling units allocated among eight buildings, including the recreation building, totaling 104,576 square feet. Floor plans include 1-bed/1-bath (1 unit); 2-bed/2-bath (45 units); and 2-bed/2-bath plus den (36 units)	104,576 square feet over 2.07 acres
Recreational	Recreational areas contain a recreation building, pool, leasing office, and adjacent tennis court	4,553-square-foot recreation building (recreation area: 2,983 square feet, leasing office area: 2,983 square feet); 0.67 acre of flatwork (pool and tennis courts)

<sup>6</sup> City of Santa Rosa Zoning Code Section 20-70.020 defines Multi-family Dwelling as “a dwelling unit that is part of a structure containing one or more other dwelling units.”

**Table 1 (cont.): Project Summary**

Use	Description	Characteristics
Parking and Circulation	94 covered spaces; 115 uncovered spaces; driveway connection to Gullane Drive; EVA to Thomas Lake Harris Drive	2.27 acres
Landscaping	Trees and turf	1.33 acres
Natural Open Space	Existing oak trees and vegetation around perimeter	5.82 acres
Source: City of Santa Rosa 2019; FirstCarbon Solutions (FCS) 2019; Oakmont Senior Living Emerald Isle Coverage Plan 2019.		

### Residential Building

The residential component would consist of one 1-bedroom unit, 45 2-bedroom units, and 36 2-bedroom plus den units organized within eight buildings. The seven residential buildings would be 2 to 3-stories in height and would contain a total of 80 residential units. The recreation building would include two residential units on the second floor.

### Recreation Building

The project would develop a 6,545-square-foot recreation building, which would be 2 stories in height. In addition to the two residential units described above, the building would house a game room, fitness center, social room, and leasing office. The recreation building, pool and spa (with lanai), pet park, and common area would be located in the center of the project site. A tennis court would be located south of the pool area.

### Design and Appearance

The exterior of the buildings would employ a style derived from “Bungalow,” “Craftsman,” or “Arts and Crafts” architectural styles. The buildings would incorporate architectural features including low pitched gable roofs with generous overhangs. Exterior walls would use wood shingles, horizontal and vertical wood siding, and stucco and natural stone facing. The building entrances would employ heavy timber truss framing along with stone accents. Stucco colors would be cool tones to complement warm-tone wood framing and the natural surroundings. Exhibits 5a–5c depict building elevations for the recreation building, residential building, and garage building.

### Resident Population

Rental of condominiums within the proposed residential development would be age-restricted to persons 55 years old and older. Oakmont Senior Living estimates that average project occupancy would be approximately 123 residents.

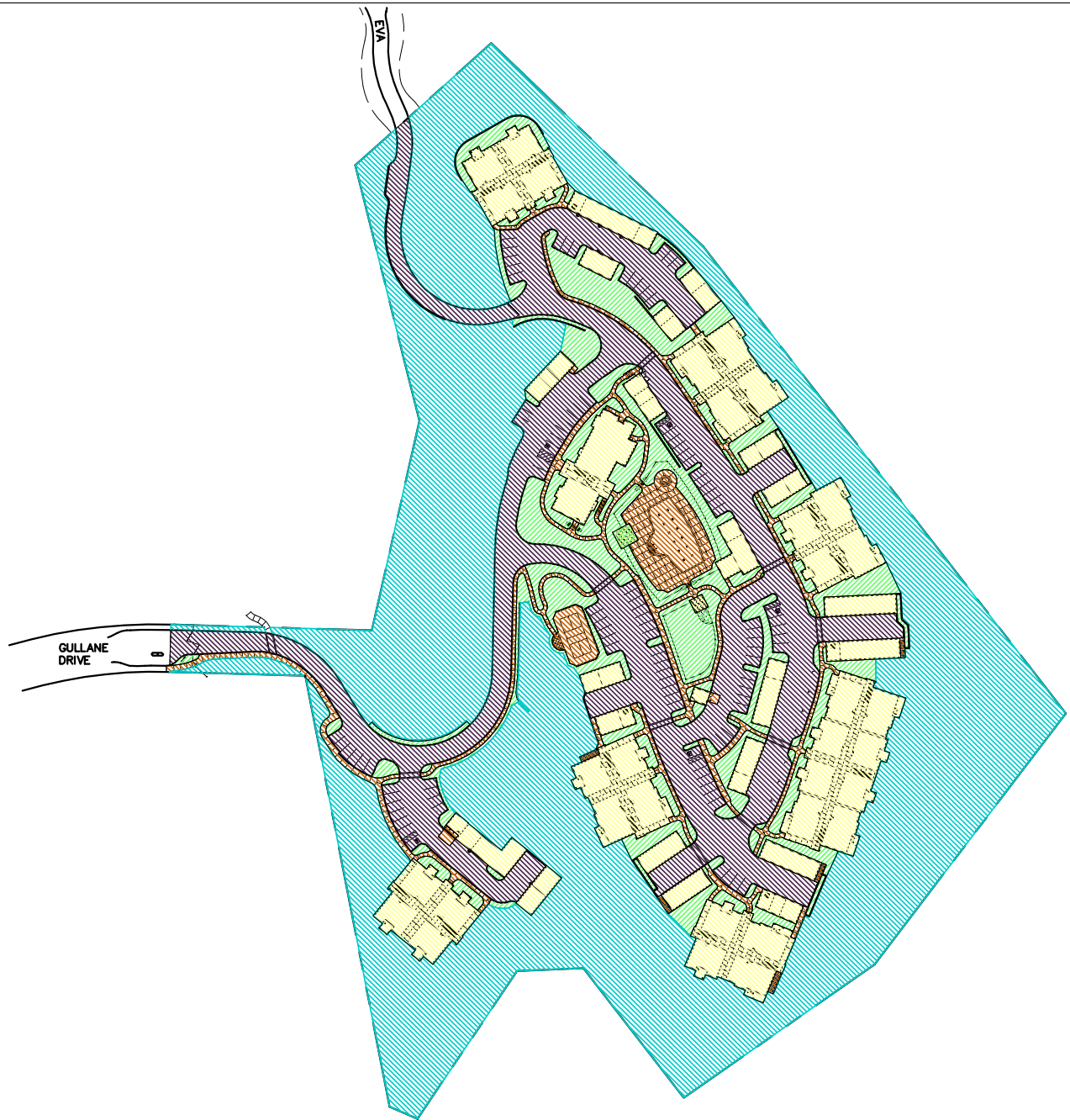
### Employment

Once the project is completed and fully occupied, the project would be staffed by four on-site, full-time equivalent employees who would provide leasing management and maintenance services. Upper-level residential units in the recreation building would be made available to employees.











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#### LEGEND

	NATURAL OPEN SPACE	5.82 AC	46.30% OF TOTAL SITE
	LANDSCAPED AREA	1.33 AC	10.58% OF TOTAL SITE
	PARKING AND CIRCULATION	2.27 AC	18.06% OF TOTAL SITE
	EXTERIOR FLATWORK	0.67 AC	5.33% OF TOTAL SITE
	BUILDING	2.07 AC	16.47% OF TOTAL SITE
	EXISTING GULLANE DRIVE AREA	0.41 AC	3.26% OF TOTAL SITE
TOTAL SITE		12.57 AC	100.00%

Source: Brelje & Race Consulting Engineers, February 2019.



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**FRONT ELEVATION**



**RIGHT ELEVATION**



**LEFT ELEVATION**



**BACK ELEVATION**

Source: MEHRDAD HAJI-SHARIFI, June 27, 2019.



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FRONT ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



BACK ELEVATION

Source: MEHRDAD HAJI-SHARIFI, June 27, 2019.

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**GARAGE - G1 FRONT ELEVATION**



**GARAGE - G1 LEFT ELEVATION**



**GARAGE - G1 BACK ELEVATION**



**GARAGE - G1 RIGHT ELEVATION**



**GARAGE - G3 FRONT ELEVATION**



**GARAGE - G3 LEFT ELEVATION**



**GARAGE - G3 BACK ELEVATION**



**GARAGE - G3 RIGHT ELEVATION**

Source: MEHRDAD HAJI-SHARIFI, June 27, 2019.

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## Parking

### ***Covered Parking***

The project would include a total of 95 garage parking spaces, four of which would be designated for handicap-accessible vehicles.

### ***Open Parking***

The project would include a total of 115 open parking spaces. There would be six parallel spaces, nine compact spaces, five handicap-accessible spaces, and 95 standard spaces.

### ***Bicycle Parking***

Each residential unit would have a bicycle rack in its garage. In addition, bicycle racks would be provided at the recreation building for employees and guests.

## Open Space

The project would provide 5.82 acres of natural open space area around the perimeter of development to screen buildings from view. Within this area, 280 existing oak trees would remain.

## Landscaping

The project would provide 1.33 acres of landscaping consisting of trees and turf. Native, drought-resistant tree species including big leaf maple, Chinese pistache, Santa Cruz Island ironwood, and marina madrone would be planted. The project would employ low flow drip irrigation to minimize irrigation water usage. Exhibit 6 depicts the conceptual landscaping plan for the project.

## Defensible Space Plan

The proposed project would implement a defensible space plan consisting of four vegetation management zones around the perimeter of the project as noted on the project's Defensible Space Plan:<sup>7</sup>

- **Zone I:** This defensible space zone would include areas within 10 feet of the project structures. Vegetation in this zone would consist of well-irrigated ornamental landscaping intended to reduce the opportunity of adjacent flammable vegetation to ignite sidings, overhangs, heat trapping areas, and other structural areas. Decks, balconies, and overhangs would be kept free of all native vegetation within 10 feet. Storage would not be permitted under decks or overhangs.
- **Zone II:** This defensible space zone would include areas between 10 and 30 feet of the project structures. Vegetation in this zone would consist of fire resistant and well-irrigated ornamental and native landscaping properly spaced to prevent rapid transmission of fire. Native vegetation would be aggressively thinned and deadwood would be removed. Ladder fuels would be removed to break the chain of plant-to-plant continuity. Existing Oak groves with continuous tree canopies would be retained. Tree limbs under 6 feet in length would be removed and for smaller trees, a third of lower limbs would be removed. Grasses would be cut

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<sup>7</sup> Landesign Group. 2019. Defensible Space Plan. February.

to 3 inches and maintained throughout the summer fire season. Areas disturbed by constructed would be mulched and seeded with short native grasses.

- **Zone III:** This defensible space zone would include areas between 30 and 50 feet of the project structures. All trees not removed would be thinned to establish proper separation and remove deadwood. Conifer seedlings and crown sprouts would be discarded. All pyrophytic vegetation within 10 feet of dripline would be removed.
- **Zone IV:** This defensible space zone would include areas between 50 and 110 feet of the project structures. Within this zone, less aggressive actions would be taken concerning the reduction of fire fuels. Continuous tree canopy would be retained. All trees not removed would have crown separation and crowns raised 6 feet above ground. Deadwood would be removed. Ladder fuels within 10 feet of dripline would be removed. Brush would be reduced to groups not to exceed 20 feet in diameter. Native grass would be mowed to 6 inches or less during summer fire season.

### 1.6.2 - Circulation and Access

Access to the site from Thomas Lake Harris Drive would be via Gullane Drive, which is a private drive contained within the boundaries of the project site. Thomas Lake Harris Drive is an approximately 1.75-mile long collector two-lane street that forms a loop beginning and ending on Fountaingrove Parkway. The street passes through single- and multi-family residential neighborhoods and has a posted speed limit of 25 miles per hour (mph), conforming to the hillside topography with a series of horizontal and vertical curves. Thomas Lake Harris Drive is generally 40 feet wide with turn pockets at intersections, together with sidewalks and/or parallel multi-use paths on both sides of the street. A gated driveway extending from the end of Gullane Drive and bisecting the Fountaingrove Golf Course would cross the existing paved golf cart path connecting Holes 12 and 13 of the golf course. Pavement treatments and signage would be installed at this crossing for safety purposes. This drive would then enter into the developed portion of the site at its western/southwestern edge. Driveways and internal drive aisles use standard configurations that would be navigable by emergency response vehicles.<sup>8</sup> In addition, the gates would include an override to allow for manual operation.

An emergency vehicle access (EVA) would be provided through a deeded easement from the northwest corner of the site, through the Fountaingrove Golf Course property, to Thomas Lake Harris Drive. The EVA would be 16 feet at its narrowest and 22 feet at its widest with turnouts provided at various locations, and access would be controlled by gates at both ends of the EVA. Site managers and the City of Santa Rosa Fire Department and would be able to control the gates manually in the event of a power outage. The proposed EVA access has been reviewed and approved by City Fire personnel.

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<sup>8</sup> W-Trans. 2019. Focused Traffic Study for the Emerald Isle Senior Housing Project. August 30.





Source: MEHRDAD HAJI-SHARIFI, June 27, 2019.

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### 1.6.3 - Utilities

#### Storm Drainage

The project would install an on-site storm drainage system consisting of inlets and underground piping that would discharge to several rip-rap outfalls located throughout the project site. The outfalls would discharge either into infiltration trenches or overland.

#### Potable Water

The project would be served with a looped 4-inch to 8-inch diameter water system that would connect to the City of Santa Rosa municipal water system at manholes within Gullane Drive and Thomas Lake Harris Drive. The project would install low flow domestic water fixtures, reducing water usage.

#### Wastewater

The project would be served by a 6-inch diameter force and gravity sewer system that would connect to the City of Santa Rosa municipal sewer system at manholes within Gullane Drive and Thomas Lake Harris Drive.

#### Energy

The project would be served with electricity generated by Sonoma Clean Power and delivered by Pacific Gas & Electric Company (PG&E).<sup>9,10</sup> The project would be served with natural gas procured and delivered by PG&E. All service laterals would be located underground.

The project is required to comply with the 2019 California Building Energy Efficiency Standards (2019 California Energy Code) and must demonstrate compliance by submitting finalized project plans to the City Engineer for approval prior to building permits. At this stage of development, specific details regarding compliance with solar/zero net requirements included as part of the 2019 California Energy Code are unknown because it is too early in the design process. All new construction would meet the 2019 California Energy Code.

### 1.6.4 - Phasing and Construction

Construction staging areas would be located on-site. Heavy-duty truck routes would be from Fountaingrove Parkway to Thomas Lake Harris Drive to Gullane Drive to the site. The project would import 1,000 cubic yards of asphalt, 3,360 cubic yards of base rock, 360 cubic yards of concrete, and 100 cubic yards of decomposed granite. The project would export approximately 20,000 cubic yards of material. The hauling of the exported material would take approximately 10 days.

For the purposes of this Subsequent MND, the project is assumed to be constructed in one 15-month phase estimated to begin April 2020 and end July 2021. The project is estimated to be operational by August 1, 2021, and at full occupancy by February 1, 2022.

<sup>9</sup> Sonoma Clean Power. 2019. Frequently Asked Questions. Website: <https://sonomacleanpower.org/frequently-asked-questions>. Accessed: June 14, 2019.

<sup>10</sup> In 2002, California passed California's Community Choice Aggregation law, which makes public programs like Sonoma Clean Power the default service provider. Using a conservative approach, FCS assumed PG&E was the service provider.

## 1.7 - Proposed Modifications for the Emerald Isle Condominium Project

The City is the Lead Agency responsible for preparing the MND and is the public agency that has the primary responsibility for approving the currently proposed project modifications. Therefore, the City is the appropriate Lead Agency to evaluate the potential environmental effects of the currently proposed project modifications that are the subject of this Subsequent MND. Based on the information contained herein, the City has determined that a Subsequent MND is the appropriate document for the proposed modifications for the Emerald Isle Condominium Project.

The 2017 Emerald Isle Assisted Living Facility Project proposed to build and operate a 68,144-square-foot assisted living facility on the site. As shown on the 2017 site plan (Exhibit 7), the 2017 proposed facility would be constructed at the center of the site, with a winding driveway leading from Gullane Drive to the main entrance of the building and wrap around the northern and southern ends of the building. The majority of the project site would remain undeveloped woodland and open space. Approximately 1.51 acres would be landscaped and approximately 8.03 acres would remain as natural open space. Exhibit 8 depicts the project site coverage plan for the 2017 Emerald Isle Assisted Living Facility Project.

Compared to the 2017 Project, the project as presently proposed would develop eight buildings rather than a single facility building, and it would include more total square footage. As shown in Exhibit 4 and Exhibit 8, the amount of natural open space would be reduced from 8.03 acres to 5.82 acres. The Emerald Isle Condominium Project would not develop an assisted living facility. Instead, it would develop 82 for-rent multi-family condominium dwelling units that are age-restricted to persons 55 years old and older.

Table 2 provides a side-by-side project summary of the 2017 Emerald Isle Assisted Living Facility Project and the project as currently proposed.

**Table 2: Comparison of 2017 Project to Emerald Isle Condominium Project**

Use	2017 Emerald Isle Assisted Living Facility Project Description	2017 Emerald Isle Assisted Living Facility Project Characteristics	Emerald Isle Condominium Project Description	Emerald Isle Condominium Project Characteristics
Residential	71 beds in 49 units for assisted living and memory care	68,144 square feet	82 dwelling units allocated among seven buildings totaling 102,584 square feet.  Floor plans include 1-bed/1-bath (1 unit); 2-bed/2-bath (45 units); and 2-bed/2-bath plus den (36 units)	104,921 square feet



**Table 2 (cont.): Comparison of 2017 Project to Emerald Isle Condominium Project**

Use	2017 Emerald Isle Assisted Living Facility Project Description	2017 Emerald Isle Assisted Living Facility Project Characteristics	Emerald Isle Condominium Project Description	Emerald Isle Condominium Project Characteristics
Recreational	Building contains common lobby, café, reading room, central dining areas, private dining rooms, activity rooms, beauty salon, fitness center, media rooms, laundry rooms, and offices; Outdoor includes fountains, arbors, dining patios, walking paths, raised garden beds, sports courts, bocce court and a pet park		Building contains recreation area, leasing office, and two residential units	6,545 square feet
Parking and Circulation	12 covered spaces; 63 uncovered spaces; Driveway connection to Gullane Drive, which would be used for EVA	1.10 acres	95 covered spaces; 155 uncovered spaces; Driveway connection to Gullane Drive; EVA to Thomas Lake Harris Drive	2.27 acres
Landscaping	Landscaping along walking paths; Trees and turf	1.51 acres	Trees and turf	1.33 acres
Natural Open Space	Existing oak trees and vegetation around perimeter	8.03 acres	Existing oak trees and vegetation around perimeter	5.82 acres
Source: City of Santa Rosa 2019; FCS 2019				

## 1.8 - Required Discretionary Approvals

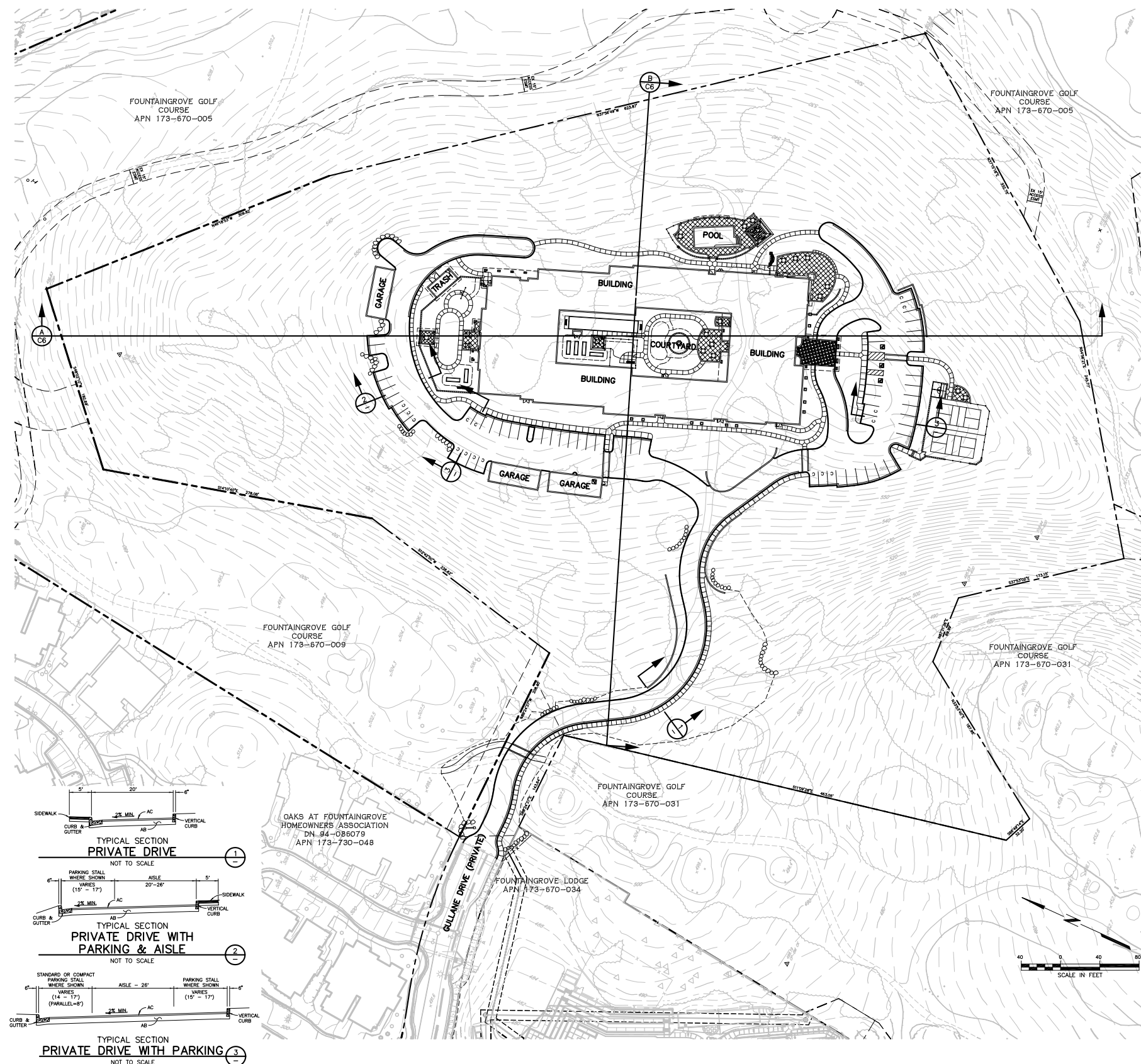
The proposed project requires the following discretionary approvals from the City of Santa Rosa:

- Adoption of Subsequent MND
- Conditional Use Permit
- Hillside Development Permit
- Tentative Map
- Design Review

## 1.9 - Intended Uses of this Document

This MND has been prepared to determine the appropriate scope and level of detail required in completing the environmental analysis for the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft MND will be circulated for a minimum of 30 days, during which period comments concerning the analysis contained in the MND should be sent to:

Andrew Trippel, City Planner  
City of Santa Rosa  
Planning and Economic Development Department  
100 Santa Rosa Avenue, Room 3  
Santa Rosa, CA 95404  
Phone: 707.543.3223  
Fax: 707.543.3269  
Email: atrippel@srcity.org



# LEGEND

## LINES

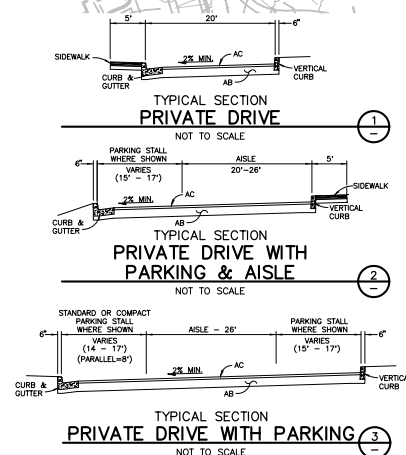
BOUNDARY	---
PARCEL	---
CENTER	---
EASEMENT/SETBACK LINE	---
STRUCTURE SETBACK LINE	---

## UTILITY LINES

	EXISTING	PROPOSED
STORM DRAIN	24" SD	24" SD
WATER	8" W	8" W
SEWER	12" SS	12" SS

## TOPOGRAPHY

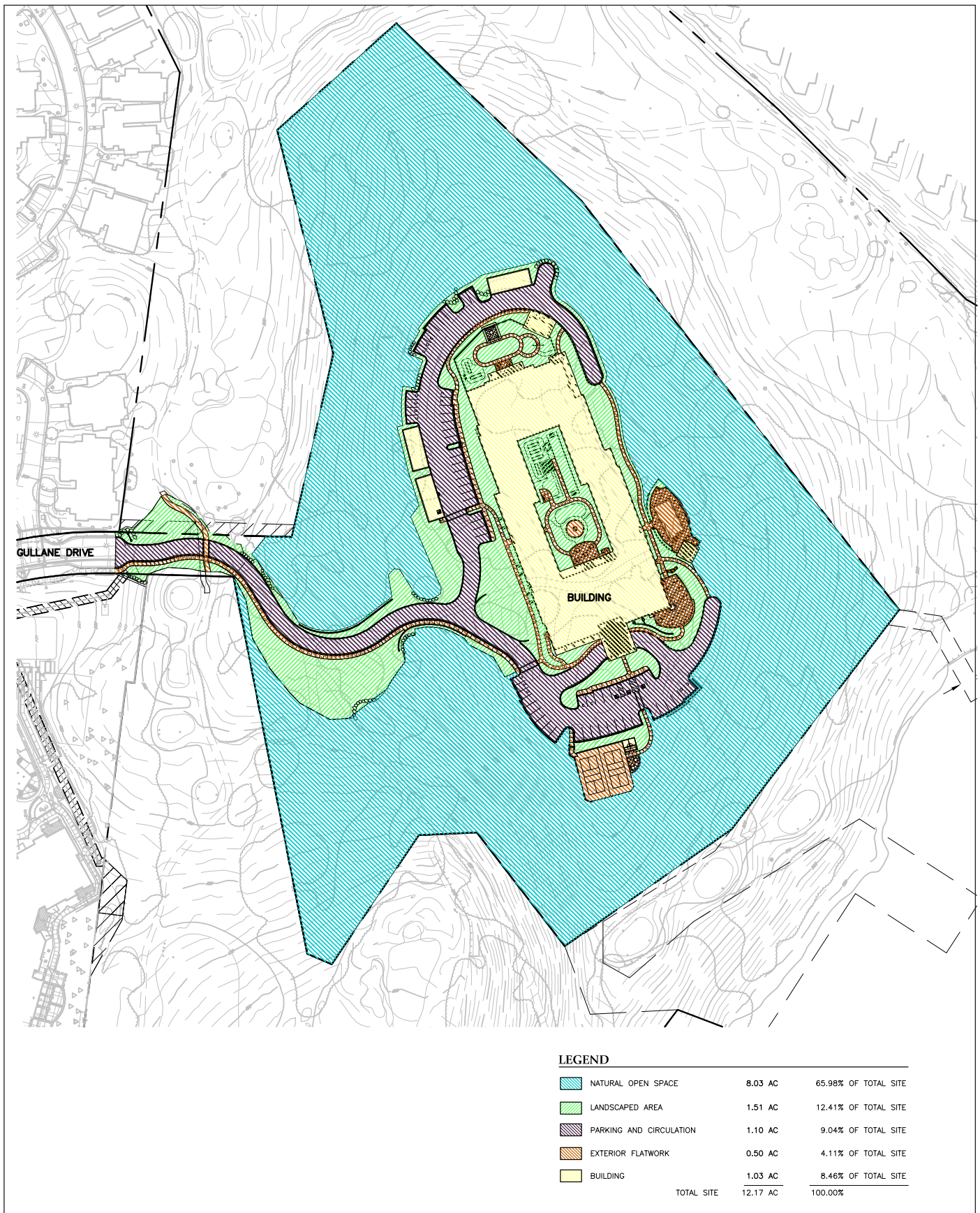
WATER VALVE		
BLOWOFF		
FIRE HYDRANT		
GAS METER		
STORM DRAIN MANHOLE		
STORM DRAIN CATCH BASIN		
STORM DRAIN DROP INLET		
STORM DRAIN CUDO BASIN		
SEWER MANHOLE		
SEWER CLEANOUT		
JOINT POLE		
LIGHT STANDARD		
GUY/ANCHOR		
CURB & GUTTER		
A.C. DIKE		
FENCE		
DITCH/SWALE		
MONUMENT		



Source: Brelie & Race, 2017

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Source: Brelje & Race, February 2019.

## Exhibit 8

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## 2017 Emerald Isle Assisted Living Facility Project Site Coverage Plan

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## SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected			
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.			
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Air Quality	
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy	
<input checked="" type="checkbox"/> Geology/Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards/Hazardous Materials	
<input type="checkbox"/> Hydrology/Water Quality	<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	
<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services	
<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources	
<input type="checkbox"/> Utilities/Services Systems	<input type="checkbox"/> Wildfire	<input checked="" type="checkbox"/> Mandatory Findings of Significance	

### Environmental Determination

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 measure 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.

Date: September 5, 2019

Signed:



Andrew Trippel, City Planner

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>1. Aesthetics</b> <i>Except as provided in Public Resources Code Section 21099, would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

Although the proposed project would expand the development footprint and would reduce acreage of natural open space as compared to the originally approved project, the changes would not result in any new significant environmental impacts or substantial increase in the severity of previously identified significant impacts related to aesthetics. As described below, the proposed project would have less than significant impacts to aesthetics, which is consistent with the 2017 MND.

### Environmental Setting

A scenic vista is typically a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. According to the Santa Rosa General Plan 2035, mountain view corridors to natural ridgelines and landmarks, such as the Taylor and Bennett Mountains, are considered part of Santa Rosa's scenic character. Taylor Mountain is located 6.26 miles south of the project site, while Bennett Mountain is located 7.22 miles southeast. Views of the Sonoma Mountains, visible from many flatland areas of the City, are also recognized as a scenic resource. The Sonoma Mountains are 15.93 miles southeast of the project site.

The California Department of Transportation (Caltrans) identifies officially designated scenic highways through the California Scenic Highway Mapping System. The project site is not located in

the vicinity of an officially designated or eligible State Scenic Highway. The closest officially designated scenic highways are State Route 12 (SR-12) and State Route 116 (SR-116), located approximately 4.37 miles east and 8.18 miles west of the project site, respectively.<sup>11</sup> The City's General Plan and Municipal Code identify a number of scenic corridors, including US Route 101 (US-101), SR-12, Mendocino Avenue/Old Redwood Highway, Fulton Road, Calistoga Road, Guerneville Road, Piner Road, Hall Road/West Third Street, Santa Rosa Avenue, Stony Point Road, Petaluma Hill Road, and Bennett Valley Road. The project site is not located along or within the vicinity of these roads; however, Fountaingrove Parkway, which runs southeast of the project site, is classified as a Scenic Road in the Santa Rosa General Plan 2035.

The existing visual character of the project site is defined by steep, tree-covered slopes consisting of native oak and fir, descending from a relatively flat center. The project site also contains various "dry" shrubs that are spread throughout the site. The existing visual character of the surrounding area generally consists of low-density hillside neighborhood adjacent to Fountaingrove Lake, a reservoir fed from the east by Piner Creek and formed by the Fountaingrove Dam. The project site itself is currently undeveloped, and views from the site are largely obscured by dense tree coverage, as shown on Exhibit 9 and 9a–c, views of the project site. No portion of the site is identified as a "ridge" on the General Plan Ridgeline figure.<sup>12</sup> The project site is not visible from valley floor locations, and, even when viewed from a close vantage point, much of the project site is framed by higher background hillsides.

The project site is zoned as Planned Development (PD) 72-001 and on-site development must comply with the associated Fountaingrove Planned Development Policy Statement PD-72-001. The City's Municipal Code establishes site planning and development standards for Planned Development (PD) Zones that require parcel size, building site area, lot coverage, setbacks, height limits, parking requirements, and open space requirements to conform with the approved Policy Statement and Development Plan for the site. These standards are identified during the rezoning of a property to the PD zoning district, with review by the Design Review Board, Planning Commission, and City Council. As part of project approval, the project must demonstrate consistency with the identified standards, which in turn ensure appropriate aesthetics.

Although the site is located on a wooded hill near the northern city limit, it is nonetheless located in the urbanized context of the City of Santa Rosa, where existing development within the city limit contributes substantial nighttime light. Existing sources of light in the vicinity of the project site include streetlights, lighting from single-family homes, and the surrounding golf course buildings. Existing sources of glare in the vicinity include building windows and the windshields of parked cars, although the abundant trees and vegetation in the area reduce the effects of glare.

<sup>11</sup> California Department of Transportation (Caltrans). California Scenic Highway Mapping System. Website: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm). Accessed March 13, 2019.

<sup>12</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, figure 7-3.

Would the project:

**a) Have a substantial adverse effect on a scenic vista?**

**Less than significant impact.** The 2017 MND evaluated the same site as the proposed project. The conditions surrounding the project site are largely unchanged since the previous project was evaluated, and impacts associated with the currently proposed project would be the same. As mentioned above, the City's General Plan identifies various scenic resources, including views of the Sonoma Mountains, ridgelines, scenic entries, corridors, and roads. The General Plan also seeks to guide development in a way that respects natural features in the design and construction of hillside development. Although the project site was affected by the 2017 Tubbs Fire and several trees were damaged or destroyed, there is enough vegetation which largely screens the project from view. As shown on Exhibit 9a, where the yellow line represents the roofline of the proposed building, the proposed project would not be visible from this off-site vantage point. As shown on Exhibits 9b and 9c, although the project site would be visible from these vantage points, it will be partially screened by trees and would not adversely affect views of the Sonoma Mountains, or any ridgelines or scenic corridors. Therefore, similar to the conclusion of the 2017 MND, impacts to scenic vistas and resources identified in the Santa Rosa General Plan 2035 would be less than significant.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State scenic highway?**

**Less than significant impact.** As described above, segments of SR-12 and SR-116 are officially designated State Scenic Highways; however, these segments are located approximately 4.37 miles east and 8.18 miles west of the site, respectively. Given the substantial tree cover that would remain on-site with development of the project and the intervening distance from the designated State Scenic Highways, the project would not result in a substantial impact on these scenic resources. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

**c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less than significant impact.** Impacts associated with visual character are expected to be similar to those anticipated by the 2017 MND. Located near the northern city limit of Santa Rosa, with open space and agricultural land to the west in unincorporated Sonoma County, the project site is located in hilly terrain adjacent to Fountaingrove Lake with pockets of residential, commercial, and recreational development and relatively dense tree cover. The 2017 Tubbs Fire destroyed vegetation in the area and affected the surrounding properties. Single-family residential uses to the northwest (Oaks Unit 1) and northeast (Lake Pointe and Skyfarm), as well as the Oakmont of Villa Capri senior care facility to the east, were damaged or destroyed by the fire. The site would be accessed by a driveway leading from Gullane Drive to the center of the site where a recreation building, with a pool and common areas is surrounded by the seven residential buildings to the north, east, and south. The exterior of the buildings would employ a style derived from "Bungalow," "Craftsman," or

“Arts and Crafts” architectural styles, with wood shingles, horizontal and vertical wood siding, stucco and natural stone facing. Building entrances combine heavy timber truss framing along with stone accents. Stucco colors are generally cool tones intended to complement warm-tone wood framing and the natural surroundings.

The existing trees to be preserved would screen much of the project when viewed from off-site vantage points as shown on Exhibit 9a, 9b, and 9c. The project’s architectural consistency with surrounding development, coupled with screening resulting from preservation of on-site trees, would ensure the project is consistent with existing visual character and quality of the site and its surroundings as seen from public areas. Therefore, similar to the conclusion of the 2017 MND, the project would not substantially degrade the visual character of the site or its surroundings and associated impacts would be less than significant.

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less than significant impact.** Impacts associated with lighting and glare is expected to be similar to those anticipated by the 2017 MND.

The project site is located in the urban context of Santa Rosa, where existing development contributes a substantial amount of light that affects nighttime views. Existing sources of lighting in the immediate vicinity of the project include streetlights, lighting from single-family homes, and the surrounding golf course buildings.

The project would introduce new sources of light, including lighting on the exterior of the proposed building and in the parking area. However, the project would be required to comply with City of Santa Rosa regulations and guidelines, including the provisions of Santa Rosa Municipal Code Section 20-30.080, which require that lighting fixtures be shielded or recessed to reduce light spillage onto 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-site.<sup>13</sup> Additionally, on-site trees and topography would obscure glare or nighttime lighting from sources on the site. The project does not propose the use of any building materials that would create significant glare. Compliance with the above-referenced regulations and standards would ensure that the proposed project’s contribution to existing light and glare sources would be nominal in comparison to existing conditions. Therefore, similar to the overall conclusion of the 2017 MND, impacts with respect to glare or nighttime views would be less than significant.

## Mitigation Measures

None.

<sup>13</sup> City of Santa Rosa. 2012. City of Santa Rosa Municipal Code. Website: <https://qcode.us/codes/santarosa/>. Accessed March 13, 2019.

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Source: The Digital Realm, January 2019.

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## Exhibit 9 Viewpoint Location Map

CITY OF SANTA ROSA  
EMERALD ISLE CONDOMINIUM PROJECT  
SUBSEQUENT MITIGATED NEGATIVE DECLARATION

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Photograph A: View 1 Existing – View from Gullane Drive looking northeast toward the project site.



Photograph B: View 1 Proposed – View from Gullane Drive looking northeast toward the project site.

Source: The Digital Realm, June 2019.

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Photograph A: View 2 Existing – View from Thomas Lake Harris Drive looking south toward the project site.



Photograph B: View 2 Proposed – View from Thomas Lake Harris Drive looking south toward the project site.

Source: The Digital Realm, June 2019.

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Photograph A: View 3 Existing – View from Thomas Lake Harris Drive looking west toward the project site.



Photograph B: View 3 Proposed – View from Thomas Lake Harris Drive looking west toward the project site.

Source: The Digital Realm, June 2019.

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>2. Agriculture and Forestry Resources</b> <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i>				
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 non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to agriculture or forest resources. As described below, the proposed project would have no impacts to agriculture resources, which is consistent with the 2017 MND.

## Environmental Setting

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), was established by the State Legislature in 1982 to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP has established five farmland categories.

- **Prime Farmland** is comprised of the best combination of physical and chemical features able to sustain long-term agricultural production. Irrigated agricultural production is a necessary land use 4 years prior to the mapping date. The land must be able to store moisture and produce high yields.
- **Farmland of Statewide Importance** possesses similar characteristics to Prime Farmland with minor shortcomings, such as less ability to hold and store moisture and more pronounced slopes.
- **Unique Farmland** has a production history of propagating crops with high-economic value.
- **Farmland of Local Importance** is important to the local agricultural economy. Local advisory committees and county specific board of supervisors determine this status.
- **Grazing Land** is suitable for browsing or grazing of livestock.

Would the project:

- 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 non-agricultural use?**

**No impact.** The FMMP identifies the project site as “Urban and Built Up Land.” There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance contained within the project site. Therefore, similar to the conclusions of the 2017 MND, no impacts related to conversion of Farmland would occur.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No impact.** The zoning code for the City of Santa Rosa designates the project site as “Planned Development (PD)-Low Density Residential,” which is a non-agricultural zoning district. The project site does not support agricultural land use activities and, therefore, is not eligible for a Williamson Act contract. Therefore, similar to the conclusions of the 2017 MND, no impacts related to conflicts with agricultural zoning or Williamson Act contracts would occur.

- 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))?**

**No impact.** The project site is located in an urban area within the City of Santa Rosa, surrounded by single- and multi-family residential housing and a golf course. The site is zoned “Planned

Development,” which is a non-forest land zoning district. As described above, there is no forest land, timberland, or land zoned for Timberland Production on the site or in the surrounding area. This condition precludes any potential conflict with zoning for forest or timberland. Therefore, similar to the conclusions of the 2017 MND no impacts would occur.

**d) Result in the loss of forest land or conversion of forest land to non-forest use?**

**Less than significant impact.** The trees located within the project site are not considered forest land because the density does not meet State definition of such land. Because the project site is not considered forest land, similar to the conclusions of the 2017 MND, impacts with respect to conversion of forest land would be less than significant.

**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?**

**Less than significant impact.** A significant impact would occur if the project would indirectly result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. The site is located on a wooded knoll, surrounded on all sides by the Fountaingrove Golf Course with residential development to the west and north. The project would involve construction and operation of 82 for-rent multi-family condominium dwelling units, which is consistent with the land use and zoning designations applicable to the site. The site does not contain Farmland, and the character of the surrounding area within the city limits is moderately urban. While there is Farmland in the vicinity of the site, it is located outside the city limits and is protected from conversion by a Williamson Act contract. As such, development of the project would not induce the conversion of Farmland in the surrounding area.

There is no timberland on the site or in the surrounding area, and as described above, the site would retain significant native tree cover with development of the project. The project is consistent with the existing residential and recreational development in the area as well as the existing land use and zoning designations. Therefore, similar to the conclusions of the 2017 MND, the project would not induce the conversion of timberland or forest land in the surrounding area. Associated impacts would be less than significant.

## Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>3. Air Quality</b> <i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.</i> <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

Although the project would expand the development footprint and would reduce acreage of natural open space, the changes would not result in any new significant environmental impacts or substantially increase in the severity or previously identified significant impacts related to air quality. As described below, with respect to air quality, the project would have less than significant impacts with mitigation, which is consistent with the 2017 MND.

### Environmental Setting

The City of Santa Rosa is located within the San Francisco Bay Area Air Basin (Air Basin). Air quality within the Air Basin is influenced by natural geographical and meteorological conditions as well as human activities such as construction and development, operation of vehicles, industry and manufacturing, and other anthropogenic emission sources. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunlight.

Santa Rosa has a warm-summer Mediterranean climate with cool, wet winters and warm, dry summers. In the summer, fog and low overcast often move in from the Pacific Ocean during the evenings and mornings. They usually clear up to warm, sunny weather by late morning or noon before returning in the later evening but will occasionally linger all day. Average annual rainfall is 32.20 inches (818 mm), falling on 74 days annually. The wettest year was 1983 with 63.07 inches (1,602 mm) and the driest year was 1976 with 11.38 inches (289 mm). The most rainfall in one month was 19.42 inches (493 mm) in February 1998 and the most rainfall in 24 hours was 5.23



inches (133 mm) on December 19, 1981. Measurable snowfall is rare in the lowlands, but light amounts sometimes fall in the nearby mountains.

The Federal Clean Air Act and the California Clean Air Act establish National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) respectively to protect public health and welfare. Based on federal and State regulations, six major criteria pollutants have been identified: carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), ozone, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), sulfur oxides, and lead.

The Federal Clean Air Act establishes pollutant thresholds for air quality in the United States and the United States Environmental Protection Agency (EPA) administers it at the federal level. The EPA is responsible for establishing the NAAQS. In addition to being subject to federal requirements, California has its own more stringent regulations under the California Clean Air Act, which is administered by the California Air Resources Board (ARB) at the State level under the California EPA (Cal/EPA). The ARB is responsible for meeting the State requirements of the Federal Clean Air Act, administering the California Clean Air Act, and establishing the CAAQS.

The Bay Area Air Quality Management District (BAAQMD) is primarily responsible for assuring that the NAAQS and CAAQS are attained and maintained in the Air Basin. The BAAQMD is responsible for planning, implementing, and enforcing air quality standards within the Air Basin, including the City of Santa Rosa. The BAAQMD operates a monitoring station in Sebastopol where it records pollutant concentration levels for NO<sub>x</sub>, ozone, and PM<sub>2.5</sub> in order to better characterize ozone levels in the Santa Rosa area.

The BAAQMD adopted the 2017 Bay Area Clean Air Plan (2017 Clean Air Plan) on April 19, 2017, to comply with State air quality planning requirements set forth in the California Health and Safety Code. The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of air pollutants most harmful to Bay Area residents, which include particulate matter, ozone, and toxic air contaminants (TACs). The 2017 Clean Air Plan further endeavors to reduce emissions of methane and other greenhouse gases (GHGs) that are potent climate-affecting pollutants in the near-term and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. For purposes of this assessment, the significance thresholds recommended by the BAAQMD were applied. These thresholds are discussed below.

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and GHG emissions. In June 2010, the BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update to the previous version of the CEQA Guidelines. These thresholds are designed to establish the level at which the BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA.

In May 2011, the updated BAAQMD CEQA Air Quality Guidelines were amended to include a risk and hazards threshold for new receptors and modified procedures for assessing impacts related to risk and hazard impacts. However, this latter amendment regarding risk and hazards was the subject of the December 17, 2015, California Supreme Court decision (*California Building Industry Association v BAAQMD*), which clarified that CEQA does not require an evaluation of impacts of the environment on a project.<sup>14</sup> The California Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The California Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA. To account for these updates, BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court’s opinion.<sup>15</sup> This latest version of the BAAQMD CEQA Guidelines was used to prepare the analysis in this IS/MND. Table 3 below provides the BAAQMD emission significance thresholds that are applied separately for construction and operation.

**Table 3: BAAQMD Criteria Pollutant Significance Thresholds—Construction and Operation**

Pollutant	Construction Thresholds Average Daily Emissions (pounds/day)	Operational Thresholds	
		Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	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, other Best Management Practices (BAAQMD Basic Construction Mitigation Measures)	Not Applicable	

<sup>14</sup> On March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds of significance in the BAAQMD CEQA Air Quality Guidelines. The court did not rule on the merits of the thresholds of significance, but found that the adoption of the thresholds was a project under CEQA. The court issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD complied with CEQA. The Alameda County Superior Court, in ordering BAAQMD to set aside the thresholds, did not address the merits of the science or evidence supporting the thresholds, and in light of the subsequent case history discussed below, the science and reasoning contained in the BAAQMD 2017 CEQA Air Quality Guidelines provide the latest state-of-the-art guidance available. Following the court’s order, the BAAQMD released revised CEQA Air Quality Guidelines in May 2012 that include guidance on calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures, and which set aside the significance thresholds. On August 13, 2013, the First District Court of Appeal ordered the trial court to reverse the judgment and upheld the BAAQMD’s CEQA Guidelines. (*California Building Industry Association versus BAAQMD*, Case Nos. A135335 and A136212 [Court of Appeal, First District, August 13, 2013]).

<sup>15</sup> Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Website: [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf). Accessed: May 16, 2019.

**Table 3: (cont.): BAAQMD Criteria Pollutant Significance Thresholds—Construction and Operation**

Pollutant	Construction Thresholds Average Daily Emissions (pounds/day)	Operational Thresholds	
		Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per one million	10 per one million	
Chronic or 1-hour Acute Hazard Index	1.0	1.0	
Incremental annual average PM <sub>2.5</sub>	0.3 µg/m <sup>3</sup>	0.3 µg/m <sup>3</sup>	
Health Risks and Hazards for Sensitive Receptors (Cumulative from All Sources within 1,000-Foot Zone of Influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per 1 million		
Chronic Hazard Index	10.0		
Annual Average PM <sub>2.5</sub>	0.8 µg/m <sup>3</sup>		
Notes: ROG = reactive organic gases, NO <sub>x</sub> = nitrogen oxides, CO= carbon monoxide PM <sub>10</sub> = coarse particulate matter or particulates with an aerodynamic diameter of 10 µm or less PM <sub>2.5</sub> = fine particulate matter or particulates with an aerodynamic diameter of 2.5 µm or less µg/m <sup>3</sup> = micrograms per cubic meter Source: BAAQMD 2017.			

Also contained within the BAAQMD Guidance is a series of screening criteria developed by the BAAQMD to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in a potentially significant air quality impact. If all screening criteria are met by a proposed project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels were applied in this project assessment.

At the time of this analysis, specific details are not available on how the project will meet the solar/zero net energy goals and requirements included as part of the 2019 California Energy Code. However, the project is required to comply with the 2019 California Energy Code. Therefore, the analysis presented below provides a conservative estimate with respect to project generated air quality emissions.

Air quality modeling data that was used in the analysis below is included in Appendix A of this document.

**a) Conflict with or obstruct implementation of the applicable air quality plan?**

**Less than significant impact with mitigation incorporated.** The EPA is responsible for identifying nonattainment and attainment areas for each criteria pollutant within the Air Basin. The Air Basin is

designated non-attainment for CAAQS for 1-hour and 8-hour ozone, PM<sub>10</sub>, annual PM<sub>10</sub>, and annual fine particulate matter (PM<sub>2.5</sub>), and non-attainment for NAAQS for 8-hour ozone and PM<sub>2.5</sub>.<sup>16</sup>

As described above, the BAAQMD adopted the Clean Air Plan in April 2017,<sup>17</sup> which serves as the regional air quality plan (AQP) for the Air Basin for attaining federal ambient air quality standards. The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The determination of project significance with regard to conflicting with or obstructing implementation of the applicable air quality plan is based on consistency with the policies and plans of the 2017 Clean Air Plan.

As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants<sup>18</sup> and GHGs.<sup>19</sup> The 2017 Clean Air Plan also accounts for projections of population growth provided by Association of Bay Area Governments and vehicle miles traveled provided by the Metropolitan Transportation Commission and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would be judged to conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

The BAAQMD does not provide a numerical threshold of significance for project-level consistency analysis. Therefore, the following criteria will be used for determining a project's consistency with the AQP.

- Criterion 1: Does the project support the primary goals of the AQP?
- Criterion 2: Does the project include applicable control measures from the AQP?
- Criterion 3: Does the project disrupt or hinder implementation of any AQP control measures?

### **Criterion 1**

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are to:

- Attain air quality standards;
- Reduce population exposure to unhealthy air and protecting public health in the Bay area; and
- Reduce GHG emissions and protect the climate.

As discussed under Impacts 3(b) and 3(c), below, with implementation Mitigation Measure (MM) AIR-1 and MM AIR-2, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable

<sup>16</sup> Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. Website: <http://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed: May 16, 2019.

<sup>17</sup> Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. Website: [http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-proposed-final-cap-vol-1-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en). Accessed May 16, 2019.

<sup>18</sup> The EPA has established NAAQS for six of the most common air pollutants—carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as “criteria” air pollutants (or simply “criteria pollutants”).

<sup>19</sup> A GHG is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, greenhouse gases are responsible for the greenhouse effect, which ultimately leads to global warming.

federal or State ambient air quality standard or expose sensitive receptors to substantial pollutant concentrations. The project is therefore consistent with Criterion 1 with implementation of MM AIR-1 and MM AIR-2.

### **Criterion 2**

The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollutants at the local, regional, and global levels. Along with the traditional stationary, area, mobile source, and transportation control measures, the 2017 Clean Air Plan contains a number of new control measures designed to protect the climate and promote mixed use, compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources.<sup>20</sup> The 2017 Clean Air Plan also includes an account of the implementation status of control measures identified in the 2010 Clean Air Plan.

None of the stationary source control measures contained in the 2017 Clean Air Plan are directly applicable to the project, which consists of constructing 82 for-rent multi-family condominium dwelling units. The Santa Rosa Zoning Code defines a multi-family dwelling as “a dwelling unit that is part of a structure containing one or more other dwelling units.”<sup>21</sup> In addition, none of the mobile source measures or land use and local impact measures contained in the 2017 Clean Air Plan directly apply to the project. The project would be consistent with Transportation Control Measures (TCM) D-1 through D-3 of the 2017 Clean Air Plan as follows:

- TCM D-1 will expand bicycle facilities serving employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers. Typical improvements include bike lanes, routes, paths, and bicycle parking facilities. This TCM also includes improving bicycle access to transit and supporting the annual Bike to Work event.
- TCM D-2 will improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment, and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width, reduced intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees.
- TCM D-3 will support and promote land use patterns, policies, and infrastructure investments that support higher density mixed-use, residential and employment development near transit in order to facilitate walking, bicycling and transit use.

The project site would be served by Santa Rosa CityBus (CityBus) service. Route 10 of the bus service stops at Round Barn Boulevard/Unocal Place, 0.9 miles from the project site on Gullane Drive.

<sup>20</sup> Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. Website: [http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-proposed-final-cap-vol-1-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en). Accessed May 16, 2019.

<sup>21</sup> City of Santa Rosa. no date. City of Santa Rosa Zoning Code, Section 20-70.020: Definition of specialized terms and phrases. Website: [http://qcode.us/codes/santarosa/view.php?topic=20-7-20\\_70-20\\_70\\_020&highlightWords=dwelling+unit+that+is+part+of](http://qcode.us/codes/santarosa/view.php?topic=20-7-20_70-20_70_020&highlightWords=dwelling+unit+that+is+part+of). Accessed: June 14, 2019.

There are 174 miles of Class I, II, and III bikeways in the City of Santa Rosa. Proposed pedestrian and bicycle facilities would connect to existing infrastructure. Continuous pedestrian facilities exist between this transit stop and the project site. The project would effectively tie into the regional bicycle circulation network with the existing Class I bicycle route that parallels Fountaingrove Parkway. Additionally, continuous sidewalks would effectively link the project site to the nearest transit facilities.

In summary, the project would not conflict with any applicable measures under the 2017 Clean Air Plan and is therefore consistent with Criterion 2.

### **Criterion 3**

The project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of any AQP control measures. As shown above, the project would incorporate several AQP control measures as project design features. The project is therefore consistent with Criterion 3.

### **Summary**

As discussed above in Criteria 1 through 3, the project would not conflict with the 2017 Clean Air Plan with incorporation of MM AIR-1 and MM AIR-2. Therefore, impacts associated with conflicting with or obstructing implementation of the 2017 Clean Air Plan would be less than significant with mitigation.

#### **b) 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?**

**Less than significant impact with mitigation incorporated.** This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The non-attainment status of regional pollutants is a result of past and present development within the air basin; thus, this regional impact is also a cumulative impact. Therefore, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in non-attainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

Non-attainment pollutants of concern include ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. If a project exceeds the identified thresholds of significance, its emissions would be cumulatively considerable, resulting in



significant adverse air quality impacts to the region's existing air quality conditions. The analysis considers construction and operation period impacts separately, as described below.

### **Short-term Construction Impacts**

A preliminary screening method is provided in BAAQMD's 2017 Guidelines for construction-related impacts associated with criteria air pollutants and precursors. The preliminary screening is used to indicate whether a project's construction-related air pollutants or precursors could potentially exceed BAAQMD's thresholds of significance. The construction of the project would result in a less than significant impact to air quality if the following screening criteria are met:

1. The project is below the applicable screening level size (Table 4); and
2. All Basic Construction Mitigation Measures would be included in the project design and implemented during construction; and
3. Construction-related activities would not include any of the following:
  - a. Demolition activities inconsistent with District Regulation 11, Rule 2: Asbestos Demolition, Renovation, and Manufacturing
  - b. Simultaneous occurrence of more than two construction phases;
  - c. Simultaneous construction of more than one land use type (e.g., project would develop residential and commercial uses on the same site), (not applicable to high density infill development);
  - d. Extensive site preparation (i.e., greater than default assumptions used by the California Emissions Estimator Model (CalEEMod) for grading, cut/fill, or earth movement); or
  - e. Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

**Table 4: Construction Criteria Air Pollutants and Precursor Screening Level Sizes**

Land Use	Construction-Related Screening Size	Project Size	Project Percent of Screening Size
Retirement Facility	114 du	82	75 percent
Note: Du = dwelling units Source: BAAQMD 2017. CEQA Air Quality Guidelines			

As shown in Table 4, the project does not exceed the screening size for construction-related criteria air pollutants and precursors. However, the project would export approximately 20,000 cubic yards of soil and import quantities of asphalt, concrete, and decomposed granite amounting to approximately 4,820 cubic yards. Therefore, the project would exceed the 10,000-cubic-yard screening threshold for soil and material import or export during construction, and project construction emissions must be compared with the BAAQMD significance thresholds.

The project's annual construction emissions for each year are presented in Table 5 and converted to average pounds per day in Table 6. As shown in Table 6, the construction emissions for all years are below the recommended thresholds of significance. Therefore, impacts from construction emissions

would be less than significant. In addition, the BAAQMD does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, the BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures are implemented for a project as recommended by the BAAQMD, then fugitive dust emissions during construction are not considered significant. Therefore, the project would implement MM AIR-1 as recommended by the BAAQMD. With incorporation of this measure, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant with mitigation.

**Table 5: Annual Construction Emissions (Unmitigated)**

Construction Activity	Tons/Year			
	ROG	NO <sub>x</sub>	PM <sub>10</sub> (Exhaust)	PM <sub>2.5</sub> (Exhaust)
<b>2020</b>				
Site Preparation	0.021	0.212	0.011	0.010
Grading	0.081	1.207	0.034	0.031
Building Construction	0.200	1.751	0.089	0.084
<b>Total</b>	<b>0.302</b>	<b>3.170</b>	<b>0.134</b>	<b>0.125</b>
<b>2021</b>				
Building Construction	0.164	1.448	0.069	0.065
Paving	0.016	0.130	0.007	0.006
Architectural Coating	0.746	0.016	0.001	0.001
<b>Total</b>	<b>0.926</b>	<b>1.594</b>	<b>0.077</b>	<b>0.072</b>
<b>Total Construction Emissions</b>	<b>1.227</b>	<b>4.765</b>	<b>0.211</b>	<b>0.197</b>
Notes: Columns may not add due to numerical rounding ROG = reactive organic gases    NO <sub>x</sub> = oxides of nitrogen    PM <sub>10</sub> = particulate matter 10 microns or less in diameter PM <sub>2.5</sub> = particulate matter 2.5 microns or less in diameter Source: see CalEEMod model output				

**Table 6: Construction Emissions (Unmitigated Average Daily Rate)**

Construction Activity	Air Pollutants			
	ROG	NO <sub>x</sub>	PM <sub>10</sub> (Exhaust)	PM <sub>2.5</sub> (Exhaust)
Total Emissions (tons)	1.227	4.765	0.211	0.197
Total Emissions (pounds)	2,454	9,530	422	394
Average Daily Emissions (lbs/day) <sup>(1)</sup>	6.7	26.0	1.2	1.1
Significance Threshold (lbs/day)	54	54	82	54
Exceeds Threshold?	No	No	No	No
Notes: <sup>(1)</sup> Calculated by dividing the total emissions in pounds by a total of 366 total working days for the duration of construction ROG = reactive organic gases    NO <sub>x</sub> = oxides of nitrogen    PM <sub>10</sub> = particulate matter 10 microns or less in diameter PM <sub>2.5</sub> = particulate matter 2.5 microns or less in diameter Source: see CalEEMod model output				

### Long-Term Operational Impacts

Generally, long-term operational emissions result from project-related traffic and through the routine use of landscape equipment and consumer products. Other sources of long-term operational emissions result from occasional repainting of the buildings and use of natural gas. BAAQMD's 2017 Guidelines provide guidance and screening criteria for determining if a project could potentially result in significant air quality impacts. As shown in Table 7, the operational criteria pollutant screening size for a Retirement Community is 487 units. The project is well below BAAQMD's screening threshold, indicating that ongoing project operations would not be considered to have the potential to generate a significant quantity of air pollutants. Therefore, long-term operational impacts associated with criteria pollutant emissions would be less than significant.

**Table 7: Annual Construction Emissions (Unmitigated)**

Land Use	Operation-Related Screening Size	Project Size	Project Percent of Screening Size
Retirement Facility	487 du	82	17%
Note: Du = dwelling units Source: BAAQMD 2017. CEQA Air Quality Guidelines			

### Summary

With incorporation of MM AIR-1, the project would not 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 and impacts would be less than significant.

#### c) Expose sensitive receptors to substantial pollutant concentrations?

**Less than significant impact with mitigation incorporated.** This impact relates to localized criteria pollutant and TAC impacts to sensitive receptors. The BAAQMD considers a sensitive receptor to be any facility or land use that includes members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. If a project is likely to be a place where people live, play, or convalesce, it should be considered a sensitive receptor. A sensitive receptor also includes locations where sensitive individuals are likely to spend a significant amount of time there. Examples of receptors include residences, schools and schoolyards, parks and play grounds, daycare centers, nursing homes, and medical facilities. Playgrounds could be play areas associated with parks or community centers. As a condominium, the project itself is a sensitive receptor. Additionally, there are residential buildings adjacent to the project site, including residences to the west and east of the project along Thomas Lake Harris, and the Fountaingrove Lodge Retirement Center to the west of the project.

### Short-Term Construction Impacts

#### Construction Fugitive Dust

Project construction would require general site clearing and grading/earthwork activities during construction. Emissions from construction activities are generally short-term in duration but may still

cause adverse air quality impacts. The project would generate emissions from construction equipment exhaust, worker travel, and fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>). Construction activities would also temporarily create emissions of equipment exhaust and other air contaminants. The project's potential impacts related to TACs are evaluated separately under "Construction Period TAC Impacts," below.

As discussed in Impact 3(b) above, BAAQMD does not recommend a numerical threshold for fugitive dust particulate matter emissions. Instead, BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures are implemented for a project as recommended by BAAQMD, then fugitive dust emissions during construction are not considered significant.

As required by MM AIR-1, the project would implement the best management practices (BMPs) recommended by BAAQMD. Therefore, short-term construction impacts associated with fugitive dust would be less than significant with mitigation.

### ***Construction Period TAC Impacts***

Residents located adjacent to the project site and within the local vicinity would be exposed to TAC emissions for the duration of construction, the most important of which is diesel particulate matter (DPM).

An assessment was made of the potential health impacts to surrounding sensitive receptors resulting from the emissions of TACs during construction. TACs are air pollutants present in miniscule amounts in the air that, if a person is exposed to them, could increase the chances of experiencing health problems. The TACs of greatest concern are those that cause serious health problems or affect many people. Health problems can include cancer, respiratory irritation, nervous system problems, and birth defects. Some health problems occur very soon after a person inhales a TAC. These immediate effects may be minor, such as watery eyes; or they may be serious, such as life-threatening lung damage. Other health problems may not appear until many months or years after a person's first exposure to the TAC. Cancer is one example of a delayed health problem.

Fine particle pollution or PM<sub>2.5</sub> describes particulate matter that is 2.5 micrometers in diameter and smaller—one-thirtieth the diameter of a human hair. Fine particle pollution can be emitted directly or formed secondarily in the atmosphere. PM<sub>2.5</sub> health impacts are important because their size can be deposited deeply in the lungs causing respiratory effects.

For purposes of this assessment, exhaust emissions of DPM are represented as PM<sub>2.5</sub> exhaust emissions. Studies indicate that DPM poses the greatest health risk among airborne TACs. DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM<sub>10</sub> database, ambient PM<sub>2.5</sub> monitoring data, and the results from several studies to estimate concentrations of DPM.

The BAAQMD has also adopted health-based risk significance thresholds. The thresholds adopted for this assessment are as follows:

- Cancer Risk (10 in one million)
- Non-cancer hazard index (1.0)
- Annual PM<sub>2.5</sub> (3.0 µg/m<sup>3</sup>)

*Estimation of DPM (as PM<sub>2.5</sub> Exhaust)*

DPM construction emissions were estimated using the CalEEMod Land Use Emission Model (Version 2016.3.2). Table 8 summarizes the unmitigated annual construction emissions of DPM.

**Table 8: Project Annual DPM Construction Emissions-No Mitigation**

Year	On-site DPM (as PM <sub>2.5</sub> Exhaust) (tons/year)	Off-site DPM (as PM <sub>2.5</sub> Exhaust) (tons/year)	Total DPM (as PM <sub>2.5</sub> Exhaust) (tons/year)
2020	0.123	0.003	0.126
2021	0.072	0.0007	0.072
<b>Total</b>	<b>0.194</b>	<b>0.004</b>	<b>0.198</b>
Source: see Appendix A.			

*Air Dispersion Modeling*

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the AERMOD (Version 18081) air dispersion model that is approved for preparing air dispersion assessments. Specifically, the AERMOD model was used to estimate levels of PM<sub>2.5</sub> at sensitive receptor locations from the project's construction PM<sub>2.5</sub> exhaust and fugitive dust emissions. The use of the AERMOD model provides a refined methodology for estimating construction impacts by utilizing long-term measured, representative meteorological data for the project site and a representative construction schedule.

A total of four emission sources were used to represent the project's exhaust and fugitive dust PM<sub>2.5</sub> on-site and off-site construction emissions within the air dispersion model. One source represented the generation of on-site construction DPM exhaust emissions (as PM<sub>2.5</sub> exhaust) from the off-road construction equipment. A second source was applied to represent the emissions of fugitive dust PM<sub>2.5</sub> for the off-road construction equipment during earth-moving activities. This source was assumed to be coincident (same size and timing) with the construction exhaust emission source. A third emission source was included to account for the off-site DPM (as PM<sub>2.5</sub>) emissions worker, haul truck, and vendor truck construction vehicles while a fourth off-site source was included to account for the production of fugitive dust from off-site construction vehicles. Construction vehicles were assumed to travel from the project site along Thomas Lake Harris Drive and Fountaingrove Parkway on their way to U.S. 101. Full construction assumptions are available in Appendix A.

Receptor locations within the AERMOD model were placed at locations of existing residences surrounding the project. The air dispersion model assessment used meteorological data from the Sonoma County Airport for the time period of January 2009 to January 2014.

#### *Estimation of Cancer Risks from Construction*

The BAAQMD has developed a set of guidelines<sup>22</sup> for estimating cancer risks that provide adjustment factors that emphasize the increased sensitivities and susceptibility of young children to exposures to TACs. These adjustment factors include age-sensitivity weighting factors, age-specific daily breathing rates, and age-specific time-at-home factors. The recommend method for the estimation of cancer risk is shown in the equations below with the cancer risk adjustment factors provided in Table 8 for various sensitive/residential receptors (infant, child, and adult) over the construction time period.

$$\text{Cancer Risk} = C_{\text{DPM}} \times \text{Inhalation Exposure Factor}$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

$C_{\text{DPM}}$  = Period average DPM air concentration calculated from the air dispersion model in  $\mu\text{g}/\text{m}^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = \text{CPF} \times \text{EF} \times \text{ED} \times \text{AAF}/\text{AT}$$

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 (mg/kg-day)<sup>-1</sup> for DPM

EF = Exposure frequency (days/year)

ED = Exposure duration (years)

AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)—see Table 9.

AT = Averaging time period over which exposure is averaged (days)

Table 9 presents the exposure assumptions for cancer risk.

<sup>22</sup> Bay Area Air Quality Management District (BAAQMD). 2016. Air Toxics NSR Program Health Risk Assessment Guidelines. Website: [http://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra\\_guidelines\\_12\\_7\\_2016\\_clean-pdf.pdf](http://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf). May 16, 2019.



**Table 9: Exposure Assumptions for Cancer Risk**

Receptor Scenario	Exposure Frequency		Exposure Duration (years) <sup>(1)</sup>	Age Sensitivity Factors (ASF)	Time at Home Factor (TAH) (percent)	Daily Breathing Rate (DBR) (L/kg-day)
	Hours/day	Days/year				
Sensitive/Residential Receptor—Prenatal to Adult						
3 <sup>rd</sup> Trimester	24	350	0.25	10	100	361
0 to 2 years	24	350	2	10	100	1,090
2 to 16 years	24	350	14	3	100	572
16 to 30 years	24	350	14	1	72	261
Sensitive/Residential Receptor—Adult						
Adult (30 years)	24	350	30	1	73	233
Sensitive Receptor—Child						
3 to 16 years	24	350	14	3	1	520
Note: <sup>(1)</sup> The actual duration used to estimate cancer risks during construction is over the duration of construction which was 1.3 years						
Source: BAAQMD 2016. Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines. Website: <a href="http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en">http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en</a> .						

#### *Estimation of Non-Cancer Hazards*

An evaluation of the potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate reference exposure level (REL). Available RELs promulgated by the California Office of Environmental Health Hazards Assessment (OEHHA) were considered in the assessment.

To quantify non-carcinogenic impacts, the hazard index approach was used.

$$HI = C_{ann}/REL$$

Where:

HI = chronic hazard index

$C_{ann}$  = annual average concentration of TAC as derived from the air dispersion model ( $\mu\text{g}/\text{m}^3$ )

REL = reference exposure level above which a significant impact is assumed to occur ( $\mu\text{g}/\text{m}^3$ )

The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in the OEHHA regulatory guidance were used. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity reference exposure level. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1,

a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM for which the OEHHA has defined a REL for DPM of  $5 \mu\text{g}/\text{m}^3$ . The principal toxicological endpoint assumed in this assessment was through inhalation.

#### *Estimation of PM<sub>2.5</sub> Hazards*

The BAAQMD has included significance thresholds for PM<sub>2.5</sub> from recent studies that show health impacts from exposure to this pollutant. The construction emissions of PM<sub>2.5</sub> incorporated into this assessment are represented as DPM (as PM<sub>2.5</sub> exhaust) and PM<sub>2.5</sub> fugitive dust.

#### **Estimates of Health Risks and Hazards from Project Construction**

The maximum impacted sensitive receptor (MIR) was found at an existing residence located approximately 80 meters (264 feet) northeast of the project across Thomas Lake Harris Drive. The estimated health and hazard impacts at the maximum impacted sensitive receptor from the project's construction emissions are provided in Table 10.

**Table 10: Estimated Project Construction Health Risks and Hazards-No Mitigation**

Receptor	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index	Annual PM <sub>2.5</sub> Concentration ( $\mu\text{g}/\text{m}^3$ )
Risks and Hazards at the Maximum Impacted Sensitive Receptor—Prenatal-Infant <sup>1</sup>	28.3	0.03	0.20
Risks and Hazards at the Maximum Impacted Sensitive Receptor—Adult <sup>1</sup>	0.5	0.03	0.20
Risks and Hazards at the Maximum Impacted Sensitive Receptor—Child <sup>1</sup>	4.5	0.03	0.20
BAAQMD Significance Threshold	10	1	0.3
Exceeds Threshold?	<b>Yes (Prenatal to Infant)</b>	No	No
Note: <sup>1</sup> Maximum impacted sensitive receptor is a residence located approximately 80 meters (264 feet) northeast of the project across Thomas Lake Harris Drive. Source: see Appendix A			

As noted from Table 10, the project's construction DPM emissions would exceed the cancer risk significance thresholds adopted for this assessment at the maximum impacted sensitive prenatal to infant receptors. Therefore, mitigation would be necessary to reduce potentially significant impacts from construction of the project. As outlined in MM AIR-2, mitigation requiring the use of construction equipment meeting Tier IV Final off-road engine emission standards would be necessary to reduce impacts to sensitive receptors during project construction.

Table 11 summarizes the project's construction PM<sub>2.5</sub> emissions after the application of MM AIR-2, and Table 12 summarizes the cancer risks and hazards after implementation of MM AIR-2.

**Table 11: Project Annual DPM Construction Emissions-With Mitigation**

Year	On-site DPM (as PM <sub>2.5</sub> Exhaust) (tons/year)	Off-site DPM (as PM <sub>2.5</sub> Exhaust) (tons/year)	Total DPM (as PM <sub>2.5</sub> Exhaust) (tons/year)
2020	0.005	0.003	0.008
2021	0.004	0.001	0.005
<b>Total</b>	<b>0.008</b>	<b>0.004</b>	<b>0.012</b>
Note: Columns may not add correctly due to numerical rounding Source: see Appendix A			

**Table 12: Estimated Project Construction Health Risks and Hazards-With Mitigation**

Receptor	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index	Annual PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
Risks and Hazards at the Maximum Impacted Sensitive Receptor—Prenatal-Infant <sup>1</sup>	1.4	0.001	0.06
Risks and Hazards at the Maximum Impacted Sensitive Receptor—Adult <sup>1</sup>	0.03	0.001	0.06
Risks and Hazards at the Maximum Impacted Sensitive Receptor—Child <sup>1</sup>	0.2	0.001	0.06
BAAQMD Significance Threshold	10	1	0.3
Exceeds Threshold?	No	No	No
Note: <sup>1</sup> Maximum impacted sensitive receptor is a residence located approximately 80 meters (264 feet) northeast of the project across Thomas Lake Harris Drive. Source: see Appendix A			

As noted in Table 12, the project's construction emissions would not exceed the BAAQMD significance threshold after application of MM-AIR 2; therefore, project-related emissions would not result in significant health impacts to nearby sensitive receptors during construction with mitigation.

#### ***Cumulative Impact Analysis at the Maximum Impacted Sensitive Receptor***

The BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project. There are no stationary sources, major roads (Fountain Grove Parkway) and railroads located within 1,000 feet of the project site. In addition, the closest highway (U.S. 101) is approximately 4,500 feet west of the project site. Therefore, considering the distance between the potential cumulative impacts sources and the project site, the project's construction DPM emissions would not result in a significant cumulative health risk impact at the MIR.

## **Long-Term Operational Impacts**

### *Operational CO Hotspot*

CO emissions from project-related traffic would be the greatest pollutant of concern at the local level, since congested intersections with a large volume of traffic have the greatest potential to cause high, localized concentrations of CO.

The BAAQMD recommends a screening analysis to determine whether a project has the potential to contribute to a CO hotspot. The screening criteria identify when subsequent site-specific CO dispersion modeling is necessary. The BAAQMD considers a project's local CO emissions less than significant if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; or
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; or
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Based on the Focused Traffic Study for the Emerald Isle Senior Housing Project (Focused Traffic Study) prepared by W-Trans (Appendix G), implementation of the project would increase daily traffic volumes by an additional 303 vehicles per day, including 16 during the AM peak-hour and 21 during the PM peak-hour. The intersection of Thomas Lake Harris Drive and Fountaingrove Parkway currently has 2,214 vehicles during the AM peak-hour and 1,986 vehicles during the PM peak-hour. Even with conservatively adding the daily project trips of 303 vehicles per day to existing traffic conditions, the volumes would be well below the hourly screening criteria identified above. In addition, according to the Focused Traffic Study, all study intersections are projected to continue operating acceptably at Level of Service (LOS) A or B under future conditions. Therefore, the project would be consistent with applicable congestion management programs within Sonoma County, thus satisfying Criterion 1.

Likewise, the project would not increase traffic volumes by more than 44,000 vehicles per hour at nearby intersections or increase traffic volumes by more than 24,000 vehicles per hour at nearby intersections where vertical and/or horizontal mixing is substantially limited, satisfying both Criteria 2 and 3 above. Furthermore, the adjacent roadways are not located in an area where vertical and/or horizontal mixing is substantially limited. Therefore, the project would not significantly contribute to an existing or projected CO hotspot.

### **Project as a Receptor**

The project is locating new sensitive receptors (residents) that could be subject to existing sources of TACs. However, in a 2016 decision, the California Supreme Court concluded in *California Building Industry Association v. Bay Area Air Quality Management District* that agencies subject to CEQA are

generally not required to analyze the impact of existing environmental conditions on a project's future users or residents. Therefore, impacts from existing sources of TAC emissions on sensitive receptors who would reside within the future project are not subject to CEQA. As a condominium, the project itself is considered a sensitive receptor; therefore, potential TAC risks to the project's future residents are analyzed for informational purposes.

When siting a new receptor, the existing or future proposed sources of TACs and PM<sub>2.5</sub> emissions that would adversely affect individuals within the project were examined, including:

- The extent to which existing sources would increase risk levels, hazard index, and/or PM<sub>2.5</sub> concentrations near the planned receptor.
- Whether the existing sources are permitted or non-permitted by BAAQMD.
- Whether there are freeways or major roadways near the planned receptor.

BAAQMD recommends that lead agencies identify all TAC and PM<sub>2.5</sub> sources located within a 1,000-foot radius of a project. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a project is beyond the recommended radius. Permitted sources of TAC and PM<sub>2.5</sub> should be identified and located, as should freeways, major roadways, and other potential sources.

The operational analysis used the methodology in BAAQMD's Recommended Methods for Screening and Modeling Local Risks and Hazards:

- The project site is approximately 4,500 feet from U.S. 101, which is outside the 1,000-foot radius for the project site.
- The project site is approximately 2,300 feet from Fountaingrove Parkway, which is outside the 1,000-foot radius for the project site.
- There are no stationary sources within the 1,000-foot radius of the project site.

Based on the above, the project's future residents would not be exposed to substantial pollutant concentrations.

**d) Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?**

**Less than significant impact.** As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard and the ability to detect odors varies considerably among the populations and overall is subjective.

The BAAQMD does not have a recommended odor threshold for construction activities. However, BAAQMD recommends screening criteria that are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:



An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3 [of the BAAQMD's guidance].

### **Construction**

Diesel exhaust and volatile organic compounds would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore would not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

### **Operation**

Land uses typically associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project does not contain land uses typically associated with emitting objectionable odors. During operation of the project, odors would primarily consist of vehicles traveling to the site. These occurrences would not produce significant odors; therefore, operational impacts would be less than significant.

## **Mitigation Measures**

- MM AIR-1** The following BMPs, as recommended by the BAAQMD, shall be included in the project design and implemented during construction:
- All active construction areas shall be watered at least two times per day.
  - All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least three times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
  - All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
  - All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
  - All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
  - All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
  - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, California Code of Regulations, Title 13, Section 2485). Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
  - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
  - The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact at the BAAQMD regarding dust

complaints. BAAQMD and the construction contractor shall take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

- MM AIR-2** During construction activities, the developer or project applicant shall ensure all off-road equipment in excess of 50 horsepower used on-site by the developer or contractors is equipped with engines meeting the EPA Tier IV Final off-road engine emission standards. The construction contractor shall maintain a log of equipment use at the construction site with make, model, serial number, and certification level of each piece of construction equipment that will be available for review by City building inspection staff.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>4. Biological Resources</b> <i>Would the project:</i>				
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 California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The analysis in this section is based on record searches and a field survey conducted by FCS. Supporting information is provided in Appendix B.

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project or new information of substantial importance since the 2017 MND that would result in any new significant environmental impacts or substantial increase in the severity or previously identified significant impacts related to biological

resources. As described below, the proposed project would have less than significant impacts to biological resources, which is consistent with the 2017 MND.

### Environmental Setting

The section provided below evaluates potential effects on biological resources that may result from project implementation. The analysis is based on a site visit by FCS Biologist, Joaquin Pacheco, on March 27, 2019, as well as the 2017 MND, and an Arborist Report and Tree Preservation Plan completed in February 2019, by International Society of Arboriculture (ISA) Certified Arborist, Becky Duckles. Ms. Duckles confirmed the findings of the February 2019 Arborist Report and Tree Preservation Plan in an Arborist Report Summary and Addendum dated May 17, 2019 with further clarifications provided on August 20, 2019. The analysis is also based on the Tree Removal Mitigation Report prepared by Landesign Group on February 25, 2019. In addition, descriptions and analysis in this section are based on results from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and the United States Fish and Wildlife Service (USFWS) database searches. Supporting information is provided in Appendix B.

Would the project:

- 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less than significant impact with mitigation incorporated.** The 2017 MND evaluated the same site as the proposed project. In October of 2017, the project site was affected by the Tubbs Fire, which burned large portions of the site and damaged or destroyed multiple trees throughout the project site. Areas surrounding the project site were also affected by the fire. However, the general habitat types within and surrounding the project site are largely unchanged since the 2017 MND was evaluated, and impacts associated with the currently proposed project will be the same.

FCS completed an updated CNDDDB and CNPS database search and found additional special-status plant species that have the potential to occur on the project site. The updated CNDDDB database search found there to be potential for Cooper's hawk and a field survey confirmed this potential. The project site provides both suitable nesting and foraging habitat. However, the updated CNDDDB database search no longer identifies a potential for special status bats species to occur on the project site, while the 2017 MND recommended mitigation measures to be enacted for special-status species of bats. This is likely attributed to the monthly data updates of the CNDDDB database. As such, this document no longer recommends a focused survey for special-status bat species.

For the purpose of this analysis, special-status species refers to all species formally listed as threatened and/or endangered under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA); California Species of Special Concern; designated as Fully Protected by CDFW; given a status of 1A, 1B, or 2 by California Native Plant Society (CNPS); or designated as special-status by city, county, or other regional planning documents. Federal and State listed threatened and/or endangered species are legally protected under FESA/CESA. The designated

special-status species listed by CNPS have no direct legal protection, but an analysis of the significance of potential impacts under CEQA Guidelines is required.

Special-status plant and wildlife species typically occur in undeveloped areas. Although it is less likely, it is also possible for them to occur within developed areas. The project site contains coastal oak woodland habitat and a rocky, recently cleared area dominated by invasive and non-native plant species. A total of 32 special-status plant species and eight special-status wildlife species were evaluated for their potential to occur on the project site based on their ecology and regional occurrences within USGS Santa Rosa, California 7.5-minute quadrangle. A summary of the findings is provided below. Potential impacts occurring to special-status species, if they were found on-site, would likely be significant.

### Special-Status Plant Species

Thirty-two special-status plant species have been recorded with the potential to occur within the project site based on CNDDDB and CNPS database searches. A plant's potential to occur on the project site was based on the presence of suitable habitats, soil types, and occurrences recorded by the USFWS, CNPS, or CNDDDB within the Santa Rosa quadrangle, and field observations made during the March 29, 2019, site survey by FCS Biologist, Joaquin Pacheco. Based on the database searches and field observations, potential habitat suitability was determined for six special-status plant species within the project site: Napa false indigo (*Amorpha californica*), bent-flowered fiddleneck (*Amsinckia lunaris*), narrow-anthered brodiaea (*Brodiaea leptandra*), hollyleaf ceanothus (*Ceanothus purpureus*), Colusa layia (*Layia septentrionalis*), and Baker's naranretia (*Navarretia leucocephala*).

Construction of the proposed project could result in direct loss of these special-status plant species, if they are present, through earthmoving activities. In addition to direct impacts, indirect impacts to special-status plant species could occur through degradation of habitat due to temporary construction impacts, the introduction of invasive or non-native plant species, the placement of paving and infrastructure, and increased human activity within the project site attributable to project operations. Impacts would be potentially significant. Focused surveys for these six species are recommended, along with protective measures, if required, to ensure no adverse impacts would occur. Implementation of MM BIO-1a, would reduce impacts to special-status plants to less than significant.

### Special-Status Wildlife Species

As noted above, eight special-status wildlife species were evaluated for their potential to occur on the project site. The largely coastal oak woodland habitat and rocky, non-native grassland area lacks any defined aquatic features and as such, provides suitable foraging and nesting habitat for only avian species that are federally- or State-protected. Of the eight special-status wildlife species, only one has the potential to occur within the project boundaries. The white-tailed kite (*Elanus leucurus*), a fully protected species, has the potential to use the project site as suitable foraging and nesting habitat as the project site contains open grasslands and dense-topped trees for nesting and perching.

Additionally, the project site and its adjacent areas contain mature trees that support potential habitat for bird species protected under the Migratory Bird Treaty Act (MBTA). Construction activities could disturb nesting and breeding birds in trees within and around the construction site. Potential



impacts on special-status and migratory birds that could result from the construction and operation of the project include the destruction of eggs or occupied nests, mortality of young, and the abandonment of nests with eggs or young birds prior to fledging. If these species were found to be present, impacts to these species would be significant.

Implementation of MM BIO-1b would reduce impacts to migratory and nesting birds and raptors protected under the MBTA to less than significant by preventing take of individuals roosting in trees, requiring preconstruction surveys to be conducted, and altering construction activities to avoid disturbance of any active nests.

**b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less than significant impact with mitigation incorporated.** The 2017 MND found that the site contains a large amount of coastal oak woodland, which is considered a special-status natural community. Coastal oak woodland has high habitat value for native wildlife and is targeted for protection in the Sonoma County General Plan because it continues to decline regionally. In general, “special-status natural communities” include those communities that are of limited distribution Statewide or within a county or region; communities that are of special concern to resource agencies; and communities that, because they are vulnerable to the environmental effects of projects, are assessed or protected under CEQA Section 1600 of the California Fish and Game Code, and/or Section 404 of the Clean Water Act (CWA), among others.

The conclusion reached in the 2017 MND remains largely accurate, as the vast majority of the oak woodland remains intact. The proposed project would result in the loss of coastal oak woodland through the removal of individual oak trees. The loss of oak woodland and associated common wildlife is significant because this biological community is classified as a sensitive community. Therefore, this impact is potentially significant. Implementation of MM BIO-2 would reduce impacts to coastal oak woodland to less than significant through protection of trees to remain and replanting to enhance the existing woodland.

**c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No impact.** The 2017 MND found that the project site does not contain any wetlands or other areas designated as waters of the United States and no further studies or regulatory permitting would be required. The project site remains largely unchanged. Therefore, the conclusions regarding jurisdictional water features remain the same and the project would not have a substantial adverse effect on State or federally protected wetlands. No impact would occur.

- 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 wildlife nursery sites?**

**Less than significant impact with mitigation incorporated.** The 2017 MND found that the mitigations in place regarding migratory birds and nesting raptors and special-status bats were sufficient to ensure less than significant impacts. As the updated database search found there to be no potential for special-status bat species to occur, the mitigation measures protecting against impacts to birds and raptors under the MBTA (MM BIO-1b) will be sufficient to reduce impacts to the movement of any native wildlife species. Although the project site may offer a corridor in the form of coastal oak woodland habitat for native wildlife migrating through, the site is limited in size when compared with surrounding open space, and loss of movement habitat to resident wildlife would be less than significant. Additionally, the recent fires have further reduced the likelihood for the project site to act as a corridor as the surrounding open space has increased since the 2017 MND was completed.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Less than significant impact with mitigation incorporated.** Implementation of the proposed project has the potential to conflict with applicable City policies and ordinances protecting biological resources, specifically ordinances in place protecting against tree removal.

The City of Santa Rosa Municipal Code Ordinance No. 17-24 covers tree alteration, removal, relocation and the necessary permits that may be required dependent on project plans. Per Chapter 17-24, existing trees over 4-inches in girth to be removed shall be replaced by two, 15-gallon minimum-size trees for each 6 inches, or fraction thereof, of the diameter of the tree to be removed. Per Ordinance No. 17-24-0.050(c) the same genus and species as the removed tree (or another species, if approved by the Director) shall be used. The Arborist Report and Tree Protection Plan and Arborist Report Summary & Addendum completed by ISA Certified Arborist, Becky Duckles, and contained in Appendix B, inventoried 927 code-protected trees<sup>23</sup> (not including the hundreds of saplings, mostly oaks 4 inches in diameter and greater, located outside the development area). Some trees at the edges of grading or other construction activity, or near property lines that may be potentially impacted were also included. Of those 927 trees:

- 280 live trees are to remain (within development area)
- **236 live trees are to be removed for project**<sup>24</sup>
- 100 fire damaged or dead trees are to be removed (within development area)
- 143 fire damaged or dead trees have been removed per prior approval
- **168 trees have been removed per prior approval**

Overall, 404 total trees will be removed and require mitigation (see Tree Removal Mitigation Report prepared by Landesign Group, Appendix B). As such, 250 36-inch trees will be planted at the time of

<sup>23</sup> The City of Santa Rosa's Tree Protection Ordinance protects trees 4 inches in diameter and larger.

<sup>24</sup> **Bold** denotes trees to be removed or that have been removed that require mitigation.

overall project construction to ensure less than significant impacts. To maintain consistency with the City's tree ordinance, implementation of MM BIO-2 is required to reduce impacts related to the removal of on-site trees to a less than significant level.

**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?**

**No impact.** The 2017 MND found that the proposed project site is not located within the area of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP. The location or size of the proposed project site has not changed and as such, the proposed project would result in no impact related to conflicts with an adopted HCP, NCCP, or other approved local, regional, or State HCP. No mitigation is required.

## Mitigation Measures

- MM BIO-1a** Prior to any vegetation removal or ground-disturbing activities, focused botanical surveys shall be conducted to determine the presence of various special-status plant species including Napa false indigo, Bent-flowered fiddleneck, Narrow-anthered brodiaea, Hollyleaf ceanothus, Colusa layia, and Baker's nararretia. Surveys shall be conducted in accordance with Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (CDFG 2009). These guidelines require plant surveys to be conducted at the proper time of year when the species are both "evident" and identifiable. Field surveys shall be scheduled to coincide with known blooming periods, and/or during periods of physiological development that are necessary to identify the plant species of concern. If no special-status plant species are found within the project site, then the project will not have any impacts to the species and no additional mitigation measures are necessary.
1. If focused surveys indicate that special-status plant species are present within the project site, the project applicant shall evaluate the feasibility of reconfiguring the project design in order to avoid or minimize impacts to special-status plant species. In addition to avoiding direct impacts to special-status plant species, potential indirect, project construction, and operation impacts, shall be minimized to the maximum extent feasible through means that include but are not limited to the installation of protective fencing and environmentally sensitive area signage. Additionally, a Worker Environmental Awareness Program shall be implemented to educate construction workers about the presence of special-status species or other sensitive resources, including special-status plant species in and near the project site, and to instruct them on proper avoidance, and required measures and practices for protecting biological resources and contacts and procedures in case species are injured or encountered during construction.
  2. If special-status plant species are found on-site and cannot be avoided, the applicant shall coordinate with the USFWS and/or CDFW, as applicable, to determine feasible impact minimization and mitigation measures for rare plants, which may include but are not limited to the following:

- Habitat restoration to mitigate for unavoidable temporary construction impacts to special-status plant species habitat on-site.
- Incorporating project features designed to reduce ongoing impacts from project operation, including controlling public access to avoided special-status plant species habitat remaining on-site.
- In conjunction with academic institutions and/or regional native plant nurseries, a propagation program shall be developed for the salvage and transfer of special-status plant species populations from the project site before the initiation of construction activities. Permits may be required from the USFWS or CDFW that will ensure that certified biologists are involved in the propagation and transport of rare, threatened, or endangered plant species. (Note that propagation methods for the salvaged plant population must be developed on a case-by-case basis and must include the involvement of local conservation easements, preserves, and open space, where applicable.) The propagation of individual plant species must be performed at the correct time of year and successfully completed before the project's construction activities eliminate or disturb the plants and habitats of concern.
- Efforts shall be made to salvage portions of the habitat or plant populations that would be lost as a result of implementation of the proposed project. In addition to salvaging special-status plant species themselves, salvage efforts shall include soil and seed-banks surrounding impacted plants, if doing so would not contribute to the spread of invasive or noxious plant species.
- Appropriate off-site conservation opportunities shall be identified and, if feasible, protected in perpetuity through the purchase of conservation easements and/or mitigation bank credits. The habitat value of off-site conservation areas shall be enhanced where feasible through means such as reducing grazing intensity and restricting off-road vehicle access. At a minimum, the acreage of off-site habitat conserved shall exceed a 1:1 ratio of impacted rare plant habitat within the project site. The ratio shall increase depending on the rarity of the affected rare plant species, and the abundance of the rare plant habitat impacted.

**MM BIO-1b** Implementation of the following avoidance and minimization measures would avoid or minimize potential effects to migratory birds and habitat in and adjacent to the project site. These measures shall be implemented for construction work during the nesting season (February 15 through August 31):

If construction or tree removal is proposed during the breeding/nesting season for migratory birds, a qualified biologist shall conduct pre-construction surveys for Cooper's hawk, white-tailed kite, and other migratory birds within the construction area, including a 300-foot survey buffer, no more than 7 days prior to the start of ground disturbing activities in the construction area.

If an active nest is located during pre-construction surveys, the USFWS and/or CDFW (as appropriate) shall be notified regarding the status of the nest. Furthermore,

construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active migratory bird nest) or alteration of the construction schedule.

A qualified biologist shall delineate the buffer using nest buffer signs, Environmentally Sensitive Area (ESA) fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

**MM BIO-2**

To minimize impacts to existing trees to be preserved, the project applicant shall implement the following during the clearing, grading, and construction phases:

1. No parking, storage of materials, disposal of any waste materials, or unnecessary operation of equipment shall occur within the driplines of trees to remain.
2. If pruning for clearance is required on any trees to remain, it shall be conducted by trained, qualified tree workers according to International Society of Arboriculture and American National Standards Institute's Pruning Guidelines. Pruning shall be the minimum necessary for hazard reduction, (e.g., the removal of deadwood 2 inches and larger), and clearance. The project arborist shall meet with tree service contractor prior to work to discuss limits and goals of pruning.
3. Care shall be taken to avoid damaging trunks or branches of protected trees by creating a tree protection zone that includes a fenced enclosure at the dripline of trees or as established by the project arborist in which no soil disturbance is permitted and activities are restricted. Where necessary, trunks shall be wrapped with thick layers of burlap or straw wattle for protection.
4. The project arborist shall be notified a minimum of 24 hours in advance to be present on-site during rough grading or trenching within the Tree Protection Zones of trees to be preserved, as designated on the plans. Tree protection fencing shall be installed and maintained in place throughout construction.
5. If any roots larger than 1 inch are encountered that cannot be preserved, they shall be cut cleanly across the face of the root with a sharp saw. No treatment of the cut end is necessary. Backfill of the exposed cut roots shall be done as quickly as possible to prevent desiccation.
6. In areas where soil compaction within root zones of protected trees has occurred, loosening of soil surface shall be completed prior to final walkthrough of each area. Consult the project manager or project arborist for recommendations of technique.
7. Where practical, arbor mulch (chipped wood bark and foliage, 2-inch layer minimum) shall be spread and retained under protected trees to serve as a permanent top dressing and mulch.
8. Replacement/replanting of a minimum of 250 36-inch box trees within the project site or other City-approved location or as approved.



Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>5. Cultural Resources and Tribal Cultural Resources</b> <i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i>				
d) 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The analysis in this section is based on record searches and a field survey conducted by FCS. Supporting information is provided in Appendix C.

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project or new information of substantial importance since the 2017 MND that would result in any new significant environmental impacts or substantial increase in the severity or previously identified significant impacts related to cultural resources and tribal cultural resources. As described below, the proposed project would have less than significant impacts to cultural resources and tribal cultural resources, which is consistent with the 2017 MND.

### Environmental Setting

This section describes the existing cultural resources setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on information provided by the California Native American Heritage Commission (NAHC),

Northwest Information Center (NWIC), National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historic Landmarks (CHL) list, California Points of Historical Interest (CPHI) list, the California Historical Resources Inventory System (CHRIS), the University of California Museum of Paleontology Paleontological Database, and a pedestrian survey of the site conducted by FCS. The non-confidential record search results, NAHC correspondence, and pedestrian survey photographs are provided in Appendix C.

### ***Northwest Information Center***

In order to determine the presence or absence of cultural and historical resources within the proposed project area, staff at the NWIC, located at Sonoma State University in Rohnert Park, conducted a records search for the project site and a 0.5-mile radius surrounding the site on September 6, 2016. The current inventories of the NRHP, CRHR, CHL, CPHI list, and the CHRIS listings for Sonoma County were reviewed to determine the existence of previously documented local historical resources.

Results from the NWIC indicate that five resources (P-49-000481, P-49-001146, P-49-001752, P-49-004081, and P-49-004161) are on file within a 0.5-mile radius of the project area. Of the five resources, none are located within the project site. Two of the resources, P-49-000481 and P-49-001146 are prehistoric in nature, each consisting of an obsidian flake scatter adjacent to a creek. In addition, 11 area-specific survey reports (S-001778, S-013497, S-016455, S-023418, S-024982, S-032199, S-032200, S-032770, S-032771, S-035929 and S-037608) are on file with the NWIC for the 0.5-mile search radius. Of the four previous surveys, S-037608 surveyed the southeastern edge of the project site in 2010. S-001778 and S-032770 surveyed the project site in its entirety in 1979 and 2006 respectively, indicating that the site has been extensively surveyed for cultural resources. Non-confidential NWIC records search results may be found in Appendix C.

### ***Native American Heritage Commission and Tribal Consultation***

On August 16, 2016, FCS sent a request to the NAHC to review its sacred lands file search and to provide a list of Native American Representatives who may be interested in providing additional information on potential Tribal Cultural Resources (TCRs) within the project area. On August 23, 2016, a response was received from the NAHC indicating that no sacred sites were listed as present in the project area. The letter included a list of three Native American representatives. Letters including a map and project details were sent to all representatives for informational purposes on August 30, 2016. On September 22, 2016, a letter was received from Tomaras and Ogas LLP, Attorneys for the Lytton Rancheria of California. The letter indicated that the tribe had no specific information regarding cultural resources located within the project area, but that such resources may exist, as the project falls within the traditional territory of the Pomo. The letter stated that the tribe would be consulting further with the appropriate lead agency and asked that all resources be noted in the report.

On March 8, 2019, the City of Santa Rosa provided written notification of the Emerald Isle project application to Lytton Rancheria of California and the Federated Indians of Graton Rancheria in compliance with AB 52. A request for tribal consultation was received from Lytton Rancheria of California within the 30-day response period. No request was received from the Federated Indians of Graton Rancheria. Consultation between the City of Santa Rosa and the Lytton Rancheria of

California took place at the project site on April 10, 2019. City Planner Andrew Trippel, FCS Senior Archaeologist Dr. Dana DePietro, and Brenda Tomaras from Tomaras and Ogas LLP, Attorneys for the Lytton Rancheria of California, were present. Following the meeting and site visit, revisions to the draft mitigation measures were discussed, circulated by e-mail and agreed upon on April 22, 2019, bringing the consultation process to a close. Correspondence with the NAHC and Native American representatives may be found in Appendix C.

### ***Pedestrian Cultural Resources Survey***

FCS Senior Archaeologist Dr. Dana DePietro surveyed the project area for cultural resources on August 18, 2016. The project site is roughly circular in shape, and is located within Township 7 North, Range 8 West, Section 2 and Township 8 North, Range 8 West, Section 35 on the Santa Rosa quadrangle (1980) USGS 7.5-minute series topographic map. The location is completely surrounded by the Fountaingrove Golf Course on all sides, with Fountaingrove Lake to the southeast and a residential development built along Thomas Harris Lake Drive to the west. The project site is completely undeveloped and covered with tall grasses, boulders and scrub oak trees. No buildings or structures are present at the site.

The survey proceeded from west to east on the project site using north-south transects at 15-meter intervals whenever possible. Soil visibility was moderate, ranging from 30-60 percent across the site. Soils in sections of poor visibility were intermittently inspected using a hand trowel. Observed soils were largely composed of medium brown silt interspersed with large (20 to 30 centimeters [cm]) basalt and schist stones. An accumulation of larger stones ranging from 0.5 to 1.5 meters in diameter were observed in the center of the site at its highest elevation. These stones were closely inspected for signs of utilization in their distribution and appearance. None were found to have been modified and their distribution is consistent with a natural accumulation as opposed to a collapsed wall or stone structure.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, tool-making debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). Particular attention was paid to open areas across the site, as well as those located closer to water and natural resources. These areas were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources.

No historic or prehistoric cultural resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert) were found within the project site. These findings are consistent with the two prior surveys of the project site in 1979 and 2006. Survey photographs may be found in Appendix C.

## Cultural Resources

Would the project:

- a) **Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?**

**Less than significant mitigation measure incorporated.** The results of the NWIC records search show that five cultural resources lie within 0.5 mile of the project site. Of these resources, three are historic buildings or structures; however, none are located within or in close proximity to the site itself. Review of historical aerial photographs and topographic maps dating as early as 1919 shows no evidence of any buildings or structures at the site. Furthermore, complete surveys of the site conducted in 1979, 2006, and 2016 failed to reveal any buildings, structures, or other historic resources within the project area itself. For these reasons, the potential for the proposed project to have an adverse effect on historic resources is considered low.

While unlikely, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic and prehistoric resources. Historic resources can include wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. Similar to the 2017 MND, implementation of MM CUL-1 is recommended to reduce potential impacts to historic resources that may be discovered during project construction. With the incorporation of mitigation, impacts associated with historic resources would be less than significant.

- b) **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Less than significant impact with mitigation incorporated.** Records search results from the NWIC indicate that five cultural resources lie within 0.5 mile of the project site. Of these resources, two are prehistoric lithic scatters consisting of obsidian flakes and debitage. Both of these resources are associated with nearby streams located adjacent to the project site. Intensive pedestrian surveys of the project site conducted in 1979, 2006, and by FCS on August 8, 2016, failed to identify additional archaeological resources or raw materials traditionally utilized in the production of those resources, however ground visibility was poor across the site. The project site is therefore considered to have moderate sensitivity for undiscovered archaeological resources that may be encountered during subsurface excavation. Such resources could consist of but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Accordingly, this is a potentially significant impact. Similar to the 2017 MND, implementation of MM CUL-1, described below, would ensure that this potential impact is reduced to a less than significant level.

- c) **Disturb any human remains, including those interred outside of formal cemeteries?**

**Less than significant impact.** No human remains or cemeteries are known to exist within or near the project site. However, there is always the possibility that subsurface construction activities associated with the project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. Similar to the conclusion of the 2017 MND, this is a

potentially significant impact. However, in the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. These regulations stipulate that in the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. No further excavation or disturbance within 100 feet of the remains can occur until the County Coroner is contacted. The lead agency must work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98 for appropriate treatment and/or disposal. Therefore, in the unlikely event human remains are discovered, compliance with existing regulations, would reduce this potential impact to a less than significant level.

### **Tribal Cultural Resources**

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- d) 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**

**Less than significant impact with mitigation.** As previously described, a review of the California Register of Historical Resources, local registers of historic resources, a records search conducted at the NWIC, an NAHC sacred lands file failed to identify any listed or eligible Tribal Cultural Resources (TCRs) that may be adversely affected by the proposed project.

As such, implementation of MM CUL-1—which stipulates specific measure to be taken to reduce or avoid impacts to tribal cultural resources that may be discovered during project construction—is recommended. Similar to the 2017 MND, this mitigation measure would prevent substantial adverse changes in the significance of tribal cultural resources to the maximum extent practicable. With implementation of MM CUL-1 impacts would be less than significant.

- e) 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.**

**Less than significant impact with mitigation.** As described above, records searches have not identified any known TCRs on the project site. On March 8, 2019, the City of Santa Rosa provided written notification of the Emerald Isle project application to Lytton Rancheria of California and the Federated Indians of Graton Rancheria in compliance with AB 52. Consultation between the City of Santa Rosa and the Lytton Rancheria of California took place at the project site on April 10, 2019. Following the meeting and site visit, revisions to the draft mitigation measures were discussed, circulated by e-mail and agreed upon on April 22, 2019, bringing the AB 52 consultation process to a close.



Implementation of MM CUL-1, described above, stipulates specific measure to be taken to reduce or avoid impacts to tribal cultural resources that may be discovered during project construction. This mitigation measure would prevent substantial adverse changes in the significance of tribal cultural resources to the maximum extent practicable. Similar to the 2017 MND, impacts would be less than significant with implementation of MM CUL-1.

## Mitigation Measures

**MM CUL-1** All ground disturbance taking place during the initial project grubbing and grading phases shall be monitored by an archaeologist and/or a tribal monitor from an appropriately affiliated tribe in order to check for the inadvertent exposure of cultural materials. The archaeologist must meet the Secretary of Interior's Professional Qualification Standards for archaeology. Upon completion of the grading and grubbing phases, the archaeologist and/or tribal monitor will make a recommendation to the City of Santa Rosa as to whether additional monitoring is warranted. In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until the archaeologist and tribal monitor have evaluated the situation. The applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. The archaeologist and appropriately affiliated tribe(s) shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with the CEQA Guidelines and tribal tradition. Any previously undiscovered resources found during construction within the Project Site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Santa Rosa, the Northwest Information Center, and the State Historic Preservation Office, if required.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>6. Energy</b> <i>Would the project:</i>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

These checklist questions did not exist when the 2017 MND was adopted, therefore, no comparison between the project and the 2017 MND is provided.

### Environmental Setting

This section assesses the significance of the use of energy, including electricity, natural gas and gasoline and diesel fuels that would result from the project construction and operation. It discusses existing energy use patterns and examines whether the project would result in the consumption of large amounts of fuel or energy, or use of such resources in a wasteful manner during construction and operation.

Energy sources include electricity, natural gas, and other fuels. Energy is generally transmitted either in the form of electricity, measured in kilowatts (kW)<sup>25</sup> or megawatts (MW),<sup>26</sup> or natural gas measured in therms or cubic feet.<sup>27</sup> Fuel, such as gasoline or diesel, is measured in gallons. Energy usage is typically quantified using the British Thermal Units (BTU). The BTU is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, 100 cubic feet (1 therm) of natural gas, and a kilowatt-hour of electricity are 123,000 BTUs, 100,000 BTUs, and 3,400 BTUs, respectively.

Electricity is used primarily for lighting, appliances, and other building uses. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil,

<sup>25</sup> 1 kW = 1,000 watts; a watt is a derived unit of power that measure rate of energy conversion. 1 watt is equivalent to work being done at a rate of 1 joule of energy per second. In electrical terms, 1 watt is the power dissipated by a current of 1 ampere flowing across a resistance of 1 volt.

<sup>26</sup> 1 MW = 1 million watts

<sup>27</sup> A therm is a unit for quantity of heat that equals 100,000 BTU. A BTU is the quantity of heat required to raise the temperature of 1 pound of liquid water 1 degree Fahrenheit at a constant pressure of 1 atmosphere.

gas, coal, solar, geothermal, and nuclear resources, into energy. Energy production and energy use both result in the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants.

California consumes significantly more electricity than it generates, such that approximately 29 percent of California's electricity comes from outside the State, mostly the Pacific Northwest and the Southwest United States. Natural gas is the primary electricity source, with natural gas-fired power plants accounting for more than half of California's electricity generation.

According to the California Energy Commission (CEC), total system electric generation for California in 2017 was 292,039 gigawatt-hours (GWh).<sup>28</sup> California's non-carbon dioxide (CO<sub>2</sub>) emitting electric generation categories (nuclear, large hydroelectric, and renewable generation) accounted for more than 53 percent of total State generation for 2017.

Natural gas is used primarily for heating, water heating, and cooking purpose and is typically associated with commercial and residential uses. According to the CEC, approximately 2,110,829 million cubic feet of natural gas was consumed in 2017.<sup>29</sup>

Pacific Gas and Electric (PG&E) is the energy purveyor for electricity and natural gas in the City of Santa Rosa. PG&E's service territory generally covers the northern two-thirds of California from Eureka in the north to Bakersfield to the south, and from the Pacific Ocean to the west to the Sierra Nevada Mountains to the east. PG&E serves 5.2 million electrical customer accounts and 4.2 million natural gas customer accounts. In 2017, PG&E's power mix was comprised of 33 percent renewable, 27 percent nuclear, 18 percent large hydroelectric, 20 percent natural gas, and 2 percent market purchases.<sup>30</sup>

Fuel is used primarily for powering off-road equipment, trucks, and passenger vehicles. The typical fuel types used are diesel and gasoline. According to the CEC, gasoline has remained the dominant fuel within the transportation sector, with diesel fuel and aviation fuels following in order.

The City of Santa Rosa contains energy resources that encompass a variety of fuels that provide lighting for residential and commercial uses, provide heating and cooling for indoor environments, and aid in the operation of transportation systems. In 2018 the City of Santa Rosa's annual average household consumption rate was 6,162 kilowatt-hours (kwh) electricity and 453 therms (natural gas).<sup>31</sup>

## Energy Related Regulations

Federal and state agencies regulate energy use and consumption through various means and programs. At the federal level, the United States Department of Transportation (DOT), the United

<sup>28</sup> California Energy Commission (CEC). 2018. Total Electricity System Power 2017. Website: [https://www.energy.ca.gov/almanac/electricity\\_data/total\\_system\\_power.html](https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html). Accessed: May 15, 2019.

<sup>29</sup> U.S. Energy Information Administration. Natural Gas Consumption by End Use. Website: [https://www.eia.gov/dnav/ng/ng\\_cons\\_sum\\_dcu\\_SCA\\_a.htm](https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm). Accessed May 15, 2019.

<sup>30</sup> Pacific Gas and Electric Company (PG&E). 2018. Where your electricity comes from. Website: [https://www.pge.com/pge\\_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18\\_PowerContent.pdf](https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18_PowerContent.pdf). Accessed May 15, 2019.

<sup>31</sup> Pacific Gas and Electric Company (PG&E). 2019. Energy Data Request—Public Data Sets. Website: [https://pge-energydatarequest.com/public\\_datasets](https://pge-energydatarequest.com/public_datasets). Accessed May 15, 2019.

States Department of Energy, and the EPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. At the State level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. The CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new on-road motor vehicles. Some of the more relevant federal and State energy-related laws and plans are discussed below.

### ***Federal Energy Independence and Security Act, Corporate Average Fuel Efficiency Standards***

In response to *Massachusetts et al. vs. Environmental Protection Agency et al.*, the Bush Administration issued an executive order on May 14, 2007, directing the EPA and DOT to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law, requiring an increased Corporate Average Fuel Economy (CAFE) standard of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by the 2020 model year.

In addition to setting increased CAFE standards for motor vehicles, the Energy Independence and Security Act (EISA) includes the following additional provisions:

- Renewable Fuel Standard (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

### ***California Building Energy Efficiency Standards, Title 24 and California Green Building Standards Code***

The California Building Energy Efficiency Standards, Title 24, Part 6 provides efficiency standards for residential and nonresidential buildings under the California Green Building Standards Code (CALGreen). The standards are updated periodically to allow for incorporation of new energy efficient technologies and methods. The existing 2016 California Building Energy Efficiency Standards, Title 24 (2016 California Standards) became effective on January 1, 2017. The 2019 California Building Energy Efficiency Standards (2019 California Energy Code) go into effect on January 1, 2020 and are applicable to building permit applications submitted on or after that date. The 2019 California Energy Code requires solar photovoltaic systems for new homes, establishes requirements for newly constructed healthcare facilities, encourages demand responsive technologies for residential buildings, and updates indoor and outdoor lighting for nonresidential buildings.

The CEC anticipates that single-family homes built with the 2019 California Energy Code will use approximately 7 percent less energy compared to the residential homes built under the 2016 California Standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 California Energy Code will consume about 53 percent less energy than homes built under the 2016 California Standards. Nonresidential buildings will use consume approximately 30 percent less energy due to lighting upgrades.

***California Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005)***

Assembly Bill (AB) 1007 required the CEC to prepare a State plan (State Alternative Fuels Plan) to increase the use of alternative fuels in California. To comply with this requirement, the CEC prepared the State Alternative Fuels Plan in partnership with the California Air Resource Boards (ARB) and in consultation with other State, federal, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80-percent reduction in greenhouse gas (GHG) emissions associated with personal transportation, even as California's population increases.

***California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2)***

No vehicle or engines subject to this regulation may idle for more than 5 consecutive minutes. The idling limit does not apply to:

- Idling when queuing,
- idling to verify that the vehicle is in safe operating condition,
- idling for testing, servicing, repairing or diagnostic purposes,
- idling necessary to accomplish work for which the vehicle was designed (such as operating a crane),
- idling required to bring the machine system to operating temperature, and
- idling necessary to ensure safe operation of the vehicle.

**Methodology**

A number of factors are considered when weighing whether a project would use a proportionately large amount of energy or whether the use of energy would be wasteful in comparison to other projects. Such factors include the use of on-site renewable energy features, energy conservation features or programs, and relative use of transit.

According to Appendix F of the CEQA Guidelines, conserving energy is defined as decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. Neither Appendix F of the CEQA Guidelines nor Public Resources Code Section 21100(b)(3) offer a numerical threshold of significance that might be used to evaluate the potential significance of energy consumption of a project. Rather, the emphasis is on reducing “the wasteful, inefficient, and unnecessary consumption of energy.”

Construction activities would result in wasteful, inefficient, or unnecessary use of energy if construction equipment is old or not well maintained, if equipment is left to idle when not in use, if

travel routes are not planned to minimize vehicle miles traveled, or if excess lighting or water is used during construction activities.

Energy usage during project operation would be considered “wasteful, inefficient, and unnecessary” if the project were to violate federal, State, and/or local energy standards, including the 2016 California Standards, inhibit pedestrian or bicycle mobility, inhibit access to transit, or inhibit feasible opportunities to use alternative energy sources, such as solar energy, or otherwise inhibit the conservation of energy.

Project construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod Version 2016.3.2). The CalEEMod model is a Statewide program designed to calculate air pollutant emissions for development projects in California using land use data. The CalEEMod model includes default data that can be used if site-specific information is not available. At the time of this analysis, specific details are not available on how the project will meet the solar/zero net energy goals and requirements included as part of the 2019 California Energy Code. However, the project is required to comply with the 2019 California Energy Code. Therefore, the analysis presented below provides a conservative estimate with respect to project energy usage.

Project assumptions used in the analysis below are included in Appendix A of this document.

Would the project:

- a) **Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Less than significant impact.** This impact is evaluated considering the energy resource requirements during project construction and operation.

## **Construction**

Fuel consumed by construction equipment would be the primary energy resource expended over the course of project construction. For heavy-duty construction equipment, horsepower and load factor were assumed using default data from the CalEEMod model.

Fuel use associated with construction vehicle trips generated by the project was also estimated; trips include construction worker trips, haul trucks trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project was based on (1) the projected number of trips the project will generate (CalEEMod default values), (2) default average trip distance by land use in CalEEMod, and (3) fuel efficiencies estimated in the ARB 2017 Emissions Factors model (EMFAC2017) mobile source emission model. Table 13 summarizes the project’s construction fuel usage. Construction is estimated to consume a total of 62,836 gallons of diesel fuel and 11,293 gallons of gasoline fuel.

California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2), Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel because of unproductive idling of construction equipment. In addition, the



energy consumption for construction activities would not be ongoing as they would be limited to construction of the project. As discussed in Section 3, Air Quality, project construction equipment would also be required to comply with the latest EPA and ARB engine emissions standards (as described in Mitigation Measure [MM] AIR-2), as well as the BAAQMD BMPs (as described in MM AIR-1). These requirements would result in fuel savings. In addition, because of increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

**Table 13: Estimated Project Construction Fuel Usage**

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Heavy Duty Construction Equipment	46,355	0
Haul Trucks	10,158	0
Vendor Trucks	6,323	0
Worker Vehicles	0	11,293
<b>Total</b>	<b>62,836</b>	<b>11,293</b>
Source: see Appendix A.		

Given the project would comply with regulations and would implement MM AIR-1 and MM AIR-2 that would reduce the project's energy consumption, the project would not result in the unnecessary consumption of energy resources due to wasteful or inefficient consumption of energy resources during construction. Therefore, construction energy usage would be less than significant.

## Operation

Energy consumption in support of or related to project operations would include the demand for electricity, natural gas, as well as gasoline for motor vehicle trips. Operational use of energy includes the heating, cooling, and lighting of buildings, water heating, operation of electrical systems and plug-in appliances within buildings, parking lot and outdoor lighting, and the transport of electricity, natural gas, and water to the project areas where they would be consumed. This use of energy is typical for urban development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

### **Electricity and Natural Gas Consumption**

The project would use electricity for lighting, appliances, and other uses associated with the project's land use. Appendix A provides an estimate of the annual electricity demand by utilizing CalEEMod default values for the project's land use. Based on this methodology the project is estimated to use approximately 407,242 kWh of electricity per year.

During operation, the project would consume natural gas for space heating, water heating, and cooking associated with the residential land uses on the project site. As shown in Appendix A, the estimated natural gas consumption was estimated for the project's land use based on the CalEEMod model default values. Based on these calculations, the project is estimated to consume

approximately 836,306 thousand BTU of natural gas per year during operation. Table 14 summarizes the project's annual operational energy requirements.

**Table 14: Project's Annual Operational Energy Consumption**

Operational Source	Annual Vehicle Miles Traveled	Gallons of Gasoline Fuel	Kilowatt-hours	Thousand British Thermal Units
Transportation	700,735	31,143	Not Applicable (N/A)	N/A
Electricity	N/A	N/A	407,242	N/A
Natural Gas (Thousand BTU)	N/A	N/A	N/A	836,306
Source: see Appendix A.				

As described above, the project would result in a long-term increase in demand for electricity and natural gas from PG&E. The project would be required to comply with the 2016 California Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the 2016 California Standards would significantly reduce energy usage. Part 6 of the 2016 California Standards specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Typical 2016 California Standards measures include insulation; use of energy-efficient heating, ventilation and air conditioning equipment (HVAC); solar-reflective roofing materials; energy-efficient indoor and outdoor lighting systems; reclamation of heat rejection from refrigeration equipment to generate hot water; and incorporation of skylights. The City's administration of the 2016 California Standards requirements includes review of design components and energy conservation measures that occurs during the permitting process, which would ensure that all requirements are met. In complying with the 2016 California Standards, impacts to energy usage would be minimized, and impacts on Statewide and regional energy needs would be reduced.

Furthermore, the electricity provider, PG&E, is subject to California Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 50 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources, which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The project would be served with electricity provided by PG&E.<sup>32</sup> Given PG&E's power mix,<sup>33</sup> PG&E is ahead of schedule in meeting the RPS of 33 percent by 2020 mandate. The increase in reliance of such energy resources further ensures this project would not result in the waste of the finite energy resources.

<sup>32</sup> Pacific Gas and Electric (PG&E). 2019. Exploring Clean Energy Solutions. Website: [https://www.pge.com/en\\_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page](https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page). Accessed February 26, 2019.

<sup>33</sup> Pacific Gas and Electric (PG&E). 2018. Where your electricity comes from. Website: [https://www.pge.com/pge\\_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18\\_PowerContent.pdf](https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18_PowerContent.pdf). Accessed May 15, 2019.

Consequently, the project operations would not result in the inefficient, wasteful, or unnecessary consumption of building energy. Additionally, the project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

### **Transportation Energy Demands**

Energy required by the additional trips generated by the project is a function of total vehicle mile traveled (VMT) and estimated vehicle fuel economies of vehicles accessing the project site. Based on the VMT estimates generated by the CalEEMod model, the project is expected to generate 700,735 vehicle miles per year (Appendix A). Using a countywide average fuel consumption of 22.5 mpg, the project would result in the consumption of an estimated 31,143 gallons of transportation fuel each year. Fuel consumption associated with project-related vehicle trips would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. The project would also provide on-site sidewalks that would reduce on-site VMT, which would in-turn, reduce vehicular related energy use.

In addition, other regulations are likely to result in more efficient use of all types of energy, and reduction in reliance on non-renewable sources of energy within the project area over the implementation period of the project. These regulations include the Federal EISA, the State Long Term Energy Efficiency Strategic Plan, Senate Bill (SB) 350, and AB 1007, which are designed to reduce reliance on non-renewable energy resources and reduce energy demand by providing federal tax credits for purchase of fuel-efficient items. These regulations also provide goals for developing energy efficient buildings, which in turn improves renewable fuel, appliance, and lighting standards. Thus, operation of the proposed project would not use large amounts of energy or fuel in a wasteful manner within buildings or other on-site operations, and impacts would be less than significant.

#### **b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?**

**Less than significant impact.** The project would be subject to all relevant provisions of the most recent update of CALGreen, including the 2016 California Standards, which would ensure that the project would consume energy efficiently through the incorporation of energy efficient features, such as door and window interlocks, direct digital controls for HVAC systems, and high efficiency outdoor lighting. Furthermore, compliance with CALGreen in connection with the goals and policies set forth in the Santa Rosa General Plan 2035 and Santa Rosa Climate Action Plan would ensure that the building energy use associated with the project would not be wasteful, inefficient, or unnecessary.

In addition, PG&E would supply electricity and natural gas to the project, and as per PG&E compliance with the State's RPS, a portion of the energy consumed during project operations would originate from renewable sources. Therefore, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts would be less than significant.

### **Mitigation Measures**

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>7. Geology and Soils</b> <i>Would the project:</i>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to geology and soils. As described below, the proposed project would have less than significant impacts to geology and soils, which is consistent with the 2017 MND.

## Environmental Setting

The site-specific information and analysis in this section is drawn from a Geotechnical Investigation report conducted by Reese & Associates Consulting Geotechnical Engineers, dated September 21, 2016 and included in Appendix D. Reese & Associates Consulting Geotechnical Engineers provided a memo dated March 17, 2017 confirming the adequacy of the report subsequent to revised site plans developed after the initial report was prepared (see Appendix D). Reese & Associates provided a Soil Engineering Consultation memo dated February 22, 2019, for the Emerald Isle Condominium Project, and concluded that the general conclusions and recommendations from the previous report would remain applicable.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones known as earthquake fault zones around the surface traces of active faults and to issue appropriate maps. The Seismic Hazards Mapping Act addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The act resulted in a mapping program identifying areas that have the potential for liquefaction, landslide, strong ground shaking, or other earthquake and geologic hazards.

The project site is located 0.28 mile west of the Rodgers Creek Fault, an active fault that is considered an extension of the Hayward fault. In the surrounding area, the Maacama Fault is located approximately 4.1 miles northeast and the San Andreas Fault is located approximately 20 miles southwest of the project site. These and other active faults in the region are capable of causing significant ground shaking on the site. Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. According to the Association of Bay Area Governments (ABAG) Liquefaction Susceptibility map, however, the project site is located in a very low susceptibility area. Liquefaction is the process by which water-saturated soil materials lose strength and fail during strong seismic ground shaking.

The State of California has established minimum standards for building design through the California Building Standards Code (CBC), which contain specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. The American Society of Civil Engineers (ASCE) has also published standards for minimum design loads for buildings in the 2010 ASCE-7 standards. The CBC also contains standards for grading activities, including drainage and erosion control (Chapter 18, Appendix J). The City of Santa Rosa has adopted the 2016 CBC and incorporated it into the Municipal Code. The Municipal Code also contains numerous other provisions intended to promote geotechnical and seismic safety, including construction limitations and requirements for geologic reports and building permits within earthquake fault zones (Title 17) as well as grading and soil requirements for structural foundations (Title 19).

The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) has characterized the majority of native, undisturbed soils in Santa Rosa as clayey alluvial soils and riverwash, as well as some silty and gravelly soils and loams. Based on California Geological Survey (CGS) mapping, the project area is underlain by the Sonoma Volcanics, sedimentary rocks comprising the

Petaluma Formation, and alluvial deposits. The ABAG GIS (Geographic Information System) Landslide Susceptibility map establishes that the project site is located in a low risk susceptibility to landslide area.

Would the project:

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:**
- i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**Less than significant impact.** The project site does not lie within an identified Alquist-Priolo fault zone. Geotechnical investigations conducted by Reese & Associated Consulting Geotechnical Engineers (Appendix D) concluded that while inactive faults have been mapped in the vicinity of the site, active faults known to have ruptured or experienced seismic activity within the past 11,000 years are not known to traverse the site. The nearest active fault is a trace of the Rodgers Creek Fault located 0.28 mile to the southwest. As concluded by Reese & Associates Consulting Geotechnical Engineers, based on limited data, it appears that the potential for seismic ground deformations to occur in bedrock underlying the project site is relatively low. Therefore, similar to the conclusion of the 2017 MND, impacts would be less than significant.

- ii) **Strong seismic ground shaking?**

**Less than significant impact with mitigation incorporated.** The project site could experience strong to violent ground shaking as a result of an earthquake on the Hayward-Rodgers Creek fault, as well as ground shaking associated with seismic activity on other regional faults. The intensity of ground shaking would vary with the distance and magnitude of the earthquake causing the ground shaking. According to ABAG's Hazards maps, Sonoma County has been categorized under the "Very Strong" shaking category. Therefore, to minimize the risk of loss, injury or death involving seismic shaking to the maximum extent practicable, implementation of MM GEO-1 is required, which would ensure that design of proposed structures is in conformance with the seismic provisions of the latest adopted edition California Building Standards Code and the recommendations of the Geotechnical Investigation report by Reese & Associates Consulting Geotechnical Engineers dated September 21, 2016. Similar to the conclusion of the 2017 MND, implementation of this measure would reduce impacts to a less than significant level.

- iii) **Seismic-related ground failure, including liquefaction?**

**Less than significant impact.** Based on a review of the interactive ABAG GIS Liquefaction Susceptibility map, the project site is located within a very low liquefaction hazard area.<sup>34</sup> Likewise, County of Sonoma Major Earthquake Faults & Areas of Liquefaction map does not identify the

<sup>34</sup> Association of Bay Area Governments (ABAG). Liquefaction Susceptibility Map. Website: <http://gis.abag.ca.gov/website/Hazards/?hlyr=liqSusceptibility>. Accessed March 26, 2019.



project site within a very high, high, or medium liquefaction zone.<sup>35</sup> The geotechnical report also concluded that clays susceptible to seismic softening do not underlie the site and therefore are not considered a hazard. Based on these conditions, the on-site soils have a low risk for potential liquefaction and similar to the conclusion of the 2017 MND, impacts associated with liquefaction would be less than significant.

**iv) Landslides?**

**Less than significant impact with mitigation incorporated.** The project site is located in hilly terrain, adjacent to single-family residences and the Fountaingrove Golf Course however, based on a review of the ABAG GIS Landslide Susceptibility map, the project site is not located within a rainfall-induced landslide distribution area.<sup>36</sup> The California Landslide Inventory from CGS does not list the project site under any landslide susceptibility criteria. The site plan (Exhibit 3) indicates that three of the proposed residential buildings would be set back closer than 70 feet from the top of a steep, descending slope located in the southwest portion of the site, which would not be compliance with the previous geotechnical investigations according to the Geotechnical Investigation Report conducted by Reese & Associates Consulting Geotechnical Engineers. In previous investigations, a 70-foot building setback zone was recommended near the top of the steep slope.<sup>37</sup> Furthermore, implementation of California Building Standards Code requirements contained in the Santa Rosa Municipal Code—including removing excess material from the upslope swales, reshaping the hillside profile to reduce the driving forces, lowering the slope gradient, and restricting water inflow into the soil mass—would reduce impacts to the maximum extent practicable. Therefore, with the implementation of MM GEO-2 impacts would be less than significant.

**b) Result in substantial soil erosion or the loss of topsoil?**

**Less than significant impact.** The project site is located in hilly wooded terrain with natural outcroppings of rock throughout the site. As discussed in the Geotechnical Investigation report dated September 21, 2016, surface drainage is poorly defined with stormwater run-off from the site generally occurring as sheet flow. In building development areas, the site would be stripped of vegetation to a depth of 3 inches and substantial grading and excavation would be required for construction of the project. As such, soil exposed by construction activities during development of the project could be subject to erosion if exposed to heavy rain, winds, or other storm events. Grading and excavation would be required to comply with the applicable provisions of the Municipal Code, including requirements for grading and excavation contained in Title 18 Buildings and Construction as well as Chapter 20-32 Hillside Development Standards. The project would require a hillside development permit. Compliance with applicable regulations would reduce the potential for erosion on-site from construction activities to the maximum extent practicable. Similar to the conclusion of the 2017 MND, impacts related to erosion would be less than significant.

<sup>35</sup> County of Sonoma. 2015. Earthquake Faults and Areas of Liquefaction Map. Website: <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Hazard-Mitigation/Earthquake-Faults/>. Accessed March 26, 2019.

<sup>36</sup> Association of Bay Area Governments (ABAG). Landslide Hazard Areas Map. Website: <http://gis.abag.ca.gov/website/Hazards/?hlyr=cgsLndslldZones>. Accessed March 26, 2019.

<sup>37</sup> Reese & Associates Consulting Geotechnical Engineers, Geotechnical Investigation for the Emerald Isle Assisted Living, September 21, 2016, page 4.

- 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?**

**Less than significant impact with mitigation incorporated.** The site is underlain at the surface by bedrock units of the Sonoma Volcanics and is not located in an area of seismic liquefaction potential; however, the upper soils on the west-facing slope on-site are undergoing soil creep. Creep is the gradual downslope movement of weak soil and soft rock, on the order of a fraction of an inch per year, under the force of gravity. The project site is approximately 300 feet east of the Rodgers Creek Fault Zone and would therefore adhere to the guidelines set forth in the General Plan that new structures built along the Rodgers Creek Fault Zone incorporate designs to withstand mudflows. Reese & Associates Consulting Geotechnical Engineers concluded that, because of the presence of relatively soft, wet tuffaceous sand overlain by expansive clay, it is likely that soil creep affects both the soil deposits as well as approximately the uppermost 1 foot of rock. Soil creep movements can impose lateral loads on foundations, and contribute to differential settlement of slabs, walkways, roads and other project improvements, and result in tilting, lateral displacement and/or more than normal cracking. Therefore, to address potential risks associated with soil stability on-site, implementation of MM GEO-3, described below, is required. This measure would ensure that recommendations from the Geotechnical Investigation report by Reese & Associates Consulting Geotechnical Engineers, dated September 21, 2016 would be implemented, including grading measures such as over-excavation of creep-affected soil and replacement as properly keyed, benched and compacted fill, as well as ensuring that the design of foundations and retaining walls shall resist lateral creep soil loads. Similar to the conclusion of the 2017 MND, with implementation of MM GEO-3, associated impacts would be less than significant.

- d) **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**Less than significant impact with mitigation incorporated.** Geotechnical investigations conducted by Reese & Associates Consulting Geotechnical Engineers identified on-site soil deposits in the vicinity of the proposed building that are comprised of weak surface soils and expansive clays/silts and residual soils, with colluvium on the side slopes. In this area, the upper soils are generally thin, and form a veneer that obscures the bedrock. Test pit excavations within the proposed building area revealed about 12 to 18 inches of sandy silt with varying amounts of andesite rock fragments, cobbles and occasional boulders. These surface soils were observed to be porous, likely from prior cultivation and decomposition. The residual soils were generally observed in areas underlain by andesitic tuffbreccia (Tstb) and tuff (Tst). These residual soils consist of expansive clays and silts and are generally localized to the northwest portion of the proposed building area. Based on laboratory tests, the material is of moderate to high expansion potential, which is a measure of the tendency of soils to undergo strength and volume changes with seasonal variations in moisture content.

Soil investigations along the proposed new access roadway on the west-facing slope revealed a thin layer of soft, sandy silt topsoil underlain by very firm andesite breccia (Tsab). Extending downslope, the rock materials transition to a welded tuff. The soils observed between the topsoil and welded tuff become increasingly thicker and consist of medium dense tuffaceous sand with a significant

fraction of silty/clayey fines. The tuffaceous sand was observed to be wet and underlain by a thin, discontinuous layer of expansive clay. No slickensides were observed at the contact between the tuffaceous sand and clay.

Weak, porous natural soils, such as those encountered at shallow depths throughout the site, would be subject to significant settlements when under load, particularly when saturated. Where evaporation is inhibited by slabs, footings, or fill, eventual saturation could occur. Expansive soils can undergo significant strength and volume changes with seasonal variations in moisture content and can heave and distress lightly loaded footings and slabs. Therefore, to address potential risks to life and property associated with soils on-site, implementation of MM GEO-4, is recommended, which ensures that recommendations of the Geotechnical Investigation report by Reese & Associates Consulting Geotechnical Engineers regarding weak, porous soils and expansive soils on-site are implemented. Recommendations include that expansive soils encountered within building envelopes shall be removed for their full depth or covered with a moisture confining and protecting blanket of approved on-site or imported materials of low expansion potential prior to erection of structures. Additionally, for slab-on-grade support, the applicant shall verify that expansive soils have not dried and cracked. With implementation of MM GEO-4, impacts related to expansive soils would be less than significant.

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No impact.** The project site is located in a residential area of the City of Santa Rosa that is served by the municipal sanitary sewer system. The project would connect to a City of Santa Rosa existing sewer main. The project would not use septic tanks or any alternative wastewater disposal system. Therefore, no impacts related to the use of septic tanks or alternative wastewater systems would occur.

**f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less than significant impact.** Dr. Finger's report concluded that there are no potentially fossiliferous sedimentary deposits on or adjacent to the project site. The volcanic rocks in the andesite-to-basalt series are extrusive and igneous, and they do not preserve fossils. The south-adjacent Pleistocene alluvium is younger and overlies the volcanics, so it would not be encountered in the subsurface of the project site. Hence, the project site has no paleontological potential and therefore no paleontological sensitivity. Neither a paleontological walkover survey prior to construction nor paleontological monitoring during construction-related excavations is warranted because the entire site is mapped as volcanic rock. No further mitigation for paleontological resources is required.

## Mitigation Measures

**MM GEO-1** Design of proposed structures on the site shall be done in conformance with the seismic provisions of the latest adopted edition of the California Building Standards Code and the recommendations of the Geotechnical Investigation report by Reese & Associates Consulting Geotechnical Engineers dated September 21, 2016, including the parameters developed pursuant to a Risk-Targeted Maximum Considered Earthquake (MCfa) Ground Motion Hazard Analysis per ASCE 7-10 Section 21.2. A qualified geotechnical engineer shall review the final foundation and building plans to ensure conformance with the recommendations.

- MM GEO-2** Prior to the issuance of a building permit and during the foundation phases of construction, the project applicant shall consult with a geotechnical consultant to reduce potential risks of buildings planned closer than 70 feet to top of the steep slope.
- MM GEO-3** Design and construction of fills, cuts, foundations, retaining walls and slabs shall recognize the presence of creep-affected soils and be done in compliance with the recommendations of the Geotechnical Investigation report by Reese & Associates Consulting Geotechnical Engineers, dated September 21, 2016. Grading measures such as over-excavation of creep-affected soil and replacement as properly keyed, benched and compacted fill shall be implemented and foundations and retaining walls shall be designed to resist lateral creep soil loads. Prior to issuance of a grading permit, a qualified geotechnical engineer shall review the final grading and foundation plans to ensure conformance with the recommendations.
- MM GEO-4** Prior to the issuance of construction and grading permits, the applicant shall adhere to the recommendations of the Geotechnical Investigation report by Reese & Associates Consulting Geotechnical Engineers, dated September 21, 2016, regarding weak, porous soils and expansive soils on-site. Expansive soils encountered within building envelopes shall be removed for their full depth or covered with a moisture confining and protecting blanket of approved on-site or imported materials of low expansion potential prior to erection of structures. Expansive soils can undergo significant strength and volume changes with seasonal variations in moisture content and can heave and distress lightly loaded footings and slabs. Additionally, for slab-on-grade support, the applicant shall verify that expansive soils have not dried and cracked. The applicant shall document completion of these actions and submit verification to the City.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>8. Greenhouse Gas Emissions</b> <i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to greenhouse gas (GHG) emissions. As described below, the proposed project would have less than significant impacts to GHG emissions, which is consistent with the 2017 MND.

### Environmental Setting

GHGs are generated from natural geological and biological processes and through human activities including the combustion of fossil fuels and industrial and agricultural processes. GHGs include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), chlorofluorocarbons, hydrofluorocarbons and perfluorocarbons.

While GHGs are emitted locally, they have global implications. GHGs trap heat in the atmosphere, which heats up the surface of the Earth. This concept is known as global warming and is contributing to climate change. Changing climatic conditions pose several potential adverse impacts including sea level rise, increased risk of wildfires, degraded ecological systems, deteriorated public health, and decreased water supplies.

To address GHGs at the State level, the California legislature passed the California Global Warming Solutions Act in 2006 (Assembly Bill 32 [AB 32]), which requires Statewide GHG emissions be reduced to 1990 levels by 2020. Executive Order S-3-05 provides the California Environmental Protection Agency (Cal/EPA) with the regulatory authority to coordinate the State's effort to achieve GHG reduction targets. Executive Order S-3-05 goes beyond AB 32 and calls for an 80 percent reduction below 1990 levels by 2050. Senate Bill (SB) 375 was adopted in 2008, which seeks to curb GHGs by reducing urban sprawl and vehicle miles traveled.

The Governor signed SB 32 in September of 2016, giving California Air Resources Board (ARB) the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in

the 2017 Climate Change Scoping Plan Update. SB 32 states that “[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.”<sup>38</sup> The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted by the ARB on December 14, 2017.

The BAAQMD CEQA Air Quality Guidelines, which included thresholds of significance for GHG emissions, were established in May 2010 and updated in May 2017. The City of Santa Rosa recognizes these thresholds represent the best available scientific data and has elected to rely on BAAQMD Guidelines dated May 2017 in determining screening levels and significance.

1. Complies with an adopted Qualified GHG Reduction Strategy;
2. Emits less than 1,100 metric tons (MT) carbon dioxide equivalents (CO<sub>2</sub>e) per year; or
3. Emits less than 4.6 MT CO<sub>2</sub>e per service population per year (residents and employees)

To assess level of significance for GHG emissions, an emission rate of 1,100 MT CO<sub>2</sub>e was used in this assessment.

On June 5, 2012, the Santa Rosa City Council adopted the Santa Rosa Climate Action Plan (CAP). The Santa Rosa CAP recognizes the imperative to act on climate change and demonstrates the City’s continued commitment to reducing GHG emissions. The City is one of the nine cities in Sonoma County to collaborate on regional efforts to reduce GHG emissions as part of the Sonoma County Climate Action and Beyond. The Santa Rosa CAP presents measures that will reduce local GHG emissions, meet State, regional and local reduction targets, and streamline future environmental review of projects within Santa Rosa. The Santa Rosa CAP follows both the CEQA Guidelines and the BAAQMD Guidelines by incorporating the standard elements of a Qualified GHG Reduction Strategy. The Santa Rosa CAP is a Qualified GHG Reduction Strategy because it (1) contains a baseline inventory of GHG emissions from all sources, (2) sets forth GHG emission reduction targets that are consistent with the goals of AB 32, and (3) identifies enforceable GHG emission reduction strategies and performance measures. The project is also evaluated for consistency with the policies and measures in the Santa Rosa CAP.

At the time of this analysis, specific details are not available on how the project will meet the solar/zero net energy goals and requirements included as part of the 2019 California Energy Code. However, the project is required to comply with the 2019 California Energy Code. Therefore, the analysis presented below provides a conservative estimate with respect to project generated greenhouse gas emissions.

The following analysis is based in part on CalEEMod modeling conducted by FCS and included in this Subsequent IS/MND as part of Appendix A.

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<sup>38</sup> California Legislative Information. 2015–2016. SB-32 California Global Warming Solutions Act of 2006: Emissions limit. Website: [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB32](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32). Accessed May 15, 2019.



Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less than significant impact.** This analysis is restricted to GHGs identified by AB 32. The project would generate a variety of GHGs during construction and operation, including several defined by AB 32 such as CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub>.

Certain GHGs defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products used for project construction. Upstream emission sources for the project include but are not limited to emissions from the manufacture of cement, emissions from the manufacture of steel, and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated in this analysis because they are not within the control of the project and to do so would be speculative. Additionally, the California Air Pollution Control Officers Association (CAPCOA) White Paper on CEQA and Climate Change supports this conclusion by stating, “[t]he full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level.”<sup>39</sup> Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream/life cycle emissions are speculative and no further discussion is necessary.

### **Short-Term Construction Impacts**

During project construction, GHGs would be generated by construction activities such as site clearing/preparation and grading/earthwork, the operation of heavy-duty construction vehicles, materials and debris hauling, asphalt paving, and construction worker vehicle trips. BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions; however, BAAQMD does recommend that lead agencies quantify, disclose, and provide a significance determination for construction-related GHG emissions. Thus, the operational emissions threshold of 1,100 MT CO<sub>2</sub>e per year is used for this analysis to determine significance of the project’s construction-related emissions.

Construction emissions were estimated using CalEEMod version 2016.3.2. Table 15 shows the GHG emissions estimates for project construction.

<sup>39</sup> California Air Pollution Control Officers Association (CAPCOA). 2008. CEQA and Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. Website: <<http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf>>. Accessed December 18, 2011.

**Table 15: Construction Greenhouse Gas Emissions**

Construction Phases	Total Emissions (MT CO <sub>2</sub> e/year)
<b>2020</b>	
Site Preparation	17
Site Grading	203
Building Construction (2018)	289
<i>2018 Construction Subtotal</i>	<i>510</i>
<b>2021</b>	
Building Construction (2019)	262
Paving	21
Architectural Coating	4
<i>2021 Construction Subtotal</i>	<i>286</i>
<b>Maximum Annual Construction Emissions</b>	<b>510</b>
<b>Threshold of Significance</b>	<b>1,100</b>
<b>Does project exceed threshold?</b>	<b>No</b>
Note: Calculations use unrounded numbers. Source: CalEEMod Output (see Appendix A)	

During project construction, a maximum annual total of 510 MT CO<sub>2</sub>e would be emitted in 2020, which is less than the 1,100 MT CO<sub>2</sub>e per year threshold applied for the purposes of this analysis. Therefore, construction impacts associated with the generation of GHG emissions would be less than significant.

### Long-term Operational Impacts

A preliminary screening method is provided in BAAQMD's 2017 Guidelines for operational GHGs. The preliminary screening is used to indicate whether a project's operational GHG emissions could potentially exceed BAAQMD's thresholds of significance. Based on BAAQMD screening criteria, the operation of a retirement facility would result in a less than significant impact if the project comprises fewer than 94 dwelling units. As shown in Table 16, the project is below BAAQMD's screening threshold, indicating that ongoing project operations would not have the potential to generate a significant quantity of GHG emissions with respect to BAAQMD screening criteria. Therefore, long-term operational impacts associated with GHG emissions would be less than significant.

**Table 16: Operational Greenhouse Gas Screening Level Sizes**

Land Use Type	Operational Greenhouse Gas Screening Size	Project Size	Project Percent of Screening Size
Retirement Facility	94 du	82 du	87 percent
Note: du = dwelling units Source: BAAQMD 2017.			

**b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less than significant impact.** Significance for this impact is determined by project compliance with the Santa Rosa CAP,<sup>40</sup> adopted in June 2012. The Santa Rosa CAP identifies policies that will achieve the State-recommended GHG reduction target of 15 percent below 2008 levels by the year 2020 and the locally adopted reduction goal of 25 percent below 1990 levels. The Santa Rosa CAP provides goals, measures, and associated actions, in the topical areas of energy efficiency and conservation, renewable energy, parking and land use management, improved transport options, optimized vehicular travel, waste reduction, recycling and composting, water and wastewater, agriculture and local food, and off-road vehicles and equipment. The Santa Rosa CAP contains a compliance checklist for new development, which is used to determine compliance with the Santa Rosa CAP. Project compliance with those policies and requirements is shown in Table 17. As shown in the table, the project complies with applicable requirements. The Santa Rosa CAP New Development Checklist is included in Appendix A.

**Table 17: Project Compliance with Santa Rosa Climate Action Plan New Development Checklist**

Measure Number	Description	Project Compliance			
		Complies	Does Not Comply	Not Applicable	Discussion
1.1.1	Comply with CALGreen Tier 1 standards*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CALGreen is California's State-mandated green building code. CALGreen Tier 1 Residential Measures became effective January 1, 2017.  The project would be required to comply with all CALGreen Tier 1 standards.
1.1.3	After 2020, all new development will utilize zero net electricity*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> (See Discussion)	The project will comply with CALGreen and California Energy codes in effect at the time of building permit application submittal.
1.3.1	Install real-time energy monitors to track energy use*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would include real-time energy monitors in accordance with City standards and in compliance with the 2019 CALGreen building code requirements.
1.4.2	Comply with the City's tree preservation ordinance*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As explained in Impact 4(e), 404 total trees will be removed from the project site and will require mitigation. To maintain consistency with the City's tree ordinance, 250 36-inch trees will be planted at the time of overall project construction, and implementation of MM BIO-2 is required to reduce impacts related to the removal of on-site trees.

<sup>40</sup> City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: [http://ci.santa-rosa.ca.us/doclib/Documents/CDP\\_SR\\_FINAL\\_CAP\\_20120711.pdf](http://ci.santa-rosa.ca.us/doclib/Documents/CDP_SR_FINAL_CAP_20120711.pdf). Accessed: February 2, 2015 and May 25, 2017.

**Table 17 (cont.): Project Compliance with Santa Rosa Climate Action Plan New  
Development Checklist**

Measure Number	Description	Project Compliance			
		Complies	Does Not Comply	Not Applicable	Discussion
1.4.3	Provide public & private trees in compliance with the Zoning Code*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would incorporate landscaping, including shade trees, throughout the developed portion of the project site.  The majority of the project site would remain undeveloped woodland and open space.
1.5	Install new sidewalks and paving with high solar reflectivity materials*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would construct buildings and paved areas in accordance with City standards.
4.1.2	Install bicycle parking consistent with regulations*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would install bicycle parking at the Recreation Center/Leasing Office for employees and guests.
4.3.5	Encourage new employers of 50+ to provide subsidized transit passes*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project is a senior housing community and would employ less than 50 people.
5.2.1	Provide alternative fuels at new refueling stations*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The project does not involve construction of new refueling stations.
6.1.3	Increase diversion of construction waste*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would comply with the State-mandated 50 percent waste diversion rate.
7.1.1	Reduce potable water use for outdoor landscaping*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would implement required green building strategies to comply with Tier 1 CALGreen standards. The project includes sustainability design features that support the Green Building Strategy. High performance, low-emissivity windows, optimum insulation levels and efficient heating, air conditioning, ventilation, and water heating systems would enhance energy savings and comfort. The project would include low-water-use plumbing fixtures as well as high-performance low-flow toilets, faucets and showerheads using 20 percent less water than standard fixtures.
7.1.3	Use water meters which track real-time water use*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would include water meters in accordance with City standards.

**Table 17 (cont.): Project Compliance with Santa Rosa Climate Action Plan New Development Checklist**

Measure Number	Description	Project Compliance			
		Complies	Does Not Comply	Not Applicable	Discussion
7.3.2	Meet on-site meter separation requirements in locations with current or future recycled water capabilities*	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This project will not use recycled water. Therefore, this measure would not be applicable to this project.
9.1.2	Provide outdoor electrical outlets for charging lawn equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would provide electrical outlets in areas accessible to be used for landscaping equipment.
9.1.3	Install low water use landscapes*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The project would conform to the City's WELO and other outdoor water efficiency requirements.
9.2.1	Minimize construction equipment idling time to 5 minutes or less*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As required by MM AIR-1, signage will be posted at the project site throughout the duration of the construction period to remind employees of idling restrictions.
9.2.2	Maintain construction equipment per manufacturer's specs*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As required by MM AIR-1, all construction equipment shall be maintained in accordance with manufacture's specifications.
9.2.3	Limit GHG construction equipment emissions by using electrified equipment or alternative fuels*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	As required by MM AIR-2, all off-road construction equipment in excess of 50 horsepower used on-site by the developer or contractors shall be equipped with engines meeting the EPA Tier IV Final off-road engine emission standards.
Notes: * To be in compliance with the CAP, all measures denoted with an asterisk are required in all new development projects unless otherwise specified. If a project cannot meet one or more of the mandatory requirements, substitutions may be made from other measures listed at the discretion of the Community Development Director. Source: Santa Rosa CAP, 2012.					

The project is consistent with the applicable local plans, policies, and regulations and would not conflict with the provisions of AB 32, the applicable air quality plan, or any other State or regional plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

## Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>9. Hazards and Hazardous Materials</b> <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to hazards and hazardous materials. As described below, the proposed project would have less than significant impacts to hazards and hazardous materials, which is consistent with the 2017 MND.



## Environmental Setting

Hazardous materials are substances that, because of their chemical or physical properties, quantity, concentration, or other characteristics, may present a potential hazard to human health or environment if improperly treated or disposed.<sup>41</sup> Similarly, hazardous waste refers to hazardous materials that are no longer in use and awaiting disposal. The City of Santa Rosa considers materials hazardous if it appears on lists of hazardous materials prepared by a federal, State, or local agency.<sup>42</sup> Hazardous materials and waste are classified by the United States Environmental Protection Agency and California Department of Toxic Substances Control according to four properties: toxicity, ignitability, corrosivity, and reactivity.

The Resource Conservation and Recovery Act of 1976 (RCRA) regulates the transportation and handling of hazardous waste. Multiple agencies across the local, state, and federal level administer regulations regarding the transport, permitting, storage, handling and disposal of hazardous waste. These agencies include the EPA, DOT, California Division of Occupational Safety and Health (OSHA), California Department of Toxic Substances Control (DTSC), State Water Resource Control Board (State Water Board), and the Sonoma County Hazardous Materials Division. Within the framework of the Medical Waste Management Act, the California Department of Health Services administers the Medical Waste Management Program and oversees the proper handling and disposal of medical waste through permitting and inspecting medical facilities. The program provides support to Sonoma County Environmental Health Department, which enforces the Medical Waste Management Act at the local level.<sup>43</sup>

The DOT also regulates the transportation of hazardous through the National Hazardous Materials Route Registry (NHMRR). The listing reports all designated and restricted road and highway routes for transportation of Highway Route Controlled Quantities (HRCQ) of Class 7 (radioactive) materials (RAM) (HRCQ/RAM) and Nonradioactive Hazardous Materials (NRHMs).<sup>44</sup> There are no NHMRR roadways near the project site.

The State of California uses databases such as EnviroStor and GeoTracker to map the location of hazardous waste sites including sites that have been remediated, sites currently undergoing remediation, and sites that require cleanup. A search of the databases found three hazardous materials sites located approximately 0.5 miles to the southeast of the project site at 1412 Fountain Grove Parkway.<sup>45</sup> The DTSC issued a formal closure certification for the three storage areas in 1995.

To address airport safety hazards, Sonoma County has prepared a Comprehensive Airport Land Use Plan that identifies the location of airports in the county, and established spheres of influence, where more stringent planning regulations and restrictions apply. The nearest airport to the project

<sup>41</sup> California Code of Regulations, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10

<sup>42</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft Environmental Impact Report, page 4.N-1

<sup>43</sup> County of Sonoma. 2019. Medical Waste Program. Website: <http://www.sonoma-county.org/health/services/medicalwaste.asp>. Accessed March 26, 2019.

<sup>44</sup> United States Department of Transportation (DOT). 2019. California—Restricted HM Routes. Website: <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/regulations/hazardous-materials/73496/california1218.pdf>. Accessed March 26, 2019.

<sup>45</sup> California Department of Toxic Substances Control (DTSC). EnviroStor Database. Website: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=santa+rosa>. Accessed March 26, 2019.

site is Sonoma County Airport, roughly 4.6 miles to the northwest. The project site does not fall within the sphere of influence of the Sonoma County Airport or any other airport.<sup>46</sup>

The City of Santa Rosa has prepared an Emergency Operations Plan that identifies the City's emergency planning, organization and response policies and procedures.<sup>47</sup> The City has also prepared a Local Hazard Mitigation Plan (LHMP) to address various types of hazards. The LHMP identifies the capabilities, resources, information, strategies for risk reduction, and critical facilities, and provides a set of strategies to reduce vulnerability to disaster through education and outreach programs, the development of partnerships, and implementation of actions to reduce the severity of impacts from a disaster.<sup>48</sup>

The California Department of Forestry and Fire Protection (CAL FIRE) prepares maps of Very High Fire Hazard Severity Zones (VHFHS) that are used to develop recommendations for cities and planning. CAL FIRE categorizes parcels into VHFHS and Non-VHFHS zones. According to the VHFHS in Local Responsibility Areas map for Sonoma County, the project site is within an area of local responsibility and not within a VHFHS.<sup>49</sup> However, the project site is within the Wildland-Urban Interface (WUI) Zone according to the Fire Hazard Zones figure in the Santa Rosa General Plan 2035. The WUI Zone encompasses four types of fire hazard zones: moderate, high, very high, and mutual threat. Approximately 30 percent of Santa Rosa is located within the WUI Zone.<sup>50</sup>

The project site was affected by the 2017 Tubbs Fire. Following the fire, the project site's trees were inventoried. It was determined that several of the inventoried trees were damaged or destroyed by the fire. Subsequently, 311 trees (143 of which were fire-damaged) were removed under a prior approval from the City of Santa Rosa, leaving 616 trees on-site. Surrounding properties were affected by the fire, including single-family residential uses to the northwest (Oaks Unit 1) and northeast (Lake Pointe and Skyfarm) that were destroyed.

Would the project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less than significant impact.** Construction of the project would involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints during the construction period. Additionally, once operational, pesticides and common household cleaning supplies would be utilized and stored on-site for landscaping and maintenance. Medical waste may also be generated on-site. However, hazardous substances would not be used, stored or transported in sufficient quantities to

<sup>46</sup> County of Sonoma. 2019. Sonoma County Airport Referral Area. Website: <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Comprehensive-Airport-Land-Use/Sonoma-County-Airport/>. Accessed March 26, 2019.

<sup>47</sup> City of Santa Rosa. 2017. City of Santa Rosa Emergency Operations Plan. Website: <https://srcity.org/DocumentCenter/View/16434/Emergency-Operation-Plan>. Accessed March 26, 2019.

<sup>48</sup> City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan. Website: <https://srcity.org/DocumentCenter/View/3982/Local-Hazard-Mitigation-Plan-Draft-PDF?bidId=>. Accessed March 26, 2019.

<sup>49</sup> California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LRA. Website: [http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl\\_map.49.pdf](http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl_map.49.pdf). Accessed March 26, 2019.

<sup>50</sup> City of Santa Rosa. 2009. City of Santa Rosa General Plan 2035, figure 12-5.

create a significant hazard to the public. Further, compliance with applicable plans and regulations, including the Sonoma County Hazardous Materials and Waste Management Plan and the California Medical Waste Program, would minimize associated risks to the maximum extent practicable. Therefore, similar to the conclusion of the 2017 MND, impacts would be less than significant.

**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?**

**Less than significant impact.** The project site is currently undeveloped and would not require the demolition of any existing structures, therefore no hazards related to demolition would occur. As described above, small quantities of hazardous materials would be used on-site during construction and operation of the project, however, not in sufficient quantities to create significant hazard in the unlikely event of upset or accident. Additionally, transport of hazardous materials would be restricted to designated regional and local routes, thereby minimizing the risks associated with upset and accident during transport. Overall, similar to the conclusion of the 2017 MND, compliance with applicable regulations would ensure that associated impacts would be less than significant.

**c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Less than significant impact.** There are no schools within 0.25 mile of the proposed project site. The nearest school, Hidden Valley Elementary, is located at 3435 Bonita Vista Lane, roughly 1.5 miles south of the project site. While small quantities of hazardous substances would be used on-site as described above, the project would not involve the handling of these substances in proximity to a school and hazardous substances would be transported along designated routes that do not pass within 0.25 mile of a school. No roads near the project site are listed under the National Hazardous Materials Route Registry. Therefore, similar to the conclusion of the 2017 MND, impacts would be less than significant.

**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?**

**Less than significant impact.** According to the DTSC and the State Water Board databases, EnviroStor and GeoTracker respectively, the proposed project site does not contain any Cortese list sites. As described above, three hazardous materials sites are located approximately 0.5 mile to the southeast of the project site at 1412 Fountain Grove Parkway. However, the DTSC issued a formal closure certification for the three storage areas in 1995. The sites no longer pose a hazardous threat to the surrounding areas. As such, similar to the conclusion of the 2017 MND, impacts would be less than significant.

**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 result in a safety hazard or excessive noise for people residing or working in the project area?**

**No impact.** The project site is not located in an airport influence zone as delineated in the Sonoma County Comprehensive Airport Land Use Plan. The nearest airport, Sonoma County Airport, is

roughly 4.6 miles northwest of the project site. Similar to the conclusion of the 2017 MND, given the distance of the project site from local airports, intervening development and applicable air traffic and safety regulations, the project would result in no impact with respect to air safety hazards.

**f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than significant impact.** The LHMP designates emergency evacuation routes, including US 101, State Route 12 (SR 12) and Fountaingrove Parkway-Mission Boulevard.<sup>51</sup> Located on a wooded knoll at the eastern end of Gullane Drive, the project would not interfere with evacuation along these routes or otherwise conflict with an adopted emergency response plan or emergency evacuation plan. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

**g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**Less than significant impact.** The site is located adjacent to Fountaingrove Lake, surrounded by residential and recreational development. The site is located in an area designated as a Non-VHFHS on CAL FIRE's Very High Fire Hazard Severity Zones in Local Responsibility Area (LRA) map for Sonoma County. However, the project site is within a WUI Zone according to the Fire Hazard Zones figure in the Santa Rosa General Plan 2035.<sup>52</sup> According to the General Plan Policy NS-G-5, developments in WUI Zone designated areas require fire prevention and control measures. In compliance with the General Plan policy, the project would implement a defensible space plan consisting of four vegetation management zones around the perimeter of the project, reducing fire fuel around the proposed structures and reducing risk involving wildland fires. The proposed facility would be equipped with fire sprinklers and would comply with the applicable fire safety provisions of the CBC, thereby reducing the risk of damage from fire to the maximum extent practicable. Impacts would be less than significant.

## Mitigation Measures

None.

<sup>51</sup> City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan, page 19.

<sup>52</sup> City of Santa Rosa. 2009. City of Santa Rosa General Plan 2035, figure 12-5.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>10. Hydrology and Water Quality</b> <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to hydrology and water quality. As described below, the proposed project would have less than significant impacts to hydrology and water quality, which is consistent with the 2017 MND.

## Environmental Setting

The nearest water body to the project site is Fountaingrove Lake, a man-made, dammed lake fed by Piner Creek. Several regulations at various jurisdictional levels protect water resources and quality. At the federal level, the CWA is the primary federal law that governs and authorizes water quality control. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. The CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate municipal and industrial discharge, including those from municipal storm sewer systems, which require Municipal Separate Storm Sewer System (MS4) permits.

At the State level, the Porter-Cologne Water Quality Control Act oversees California's water quality control. The act establishes the State Water Board and the nine regional offices, each having jurisdiction to regulate and protect waters in each region. More importantly, the State Water Board and Regional Water Quality Control Board (RWQCB) issue and enforce waste discharge permits, NPDES permits, and CWA Section 401 quality permits. Other State agencies with jurisdiction over water quality regulation in California include the California Department of Health Services, California Department of Pesticide Regulation, CDFW and the Office of Environmental Health and Hazard Assessment (OEHA).<sup>53</sup>

At the Regional level, the North Coast RWQCB serves Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity Counties. The City of Santa Rosa's current NPDES stormwater permit (Order No. R1-2009-0050) regulates both stormwater and non-stormwater discharges from public and private projects into the Santa Rosa municipal storm drain system. The permit requires a minimum set of BMPs to be implemented at all construction sites, as well as permanent stormwater low impact development BMPs.<sup>54</sup>

At the local level, the General Plan outlines strategies to reduce and manage stormwater runoff. The Storm Water Pollution Prevention Plan (SWPPP) includes a description of BMPs to prevent the discharge of silt and sediment from point and non-point sources into receiving waters. The SWPPP aims to minimize the discharge of pollutants during construction, which includes, but is not limited to activities such as: clearing, grading, demolition, excavation, construction of new structures, and reconstruction of existing facilities involving removal and replacement that results in soil disturbance. The City's Standard Urban Stormwater Mitigation Plan (SUSMP) requires projects to design and implement post-development measures to reduce the potential stormwater impacts to local drainages.<sup>55</sup>

The City of Santa Rosa is located within the Laguna de Santa Rosa Watershed, in the confluence of the Santa Rosa, Bennett, and Rincon Valleys. The City of Santa Rosa has three sources of water

<sup>53</sup> City of Santa Rosa. 2012. North Santa Rosa Station Area Specific Plan City of Santa Rosa Draft Environmental Impact Report, page 3.8-6. Website: <https://srcity.org/DocumentCenter/View/21631/North-Santa-Rosa-Station-Area-Specific-Plan-Draft-EIR-and-Appendices>. Accessed March 29, 2019.

<sup>54</sup> California Regional Water Quality Control Board (RWQCB), North Coast Region. 2009. Order No. R1-2009-0050, Waste Discharge Requirements for the City of Santa Rosa. Website: [https://www.waterboards.ca.gov/northcoast/board\\_decisions/adopted\\_orders/pdf/2009/091014\\_09\\_0050\\_PERMIT\\_MS4\\_SRSONCOWA.pdf](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2009/091014_09_0050_PERMIT_MS4_SRSONCOWA.pdf). Accessed March 29, 2019.

<sup>55</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.



supply: entitlements from the Sonoma County Water Agency (SCWA), six groundwater wells, and recycled water. The SCWA receives its water supply from the Russian River while groundwater wells extract from the Santa Rosa Plain Subbasin. The Santa Rosa Subregional Water Reuse System produces recycled water for the City's residents and business.<sup>56</sup>

The SCWA entitlement provides up to 29,041 acre-feet per year (AFY) of water while the groundwater wells provide up to 2,300 AFY. Gross total water usage for 2015 was 5,389 million gallons. Ninety percent of the City's water supply is from the SCWA, while the remainder comes from groundwater and recycled water.<sup>57</sup> The water demand generated by the additional development of the General Plan 2035 beyond the development of the General Plan 2020 is anticipated to be 1,040 AFY. In the year 2035 with the proposed General Plan 2035, 38,486 AFY of water would be available, and demand would be 37,226 AFY (36,186 + 1,040). The Water Supply Assessment prepared for the General Plan 2035 concluded that the City would have adequate water supply.<sup>58</sup>

The Federal Emergency Management Agency (FEMA) issues Flood Insurance Rate Maps (FIRMs) that identifies land areas that are subject to flooding. FEMA's minimum level of flood protection for new development is the 100-year flood event, a flood that statistically has a one percent probability of occurring in any given year.<sup>59</sup> The City of Santa Rosa is located in Flood Zone 1A—Laguna de Santa Rosa-Mark West Creek Watershed.<sup>60</sup> Approximately 167.71 acres in Santa Rosa's Urban Growth Boundary are in the FEMA 100-year flood zone and 283.99 acres are in the 500-year flood zone.<sup>61</sup>

Dam inundation occurs when a flood control dam/water reservoir is damaged severely enough to compromise its ability to hold back water. These events pose a high risk the community but have low occurrence. This damage can occur as a result of earthquakes or other seismic activity, erosion of the dam face or foundation, or rapidly rising floodwaters that weaken the dam or overwhelm its capacity to drain excess water. When a dam fails, sudden fast-moving floods migrate throughout the inundation zone. The speed and volume of these floodwaters can damage or destroy property, cause injury or loss of life, and displace large numbers of residents in the flood's path.<sup>62</sup> Other hazards include seiches, oscillations of water in an enclosed body of water caused by strong winds and rapid changes in atmospheric pressure.<sup>63</sup> The General Plan also identifies that landslide hazards, including mudflows, increase with steep slopes located close to the Rodgers Creek Fault Zone.<sup>64</sup> As such, certain building codes and regulations must be met for developments within downtown or along the Rodgers Creek Fault Zone.

<sup>56</sup> City of Santa Rosa. 2015 Urban Water Management Plan, page 3. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 29, 2019.

<sup>57</sup> City of Santa Rosa. 2015 Urban Water Management Plan, page ES-1. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

<sup>58</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4-G-12.

<sup>59</sup> Federal Emergency Management Agency (FEMA). FEMA Flood Map Service Center. Website: <https://msc.fema.gov/portal/search#searchresultsanchor>. Accessed March 29, 2019.

<sup>60</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.

<sup>61</sup> City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan, page 34.

<sup>62</sup> City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan, page 38.

<sup>63</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 5-10.

<sup>64</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 12-3.

A Preliminary Storm Water Low Impact Development Report was prepared by Brelje & Race Consulting Engineers on January 15, 2019, to satisfy the project specific MS4 requirements (Appendix E).

Would the project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

**Less than significant impact.** Construction of the project would require grading and construction of new structures. Extensive soil removal during the construction period may cause erosion and temporary impacts to water quality. Since the project would disturb more than one acre of soil, compliance with the Construction and Development Effluent Guidelines within the NPDES permit would be required.

Developments that create or replace a combined total of one acre or more of impervious surface are also subject to follow the City's SUSMP. The SUSMP requires implementation of Low Impact Development (LID) BMPs that aim to decentralize stormwater treatment and to integrate it into the overall site design. The LID Technical Design Manual encourages the use of LID techniques to both retain and treat runoff water from impervious surfaces. Compliance with these guidelines would prevent the discharge of pollutants to stormwater during construction.

During project operation, changes to the amount of stormwater infiltration that occurs on the site would have the potential to affect long-term water quality by increasing the amount of pollutants that are discharged from the site. However, implementation of permanent stormwater quality features as required under the SUSMP, and implementation of post-construction BMPs as required under the NPDES permit would ensure that no stormwater discharge requirements are violated. Furthermore, the project would be required to prepare and comply with a SWPPP, as outlined within City Municipal Code Section 17-12.170. Therefore, the project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality and impacts would be less than significant.

- b) **Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less than significant impact.** As previously mentioned, 90 percent of the City's water supply is from the SCWA entitlements, which takes water from the Russian River. The project is consistent with the General Plan and the relatively small number of senior residents would not increase overall water demand in Santa Rosa over projected use analyzed in the Environmental Impact Report (EIR). The project consists of 82 living units, with a maximum of 123 residents and faculty staff at full occupancy. The project would connect to the City's water facilities, similar to the existing residential uses nearby. Using the City of Santa Rosa 2015 Urban Water Management Plan's actual water use of 145 gallons per capita daily, the proposed project is estimated to use 17,835 gallons per day. The project site is within the City's Urban Growth Boundary and is designated for residential use by the General Plan; as such, its water demand is accounted for in the Urban Water Management Plan

(UWMP)projections. The UWMP forecasts a surplus of water under year 2040 conditions and, therefore, adequate water supply would be available.

The proposed project would decrease the amount of pervious surfaces on the site. However, pursuant to the SUSMP, the project would be required to include stormwater BMPs that limit the volume and flow rate of stormwater on-site by providing opportunities for groundwater infiltration. As such, the proposed project would not significantly increase water demand from groundwater supply or interfere with groundwater recharge. Therefore, impacts would be less than significant.

- c) **Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**
- (i) **result in substantial erosion or siltation on- or off-site;**

**Less than significant impact.** No streams or rivers are located on or immediately adjacent to the project site. Piner Creek, a stream that originates as an outlet from Fountaingrove Lake, is located approximately 0.4 mile to the south of the project site. The project would substantially alter the landscape on-site and would affect the existing natural drainage pattern on-site. Grading and construction may temporarily alter stormwater flow patterns; however, compliance with NPDES permit conditions and the applicable provisions of the Municipal Code would lessen impacts related to erosion or siltation. Excess intercepted runoff would be routed to sheet drain, where possible, downslope through adjacent existing vegetation and allowed to percolate into the soil, minimizing potential erosion. In the case of unavoidable concentrated flow, conveyed on-site and through existing storm drain easements to a suitable outfall location. Outlets would be designated to distribute flow to minimize erosive effect of a concentrated flow. Municipal Code Title 18 and 19, which address general building construction and grading and soil requirements, respectively, would ensure that impacts are reduced to the maximum practicable extent. Therefore, impacts would be less than significant.

- (ii) **substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;**

**Less than significant impact.** Although there are no streams or rivers located on the project site, given the extent of grading and excavation proposed, the project would increase impervious surface, substantially alter the landscape, and may affect the existing natural drainage pattern on the project site. However, as described above, the project would be required to implement stormwater best management practices that limit the volume and off-site flow rate of stormwater to no more than existing conditions. To achieve compliance with this requirement, the project would install separate site storm drain systems that are designed to maintain the existing distribution of runoff from the site. The project would also install vegetated swales with bioretention areas and a private structural storm drain infiltration system, both of which would allow the runoff to infiltrate into the soil. Excess flows would spill over and sheet flow down the existing hillside. Where surface sheet flow of runoff is not feasible, drainage would be captured in the proposed underground pipe systems and conveyed to locations downstream, in a few cases utilizing existing storm drain easements through the off-site golf course property to do so. Further,

compliance with Municipal Code Title 18 and 19, which address general building construction and grading and soil requirements, respectively, would ensure that impacts are reduced to the maximum practicable extent. Therefore, impacts would be less than significant.

**(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**

**Less than significant impact.** In 2010, Santa Rosa was issued a joint Municipal Separate Storm Sewer (MS4) NPDES permit with the County of Sonoma and the SCWA by the North Coast RWQCB. The City must comply with the provisions of the permit by ensuring that new development and redevelopment mitigate water quality impacts to stormwater runoff both during and after construction.

Currently, the site drains overland in all directions downhill from the knoll. The first 300 feet of Gullane Drive would not be altered and would drain directly into an existing underground storm drain system. The project would install vegetated swales with bioretention areas, and a private structural storm drain infiltration system, both of which would retain storm waters and allow the runoff to infiltrate into the soil in compliance with the MS4 requirements. Compliance with the permit conditions would ensure that impacts would be less than significant.

**(iv) impede or redirect flood flows?**

**Less than significant impact.** The project would substantially alter the landscape and would affect the existing natural drainage pattern on the project site. However, as described above, the project would be required to implement stormwater BMPs that limit the volume and flow rate of stormwater on-site to no more than existing conditions. The project would install separate site storm drain systems that have been designed to maintain the existing distribution of runoff from the site. Where surface sheet flow of runoff is not feasible, drainage will be captured in the proposed underground pipe systems and conveyed to locations downstream, in a few cases utilizing existing storm drain easements through the off-site golf course property to do so. Further, compliance with Municipal Code Title 18 and 19, which address general building construction and grading and soil requirements, respectively, would ensure that impacts are reduced to the maximum practicable extent. Therefore, impacts would be less than significant.

**d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**Less than significant impact.** The project site is not located within a 100-year flood hazard zone, as shown in the FEMA Flood map. Furthermore, the City of Santa Rosa does not identify the site as being located in a flood danger zone, as outlined in the Local Hazard Mitigation Plan. The project site is approximately 0.33-mile north of the Fountaingrove potential dam inundation area. The project site located in hilly terrain and would not expose people or structures to significant risk. Similar to the overall conclusion of the 2017 MND, due to the site elevation and topography, impacts would be less than significant.

The project site is located near Fountaingrove Lake, an inland body of water capable of producing seiches. However, the site is located in a hillside terrain that would reduce the risk of flooding from a

seiche. The project site is approximately 20 miles from the coastline and, therefore, is not susceptible to tsunamis. Impacts would be less than significant.

**e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less than significant impact.** The project would not conflict with the NPDES program or the SUSMP. The project would disturb more than one acre of soil, and as such, compliance with the Construction and Development Effluent Guidelines within the NPDES permit would be required.

Developments that create or replace a combined total of one acre or more of impervious surface are also subject to follow the City's SUSMP. The SUSMP requires implementation of Low Impact Development (LID) BMPs that aim to decentralize stormwater treatment and to integrate it into the overall site design. The LID Technical Design Manual encourages the use of LID techniques to both retain and treat runoff water from impervious surfaces. Compliance with local requirements would ensure that impacts related to consistency with a water quality control plan or groundwater management plan would be less than significant.

## Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>11. Land Use and Planning</b> <i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The analysis in this section is based on noise measurements and modeling runs performed by FCS. Supporting information is provided in Appendix F.

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to land use and planning. As described below, the proposed project would have less than significant impacts to land use and planning, which is consistent with the 2017 MND.

### Environmental Setting

The Santa Rosa General Plan 2035 envisions a community featuring a diverse range of housing and employment opportunities. The Plan includes policies to focus development within the Urban Growth Boundary in a way that maintains the local quality of life through compatibility with adjacent land uses, provision of parks and open spaces, and connection between neighborhoods and activity centers. The Plan also includes policies that encourage the provision of senior housing funded by private and non-profit entities.<sup>65</sup> The General Plan Land Use Map designates areas of the City for different uses. The Zoning Code establishes development standards for each land use, including regulations regarding building heights, lot coverage and front, side and rear setbacks. The City's Municipal Code also includes provisions for the removal of trees and the protection of trees during construction activities; stormwater pollution prevention; and erosion control.

The project site is composed of two parcels (APNs 173-670-016 and 173-670-004) totaling 12.57 acres. The general plan land use designation applicable to the site is Low Density Residential, which allows for residential density of between 2 and 8 units per gross acre. Attached single-family and multi-family units are permitted. Both parcels are zoned Planned Development (PD) 72-001 and are subject to Fountaingrove Planned Development Policy Statement PD-72-001. The policy statement's

<sup>65</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Land Use and Livability Element, page 4-50.

Development Concept Plan designates the project site as a Cluster Residential (CR) Land Use Area. Permitted uses include single-family attached, or detached, units on small lots, as well as duplexes and multi-family dwellings including apartments, group dwelling, boarding, and lodging houses. Project density is established by Use Permit, which shall take into consideration site topography, vegetation, and other site design constraints. The General Plan Land Use designation would allow a maximum of 100 units on the 12.57-acre site; however, pursuant to Section VII C of the Fountaingrove Ranch Planned Community District Policy Statement, 18 units were transferred to the Canyon Oaks project within the Fountaingrove Ranch. The transfer of density reduced the allowable density from 100 to 82 dwelling units.

Would the project:

**a) Physically divide an established community?**

**No impact.** The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local bridge that would impact mobility within an existing community or between a community and outlying area. The project does not involve any such features and would not remove any means of access in the surrounding area. The project site is surrounded by existing development including residential dwelling units and a golf course. As such, similar to the conclusion of the 2017 MND, the project would not physically divide an established community and there would be no associated impact.

**b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less than significant impact.** A significant impact would occur if the project would conflict with the City's General Plan or Municipal Code, including the Zoning Ordinance, or tree removal controls. As stated above, the General Plan land use designation applicable to the project site is Low Density Residential, which allows for single- and multi-family residential development at a density of 2 to 8 units per gross acre. The General Plan Land Use designation would allow a maximum of 100 units on the 12.57-acre site; however, pursuant to Section VII C of the Fountaingrove Ranch Planned Community District Policy Statement, 18 units were transferred to the Canyon Oaks project within the Fountaingrove Ranch. The transfer of density reduced the allowable density from 100 to 82 dwelling units. Therefore, the project is within the permitted density of this land use designation.

The project site is zoned Planned Development (PD) 72-001, and compliance with the applicable Policy Statement and Development Plan, including basic development considerations regarding treatment of the land, architectural controls, and density, is required. Additionally, development standards are determined by a conditional use permit to ensure that no conflicts with the zoning code occur. The applicable Policy Statement is the Fountaingrove Planned Community Policy Statement, adopted in 1981 and amended in 1992. The project is consistent with the objectives outlined in the Policy Statement, including in the way it would retain the general topographic and tree mass characteristics and major natural features of the site, as well as in the way it would contribute to the provision for a range of housing types in the Fountaingrove area. Similar to the



land use designation's allowable density, PD 72-001 allows up to 8 units per gross acre, and therefore, the project is within the permitted zoning density.

As described in Impact 4(e), construction of the project would involve the removal of existing trees; however, compliance with City of Santa Rosa's tree ordinance contained at Municipal Code Chapter 17-24, and implementation of MM BIO-2 would reduce associated impacts to a less than significant level. Therefore, similar to the overall conclusion of the 2017 MND, the project would not conflict with applicable land use plans, policies or regulations and impacts would be less than significant.

### Noise Land Use Compatibility

**Less than significant impact.** For a discussion of the characteristics of noise and further information regarding the applicable noise regulatory framework, refer to the Noise impact discussion in Section 4.13 of this document.

Implementation of the project could introduce new residential land uses into an ambient noise environment that is in conflict with the City's established noise land use compatibility guidelines. As discussed below, the project would not result in a conflict with the City's adopted noise land use compatibility standards.

For the proposed age-restricted multi-family residential project, the closest comparable land use designation of the City's land use compatibility guidelines is multi-family residential land use. The Santa Rosa Noise Element of the General Plan indicates that for multi-family land use developments, environments with ambient noise levels ranging up to 65 A-weighted decibel (dBA) day/night average sound level ( $L_{dn}$ ) are considered "normally acceptable."

The ambient noise environment of the project site has been documented through the ambient noise monitoring effort, as well as through traffic noise modeling. One long-term noise measurement was taken on Thursday, August 18, 2016, beginning at 4:00 p.m. and ending on Friday, August 19, 2016, at 3:00 p.m. The noise measurements data sheet is provided in Appendix F of this document. The noise measurements were taken near the western boundary of the project site near the proposed site entrance along Gullane Drive. The noise monitoring location was selected to document existing long-term ambient noise levels on the project site and to determine compatibility of the proposed facility with the City's land use compatibility standards.

The average hourly ambient noise levels were measured to be 47.8 dBA equivalent continuous sound level ( $L_{eq}$ ), with a maximum reading of 76.7 dBA maximum noise/sound level ( $L_{max}$ ) and minimum reading of 31.6 dBA minimum noise/sound level ( $L_{min}$ ). The 24-hour weighted day-night average noise level for the project site is 49.5 dBA  $L_{dn}$ . The noise monitoring locations and measurement results data are contained in Appendix F. The long-term noise measurement captured noise from all noise sources in the project vicinity, including parking lot activities at the nearby residential uses and traffic on local roadways. These noise levels are within the City's "Normally Acceptable" threshold of 65 dBA  $L_{dn}$  for multi-family land use developments.

The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was also used to evaluate existing and future traffic noise conditions in the vicinity of the project site.

The projected future traffic noise levels adjacent to the project site were analyzed to determine compliance with the City’s noise and land use compatibility standards. The daily traffic volumes were obtained from the traffic analysis prepared for the project by W-Trans (2017).<sup>66</sup> The resultant noise levels were weighed and summed over a 24-hour period in order to determine the  $L_{dn}$  values. The traffic noise modeling input and output files are included in Appendix F of this document. Table 18 shows a summary of the traffic noise levels for existing background traffic noise levels without and with the project as measured at 50 feet from the centerline of the outermost travel lane. Table 19 shows a summary of the traffic noise levels for baseline background traffic noise levels without and with the project as measured at 50 feet from the centerline of the outermost travel lane. Table 20 shows a summary of the traffic noise levels for future background traffic noise levels without and with the project as measured at 50 feet from the centerline of the outermost travel lane.

**Table 18: Traffic Noise Model Results Summary**

Roadway Segment	Existing No Project ADT	Existing No Project (dBA) $L_{dn}$	Existing Plus Project ADT	Existing Plus Project (dBA) $L_{dn}$	Increase over Existing No Project (dBA)
Thomas Lake Harris Drive—Fountaingrove Parkway to Gullane Drive	960	50.5	1,200	51.5	1.0
Thomas Lake Harris Drive—Gullane Drive to Kilarney Circle	910	50.3	930	50.4	0.1
<p>Notes: ADT is calculated by the FHWA model based on PM peak-hour traffic volumes from the traffic study prepared for the project. FHWA model ADT assumptions are lower than ADT derived from the ITE methodology used in the traffic report; however, even if all 250 average daily trips forecast using ITE methodology traveled along any of the modeled roadway segments, they would still not result in even a 1 dBA increase in traffic noise levels that would exist without the project. <math>L_{dn}</math> (dBA) is stated as measured at 50 feet from the centerline of the outermost travel lane. Source: FCS 2019.</p>					

**Table 19: Baseline Traffic Noise Model Results Summary**

Roadway Segment	Baseline No Project ADT	Baseline No Project (dBA) $L_{dn}$	Baseline Plus Project ADT	Baseline Plus Project (dBA) $L_{dn}$	Increase over Baseline No Project (dBA)
Thomas Lake Harris Drive—Fountaingrove Parkway to Gullane Drive	2,000	53.7	2,200	54.1	0.4
Thomas Lake Harris Drive—Gullane Drive to Kilarney Circle	2,000	53.7	2,000	53.7	0.0
Source: FCS 2019.					

<sup>66</sup> W-Trans. 2019. Focused Traffic Study for the Emerald Isle Senior Housing Project. August 30.

**Table 20: Future Traffic Noise Model Results Summary**

Roadway Segment	Future No Project ADT	Future No Project (dBA) $L_{dn}$	Future Plus Project ADT	Future Plus Project (dBA) $L_{dn}$	Increase over Future No Project (dBA)
Thomas Lake Harris Drive— Fountaingrove Parkway to Gullane Drive	3,600	56.3	3,800	56.5	0.2
Thomas Lake Harris Drive—Gullane Drive to Kilarney Circle	3,600	56.3	3,600	56.3	0.0
Source: FCS 2019.					

Based on the modeled traffic noise results, the highest noise levels would occur under Future Plus Project traffic conditions. The modeling results in Table 20 show that traffic noise levels along the modeled roadway segment of Thomas Lake Harris Drive adjacent to the project site, north of Fountaingrove Parkway to Gullane Drive, would range up to 56.5 dBA  $L_{dn}$  under Future Plus Project traffic conditions as measured at 50 feet from the centerline of the outermost travel lane. The nearest façade of the proposed multi-family residential facility would be located approximately 605 feet from the centerline of the outermost travel lane of this roadway segment. At this distance, traffic noise levels along this roadway segment would attenuate to approximately 35 dBA  $L_{dn}$ . These traffic noise levels are well below the City's normally acceptable land use compatibility threshold of 65 dBA  $L_{dn}$  for new multi-family residential land use development. Therefore, traffic noise impacts on proposed exterior areas of the project site would be less than significant.

Traffic noise levels would also not exceed the City's established interior noise level standards. As stated above, traffic noise levels with implementation of the project could range up to approximately 35 dBA  $L_{dn}$  at the nearest façade of the proposed facility. Therefore, traffic noise impacts on interior living spaces for the proposed multi-family residential land uses would be well below the City's interior noise performance standard of 45 dBA  $L_{dn}$ .

Therefore, traffic noise impacts to the proposed project would not exceed the City's land use compatibility or the applicable interior noise standards for the proposed multi-family residential land uses. Traffic noise impacts to the proposed project would be considered less than significant and no mitigation would be required.

## Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>12. Mineral Resources</b> <i>Would the project:</i>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to mineral resources. As described below, the proposed project would have no impacts to mineral resources, which is consistent with the 2017 MND.

### Environmental Setting

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary California law concerning mineral resources, including sand, gravel, and building stone which are important for commercial purposes. Because of the economic importance of mineral resources, SMARA limits new development in areas with significant mineral deposits. SMARA also requires State Geologists to classify specified areas into Mineral Resource Zones (MRZs). An updated report on Mineral Land Classification by The California Geological Survey indicates that the project site is located in an MRZ-1 area, where adequate information indicates that no significant mineral resource are present, and is surrounded by MRZ-3A areas containing known mineral occurrences of undetermined mineral resource significance.<sup>67</sup>

There are no mineral resource recovery sites on or in the project vicinity,<sup>68</sup> which is located in hilly terrain in the northern part of Santa Rosa, surrounded by residential and recreational development. The nearest mine is the Mark West Quarry, located approximately 5.6 miles to the northeast of the site.

<sup>67</sup> Mineral Land Classification of Sonoma County Map, March 2005.

<sup>68</sup> City of Santa Rosa. 2016. City of Santa Rosa General Plan 2035 Land Use Diagram.

Would the project:

- 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?**

**No impact.** As described above, the site is located in a MRZ-1 zone, where adequate information indicates that no significant mineral resources are present. While areas in the vicinity of the site are classified as MRZ-3 (where known mineral occurrences of undetermined mineral resource significance are present), the site is surrounded by residential and recreational development. Therefore, similar to the overall conclusion of the 2017 MND, development of the project would not result in the loss of availability of known mineral resources and there would be no associated impacts.

- 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?**

**No impact.** The project site is located in hilly terrain in the northern part of the City of Santa Rosa and, as described above, there are no mineral resource recovery sites on the site or in the vicinity. As such, similar to the overall conclusion of the 2017 MND, the project would have no impact with respect to loss of availability of mineral resource recovery sites.

## Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>13. Noise</b> <i>Would the project result in:</i>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The analysis in this section is based on noise measurements and modeling runs performed by FCS. Supporting information is provided in Appendix F.

## Environmental Evaluation

### Characteristics of Noise

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the dB. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the dBA was derived to relate noise to the sensitivity of humans, as it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for a number of various sound level metrics, including the  $L_{dn}$  and the Community Noise Equivalent Level (CNEL), both of which represent how humans are more sensitive to sound at night. In addition, the  $L_{eq}$  is the

average sound energy of time-varying noise over a sample period and the  $L_{\max}$  is the maximum instantaneous noise level occurring over a sample period.

## Regulatory Framework

The City of Santa Rosa has established Noise Compatibility Standards for residential and non-residential land uses in the Noise and Safety Element of the Santa Rosa General Plan 2035 (Santa Rosa 2009).

### **Santa Rosa General Plan**

For the proposed project, the closest comparable land use designation of the City's land use compatibility guidelines is multi-family residential land use. The following are the General Plan noise policies applicable to the land use designation of multi-family residential:

- Noise environments of up to 65 dBA  $L_{dn}$  are considered “normally acceptable” based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.
- Noise environments of 60 dBA to 70 dBA  $L_{dn}$  are “conditionally unacceptable” where new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- Noise environments of 70 dBA to 75 dBA  $L_{dn}$  are “normally unacceptable” where new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- Noise environments of 75 dBA  $L_{dn}$  and higher are “clearly unacceptable” where new construction or development should generally not be undertaken.

Applicable goals and policies of the General Plan are summarized as follows:

- Encourage residential developers to provide buffers other than sound walls, where practical. Allow sound walls only when projected noise levels at a site exceed land use compatibility standards.
- Prevent new stationary and transportation noise sources from creating a nuisance in existing developed areas. Use a comprehensive program of noise prevention through planning and mitigation, and consider noise impacts as a crucial factor in project approval. The Land Use Compatibility Standards specify normally acceptable levels for community noise in various land use areas.
- Require new projects in the following categories to submit an acoustical study, prepared by a qualified acoustical consultant:
  - All new projects proposed for areas with existing noise above 60 dBA  $L_{dn}$ . Mitigation shall be sufficient to reduce noise levels below 45 dBA  $L_{dn}$  in habitable rooms and 60 dBA  $L_{dn}$  in private and shared recreational facilities. Additions to existing housing units are exempt.



- All new projects that could generate noise whose impacts on other existing uses would be greater than those normally acceptable (as specified in the Land Use Compatibility Standards).
- Pursue measures to reduce noise impacts primarily through site planning. Engineering solutions for noise mitigation, such as sound walls, are the least desirable alternative.
- Do not permit existing uses to generate new noises exceeding normally acceptable levels unless:
  - Those noises are mitigated to acceptable levels; or
  - The activities are specifically exempted by the City Council on the basis of community health, safety, and welfare.
- Adopt mitigations, including reduced speed limits, improved paving texture, and traffic controls, to reduce noise to normally acceptable levels in areas where noise standards may be exceeded (e.g., where homes front regional/arterial streets and in areas of mixed use development.)
- Encourage developers to incorporate acoustical site planning into their projects.  
Recommended measures include:
  - Incorporating buffers and/or landscaped earth berms;
  - Orienting windows and outdoor living areas away from unacceptable noise exposure;
  - Using reduced-noise pavement (rubberized-asphalt);
  - Incorporating traffic calming measures, alternative intersection designs, and lower speed limits; and
  - Incorporating state-of-the-art structural sound attenuation and setbacks.
  - Discourage new projects that have potential to create ambient noise levels more than 5 dBA  $L_{dn}$  above existing background, within 250 feet of sensitive receptors.

### ***Santa Rosa Municipal Code***

The City of Santa Rosa also addresses noise in the ordinances of the City Code. Santa Rosa Municipal Code Section 17-16.120, Machinery and Equipment, states that “it is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in any manner so as to create any noise, which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels.”

Standard city conditions of project approval limit the hours of construction to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays. No construction is permitted on Sundays and holidays.

Would the project result in:

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

### **Short Term Construction Impacts**

**Less than significant impact with mitigation incorporated.** For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the City's permissible hours for construction (7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays) that would result in annoyance or sleep disturbance of nearby sensitive receptors.

#### ***Construction-related Traffic Noise***

Noise impacts from construction activities associated with the project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. One type of short-term noise impacts that could occur during project construction would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the project site.

The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. Typically, a doubling of the average daily trip (ADT) hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels; which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Project-related construction trips would not be expected to double the hourly traffic volumes along any roadway segment in the project vicinity. For this reason, short-term intermittent noise from construction trips would be minor when averaged over a longer time-period and would not be expected to result in a perceptible increase in hourly- or daily-average traffic noise levels in the project vicinity. Therefore, similar to the overall conclusion of the 2017 MND, short-term construction-related noise impacts associated with the transportation of workers and equipment to the project site would be less than significant.

#### ***Construction Equipment Operational Noise***

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower

power settings. Impact equipment such as pile drivers are not expected to be used during construction of this project.

The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the project is expected to require the use of scrapers, bulldozers, water trucks, haul trucks, and pickup trucks. The maximum reference noise level generated by a scraper is 85 dBA  $L_{max}$  at 50 feet from this equipment. Each bulldozer would generate 85 dBA  $L_{max}$  at 50 feet. The maximum noise level generated by graders is approximately 85 dBA  $L_{max}$  at 50 feet. A characteristic of sound is that each doubling of sound sources with equal strength increases a sound level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA  $L_{max}$  at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA  $L_{eq}$ .

The closest sensitive-noise receptor to the east of the project site are residential land uses. The closest residential land uses (including properties that are anticipated to be reconstructed after fire damage) would be located approximately 300 feet from the construction footprint where the heaviest construction equipment would be operating. At this distance, these residential land uses may be exposed to noise levels ranging up to approximately 74 dBA  $L_{max}$  with a relative worst-case hourly average of 70  $L_{eq}$  when construction activities occur at the portion of the project site nearest these homes.

The closest sensitive-noise receptor to the west of the project site is also residential land uses. The closest of these residential land uses would be located approximately 240 feet from the construction footprint. At this distance, these residential land uses may be exposed to noise levels ranging up to approximately 76 dBA  $L_{max}$  with a relative worst-case hourly average of 72  $L_{eq}$  when operation of heavy construction equipment occurs at the portion of the project site nearest these homes.

Another noise sensitive receptor in the project vicinity includes the Fountaingrove Lodge to the southwest of the project site. The closest building façades of the Fountaingrove Lodge would be located approximately 265 feet from the construction footprint where the heaviest construction equipment would operate. At this distance, the Fountaingrove Lodge's nearest building façades may be exposed to noise levels ranging up to 76 dBA  $L_{max}$  with a relative worst-case hourly average of 72  $L_{eq}$  when construction activities occur at the portion of the project site nearest this lodge.

Although there could be a relatively high single event noise exposure potential causing an intermittent noise nuisance, the effect of construction activities on longer-term (hourly or daily) ambient noise levels would be small but could result in a temporary increase in ambient noise levels in the project vicinity that could result in annoyance or sleep disturbance of nearby sensitive

receptors. Therefore, restricting the permissible hours of construction to daytime hours would reduce the effects of construction activities on longer-term (hourly or daily) ambient noise levels, and it would reduce potential impacts that could result in annoyance or sleep disturbances at nearby sensitive receptors. Therefore, noise producing construction activities shall be restricted to the daytime hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays; and no construction is permitted on Sundays and holidays. Restricting construction activities to these stated time-periods, as well as implementing the best management noise reduction techniques and practices outlined in MM NOI-1, would ensure that construction noise would not result in a substantial temporary increase in ambient noise levels that would result in annoyance or sleep disturbance of nearby sensitive receptors. Similar to the overall conclusion of the 2017 MND, with implementation of MM NOI-1, temporary construction noise impacts would be reduced to less than significant.

### **Operational/Stationary Source Noise Impacts**

**Less than significant impact.** A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. According to the City of Santa Rosa City Code Section 17-16.120, it is also unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than 5 dBA. Therefore, for purposes of this analysis, an increase of more than 5 dBA above the applicable noise performance thresholds would be considered a substantial permanent increase in ambient noise levels.

### **Mechanical Equipment Operations**

At the time of preparation of this analysis, details were not available pertaining to proposed rooftop mechanical ventilation systems for the project. Therefore, a reference noise level for typical rooftop mechanical ventilation systems was used. Noise levels from typical rooftop mechanical ventilation equipment are anticipated to range up to approximately 60 dBA  $L_{eq}$  at a distance of 25 feet. Rooftop mechanical ventilation systems could be located as close as 250 feet from the nearest off-site sensitive receptor. In addition, the roof parapet would block the line of sight from all rooftop equipment to off-site receptors, providing a minimum of 6 dBA in shielding reduction. Therefore, noise generated by rooftop mechanical ventilation equipment would attenuate to less than approximately 34 dBA  $L_{eq}$  at the nearest off-site residential receptor. The long-term ambient noise levels in the project vicinity are documented through the long-term ambient noise measurement to be 47.8 dBA  $L_{eq}$ . Therefore, rooftop mechanical ventilation equipment operational noise levels, as measured at the nearest off-site sensitive receptor, would not exceed existing ambient noise levels more than 5 dBA  $L_{dn}$ .

### **Parking Lot Activities**

The project would include new stationary noise sources, such as typical parking lot activities. Typical parking lot activities such as people conversing, doors slamming, or vehicles idling generate noise levels of approximately 60 dBA to 70 dBA  $L_{max}$  at 50 feet. These activities are expected to occur sporadically throughout the day, as visitors and staff arrive and leave the parking lot areas. The

proposed project's site plan shows 115 surface parking spaces and 95 enclosed garage parking spaces. Existing background ambient noise levels are documented by the long-term ambient noise measurement to average 47.8 dBA  $L_{eq}$  and maximum noise levels of up to 76.7 dBA  $L_{max}$  at the western Project limits near the residential homes adjacent to Gullane Drive. Although there would be occasional high, single-event noise exposure ranging up to 58 dBA  $L_{max}$  as measured at the nearest receptor from parking lot activities, such activities would not result in an increase above existing ambient noise levels. Parking lot activities would occur intermittently and for only a short duration of time. These single-event maximum noise level activities would only occur for a cumulative of a minute or two within any hour and would therefore not result in a perceptible increase in the hourly average noise levels in the project vicinity. Therefore, project-related parking lot activities would not result in an increase in ambient noise levels by more than 5 dBA  $L_{dn}$  above existing background as measured at nearby sensitive receptors; and similar to the overall conclusion of the 2017 MND, the impact would be less than significant.

### **Truck Loading Activities**

Implementation of the project would also include occasional delivery truck loading/unloading activities. Typical medium truck (step-van type with roll-doors) loading and unloading activities result in maximum noise levels from 70 dBA to 80 dBA  $L_{max}$  at 50 feet. These activities are expected to occur at most a couple of times throughout a typical day as supplies are delivered or packages are picked up at the proposed facility. The closest noise-sensitive receptor building façades are the single-family residences located approximately 380 feet west from the potential delivery areas. Because of distance attenuation, maximum noise levels from these activities would range from 52 dBA to 62 dBA  $L_{max}$  at this nearest residential property. These resulting noise levels from new stationary source activities are below the existing measured maximum noise level of 76.7 dBA  $L_{max}$  recorded in the project vicinity. These single-event maximum noise levels are not expected to occur for more than a cumulative 1 minute within any hour and when averaged over a 24-hour period would not result in an exceedance of the existing average ambient noise levels in the project vicinity. Therefore, project-related delivery activities would not result in an increase in ambient noise levels by more than 5 dBA  $L_{dn}$  above existing background noise levels experienced in the project vicinity and would result in a less than significant impact on nearby sensitive receptors.

Therefore, similar to the overall conclusion of the 2017 MND, all project-related stationary operational noise sources would result in a less than significant impact.

### **Operational/Mobile Source Noise Impacts**

**Less than significant impact.** A significant impact would occur if project-generated traffic would result in a substantial increase in ambient noise levels compared with those that would exist without the project. The City does not define "substantial increase," therefore, for purpose of this analysis; a substantial increase is based on the following criteria. A characteristic of noise is that audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, for purposes of this analysis, a significant impact would occur if project-related traffic would cause the CNEL along roadway segments in the project vicinity to increase by any of the following:

- 5 dBA or more even if the CNEL would remain below normally acceptable levels for a receiving land use.
- 3 dBA or more, thereby causing the CNEL in the project vicinity to exceed normally acceptable levels and result in noise levels that would be considered conditionally acceptable for a receiving land use.
- 1.5 dBA or more where the CNEL currently exceeds conditionally acceptable levels.

Table 21 shows a summary of the traffic noise levels for existing, existing plus project, baseline, baseline plus project, future, and future plus project conditions as measured at 50 feet from the centerline of the outermost travel lane.

**Table 21: Traffic Noise Increase Summary**

Roadway Segment	Existing (dBA) CNEL	Existing Plus Project (dBA) CNEL	Increase over Existing (dBA)	Baseline (dBA) CNEL	Baseline Plus Project (dBA) CNEL	Increase over Baseline (dBA)	Future (dBA) CNEL	Future Plus Project (dBA) CNEL	Increase over Future (dBA)
Thomas Lake Harris Drive—Fountaingrove Parkway to Gullane Drive	50.5	51.5	1.0	53.7	54.1	0.4	56.3	56.5	0.2
Thomas Lake Harris Drive—Gullane Drive to Kilarney Circle	50.3	50.4	0.1	53.7	53.7	0.0	56.3	56.3	0.0
Source: FCS 2019.									

As shown in Table 21, the highest traffic noise level increase with implementation of the project would occur along Thomas Lake Harris Drive between Fountaingrove Parkway and Gullane Drive, under existing plus project conditions. Along this roadway segment, the project would result in traffic noise levels ranging up to 51.5 dBA CNEL as measured at 50 feet from the centerline of the nearest travel lane, representing an increase of 1.0 dBA over existing conditions for this roadway segment. The resulting noise levels are below the normally acceptable threshold for receiving land uses adjacent to this roadway segment. The project-related increase is well below the 5 dBA increase that would be considered a substantial permanent increase in noise levels compared with noise levels that would exist without the project. Therefore, similar to the overall conclusion of the 2017 MND, impacts from project-related traffic noise levels would not result in a substantial permanent increase in traffic noise levels in excess of applicable standards, and would be less than significant.

**b) Generation of excessive groundborne vibration or groundborne noise levels?**

**Less than significant impact.** A significant impact would occur if the project would generate groundborne vibration or groundborne noise levels in excess of established standards. For determining construction-related vibration impacts, the Federal Transit Administration (FTA) Construction Vibration Impact Criteria are utilized. The FTA has established industry accepted

standards for vibration impact assessment in its Transit Noise and Vibration Impact Assessment Manual, dated September 2018.

Groundborne noise is generated when vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels are do not exceed levels considered to be perceptible then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving and operating heavy earthmoving equipment. However, construction vibration impacts on building structures are generally assessed in terms of Peak Particle Velocity (PPV). For purposes of this analysis, project related impacts are expressed in terms of PPV.

### ***Short-term Construction Vibration Impacts***

A significant impact would occur if existing structures at the project site or in the project vicinity would be exposed to groundborne vibration levels in excess of levels established by the FTA's Construction Vibration Impact Criteria for the type of structure.

Of the variety of equipment used during construction, the small vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) PPV at 25 feet from the operating equipment.

The nearest off-site receptor to the project site is the Fountaingrove Lodge located southwest of the project site. The façade of this building would be located approximately 255 feet from the nearest construction footprint where the heaviest construction equipment would potentially operate. At this distance, groundborne vibration levels would range up to 0.003 PPV from operation of the types of equipment that would produce the highest vibration levels. This is below the FTA's Construction Vibration Impact Criteria of 0.3 PPV for buildings of engineered concrete and masonry. Therefore, similar to the overall conclusion of the 2017 MND, the impact of short-term groundborne vibration associated with construction to off-site receptors would be less than significant.

### ***Operational Vibration Impacts***

The City of Santa Rosa has not adopted criteria for operational groundborne vibration impacts. Therefore, for purposes of this analysis, a significant impact would occur if project on-going activities would produce groundborne vibrations that are perceptible without instruments by a reasonable person at the property lines of a site.

Implementation of the project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the vicinity of the project site. Therefore, similar to the overall conclusion of the 2017 MND, operational groundborne vibration impacts would be less than significant.



- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**No impact.** The project site is not located within the vicinity of a private airstrip. The nearest public airport to the project site is the Sonoma County Airport, located approximately 4.6 miles northwest of the project site. Sonoma County General Plan EIR Figure AT-9 indicates that the project site is outside of the 65 dBA CNEL airport noise contour. As such, the project site would be exposed to aviation noise levels of less than 65 dBA CNEL. Therefore, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur.

## Mitigation Measures

**MM NOI-1** Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.
- The construction contractor shall ensure that all on-site demolition and construction activities, including deliveries and engine warm-up, shall be restricted to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 8:00 a.m. and 6:00 p.m. on Saturday. No such activities shall be permitted on Sundays or holidays.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>14. Population and Housing</b> <i>Would the project:</i>				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to population and housing. As described below, the proposed project would have less than significant impacts to population and housing, which is consistent with the 2017 MND.

### Environmental Setting

The City of Santa Rosa experienced significant growth from 2000 to 2010, adding 2,022 residents per year, a 14 percent increase.<sup>69</sup> According to the California Department of Finance, the City of Santa Rosa had a population of 178,488 as of January 1, 2018.<sup>70</sup> The 2035 General Plan projects that the City of Santa Rosa would add 25,225 new housing units for a total of 96,295 units and a population of 237,000 by buildout in 2035.<sup>71</sup>

The General Plan includes a range of policies designed to accommodate this future growth, including policies to promote compact growth, foster the development of urban villages, and ensure the provision of housing options that respond to the needs of all economic and demographic segments of the community including seniors, families, the homeless and individuals with special needs. The General Plan also seeks to create housing opportunities and accessible living environments that allow seniors to age in place, either in the same home, assisted living facilities, continuing care facilities, or other housing types within the same community.

<sup>69</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Housing Element, page 4-2.

<sup>70</sup> California Department of Finance. 2018. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.

<sup>71</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Land Use and Livability Element, page 2-15.

Various policies and planning practices help the City accommodate the future growth projections. The City of Santa Rosa made significant efforts to support housing needs for low-income residents by subsidizing over 131 affordable developments. General Plan Policies H-C-8 and H-C-12 commit the City to continue supporting and funding developments of units within reach to extremely low-income households.<sup>72</sup>

In addition, the City will encourage single-room occupancy housing and other special housing arrangements and fund and support emergency shelter and homeless support services through Policies H-D-5, H-D-8, HD-9, and H-D10. Altogether, multiple policies help the City of Santa Rosa meet the Regional Housing Needs Allocation requirements established for the 7-year period (2015-2023) by ABAG.<sup>73</sup>

Would the project:

- a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**Less than significant impact.** Once operational, the condominium would house up to 123 residents<sup>74</sup>, which would represent an increase of 0.06 percent relative to the City of Santa Rosa's 2018 population estimate of 178,488. This would represent a *de minimis* amount of population growth. The project would be staffed by four employees and even if the new employees were new residents, this would also represent a *de minimis* amount of population growth. The construction phase of the project would draw construction workers to the site; however, the construction phase is temporary and would not induce long-term population growth nor influence the relocation of construction workers. Therefore, similar to the overall conclusion of the 2017 MND, impacts are less than significant.

- b) **Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No impact.** The project site itself is currently undeveloped. There are no existing structures on the site and no paved or unpaved driveways. Therefore, similar to the overall conclusion of the 2017 MND, the proposed project would not displace any existing people or housing and there would be no associated impact.

## Mitigation Measures

None.

<sup>72</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Housing Element, page 4-10.

<sup>73</sup> *Ibid.*

<sup>74</sup> Oakmont Senior Living estimates that the project occupancy would be approximately 123 residents.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>15. Public Services</b> <i>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:</i>				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to public services. As described below, the proposed project would have less than significant impacts to public services, which is consistent with the 2017 MND.

### Environmental Setting

Public services provided by the City include fire protection, police protection, education, recreation and parks, and libraries. The SRFD provides fire protection services in the City of Santa Rosa. The SRFD responds to all fires, hazardous materials incidents, and medical emergencies (including injury accidents) in the City. The senior command structure consists of a Fire Chief, an Emergency Preparedness Coordinator, a Deputy Fire Chief, an Administrative Services Officer, and a Division Chief Fire Marshal. The SRFD consists of three Bureaus—Operations, Administration, and Prevention—and two divisions—Training and Safety Division and Support Services Division. Ten fire engines and two truck companies respond to emergencies.<sup>75</sup> The SRFD has 138 dedicated employees. The Santa Rosa General Plan 2035 establishes a response time goal for first resource arrival within 5 minutes of dispatch 90 percent of the time. A secondary goal, pertaining to larger incidents, is to provide a full assignment within 8 minutes 90 percent of the time. For calendar year 2018, the SRFD responded to all incidents within 6 minutes or less 72.68 percent of the time, and Engine 5 responded to all incidents within 6 minutes or less 77.88 percent of the time.<sup>76,77</sup>

<sup>75</sup> City of Santa Rosa. Fire Department About Us. Website: <https://srcity.org/395/About-Us>. Accessed March 29, 2019.

<sup>76</sup> Ian Hardage, Assistant Fire Marshall, Santa Rosa Fire Department. Personal Communication with City of Santa Rosa, email. June 14, 2019.

The Santa Rosa General Plan 2035 EIR projected buildout over 25 years and determined the need to move the fire station on Parker Hill Road to a new location near Fountaingrove Parkway to serve the future residents of the area. Fire Station No. 5, constructed in 2015, was located at 2201 Newgate Court. However, it was destroyed by the 2017 Tubbs Fire. Station 5 is temporarily located at the Parker Hill Road site until the Newgate Court facility is rebuilt.

The SRPD provides police protection services throughout the City.<sup>78</sup> The SRPD consists of four divisions—Administration, Field Services, Special Services, and Technical Services—consisting of seven Bureaus—Patrol, Investigations, Communications, Records, Technology, Traffic, and Support Services. The SRPD has 260.5 employees with 83 patrol officers and is also comprised of civilian staff within the Administration, Procurement, Dispatch Center, and Records Department. The remaining sworn personnel are either supervisors or investigators. The police station, located at 965 Sonoma Avenue would provide police services to the project site. The SRPD has an average response time for: (1) Priority 1 calls (emergency calls) of 6 minutes and 28 seconds, (2) Priority 2 calls (urgent) of 12 minutes and 23 seconds, and (3) Priority 3 call (non-urgent) of 26 minutes and 16 seconds.<sup>79</sup>

The project site is located in Santa Rosa City School District, one of 10 districts serving the City of Santa Rosa. Within the Santa Rosa City School District, there are ten elementary schools, five middle schools, five high schools, and four charter and alternative schools.<sup>80</sup> The nearest elementary school is Hidden Valley Satellite located at 3555 Parker Hill Road, approximately 1.5 miles southeast of the project site. The nearest middle school is Rincon Valley Middle School located at 4650 Badger Road, approximately 5 miles southeast of the project site. The nearest high school is Maria Carrillo High School located at 6975 Montecito Boulevard, approximately 5.3 miles southeast of the project site.

The City of Santa Rosa Recreation and Parks Department manages and maintains approximately 525 acres of City parks and sports facilities. They also take care of an additional 250 acres of public landscaped areas, undeveloped parks, street medians, and back-on landscaping. Parks vary in size and amenities.<sup>81</sup> The closest park to the project site is Nagasawa Community Park located at 1313 Fountaingrove Parkway, approximately 1.2 miles southeast of the project site. Nagasawa Community Park is 33.7 acres in size, with amenities that include picnic tables, trails, fishing, boating (for non-motorized boats), and restrooms. Another nearby park is the 1-acre Fir Ridge Park, located approximately 1 mile northeast of the project site. Fir Ridge Park amenities include picnic tables, a playground, a basketball court and an open grass area.

The Quimby Act, codified in 1975 under California Government Code Section 66477, authorizes California cities and counties to pass ordinances requiring developers set aside land, donate

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<sup>77</sup> In conformance with the California Constitution Article XIII, Section 35(a)(2) and *City of Hayward v. Board of Trustees of the California State University* (2015) 242 CA4th 833, the City is obligated to provide adequate public safety services, including fire protection services. The need for additional constitutionally-mandated public safety services is not an environmental impact that CEQA requires a project proponent to mitigate.

<sup>78</sup> City of Santa Rosa. Police Department About Us. Website: <https://srcity.org/243/About-Us>. Accessed March 29, 2019.  
<http://www.srcity.org/departments/police/Pages/default.aspx>.

<sup>79</sup> Jodie Frost, Administrative Services Officer, Santa Rosa Police Department. Personal Communication with City of Santa Rosa, email. June 21, 2019.

<sup>80</sup> Santa Rosa City School District. Our Schools. Website: <https://www.srscschools.org/Domain/94>. Accessed March 29, 2019.

<sup>81</sup> City of Santa Rosa. Recreation & Parks About Us. Website: <https://srcity.org/1563/About-Us>. Accessed March 29, 2019.

conservation easements, or pay fees for park acquisition to help ensure the adequate provision of parkland and preserve open space through a series of policy provisions. For planning purposes, the City sets a minimum overall citywide ratio of 3.5 acres of city parks per 1,000 residents, plus 1.4 acres of publicly accessible school recreational land, and 1.1 acres of public serving open space.<sup>82</sup> With 950 acres of parkland, the City currently exceeds its established ratio and is projected to continue to exceed it with buildout of the Santa Rosa General Plan 2035.

The Sonoma County Library System operates five libraries in Santa Rosa, including the Central Library and four branch libraries. The Northwest Santa Rosa Library is the closest library to the project site, and is located at 150 Coddington Center, approximately 3.1 miles south of the project site. Its amenities include computer loan (with internet), wireless internet, and a research station with access to the library database, a copy machine, and a public printer.

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:

**a) Fire protection?**

**Less than significant impact.** As described above, Fire Station No. 5 is temporarily located at 3480 Parker Hill Road, 2.3 miles from the project site. The City intends to build a permanent replacement at 2201 Newgate Court, 1.7 miles from the project site. Using an average travel speed of 35 miles per hour, a fire engine responding to the project site from the temporary location would take 3 minutes, 57 seconds, which is within the City's adopted response time. The rebuilt Fire Station No. 5 would be even closer to the project site and, thus, response times would be faster.

The project would be required to comply with City of Santa Rosa Special Tax Financing Code provisions, including Section 4-56.240 and would, therefore, be required to make a fair-share contribution to reserve funds for the replacement of public facilities, including fire protection and suppression services. As such, new or expanded fire facilities would not be required to serve the project. Similar to the overall conclusion of the 2017 MND, impacts would be less than significant.

**b) Police protection?**

**Less than significant impact.** According to the SRPD, between 90 and 92 patrol officers are needed to handle current demand for police services and the SRPD currently employs 83 patrol officers.<sup>83</sup> SRPD has several Memorandum of Understandings with neighboring law enforcement agencies, including Santa Rosa Junior College and Sonoma County Sheriff's Office that could assist in responding to calls if necessary. In addition, the project would be required to comply with City of Santa Rosa Special Tax Financing Code provisions, including Section 4-56.240 and would, therefore,

<sup>82</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.P-1.

<sup>83</sup> Jodie Frost, Administrative Services Officer, Santa Rosa Police Department. Personal Communication with City of Santa Rosa, email. June 21, 2019.

be required to make a fair-share contribution to reserve funds for the replacement of public facilities, including police services.

SRPD is not able to anticipate the type or number of calls that would be generated by the project.<sup>84</sup> However, the condominium would be gated and employ design measures such as placement of parking and recreational areas in visible and well-lit locations. Moreover, because the project site is located on a wooded knoll surrounded by a private golf course on four sides, it would be difficult for unauthorized individuals to enter from outside the main entrance. These project attributes make it unlikely that the project would increase demands on the SRPD such that new or expanded facilities would be required to serve the project. Similar to the overall conclusion of the 2017 MND, impacts would be less than significant.

**c) Schools?**

**No impact.** The proposed project is an age-restricted senior housing community for residents 55 years old and older. As such, the proposed project would not directly increase K-12 enrollment in local schools. Thus, new or expanded school facilities would not be required. No impact would occur.

**d) Parks?**

**Less than significant impact.** Using the City's parkland ratio of 3.5 acres per 1,000 residents, the proposed project's 123 residents would create a demand for 0.43 acre of parkland. The project applicant would provide the City in lieu-of fees for the development of parkland elsewhere. As such, the proposed project would not directly result in a need for new or expanded park facilities. Similar to the overall conclusion of the 2017 MND, impacts would be less than significant.

**e) Other public facilities?**

**Less than significant impact.** The proposed project's 123 residents would create a demand for library services. However, 123 new residents represent a small proportion of the total population growth expected in Santa Rosa and Sonoma County through 2035. In 2016, Sonoma County Library prepared a Facilities Master Plan to guide facilities planning and improvements for the next 10 years. The Facilities Master Plan classified Rincon Valley Library, the closest library branch to the project site, as in good condition and a low priority for an update.<sup>85</sup> As such, the proposed project would not directly result in a need for new or expanded library facilities. Similar to the overall conclusion of the 2017 MND, impacts would be less than significant.

## Mitigation Measures

None.

<sup>84</sup> Jodie Frost, Administrative Services Officer, Santa Rosa Police Department. Personal Communication with City of Santa Rosa, email. June 21, 2019.

<sup>85</sup> Sonoma County Library. 2016. Sonoma County Library—Facilities Master Plan Report. Website: [https://sonomalibrary.org/sites/default/files/attachments/facilities/161214\\_Facilities%20Master%20Plan%20FINAL.pdf](https://sonomalibrary.org/sites/default/files/attachments/facilities/161214_Facilities%20Master%20Plan%20FINAL.pdf). Accessed April 15, 2019.



Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>16. Recreation</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to recreation. As described below, the proposed project would have less than significant impacts to recreation, which is consistent with the 2017 MND.

### Environmental Setting

The City of Santa Rosa provides and manages developed parkland, open space, and recreational facilities for the use of its residents. The City's Recreation and Parks Department is responsible for the development, operation, and maintenance of all City recreational facilities. City-run parks and park amenities are described in the previous section.

Other recreation services the City provides for residents include two community centers, two pools, a golf course, 78 parks, youth services, and hundreds of recreation classes.<sup>86</sup> The closest park to the project site is Nagasawa Community Park located at 1313 Fountaingrove Parkway, approximately 1.2 miles southeast of the project site. The nearest senior center is located at 2060 West College Avenue, approximately 4.5 miles south of the project site. The nearest community center is located at 415 Steele Lane, approximately 2.5 miles south of the project site.

Sonoma County Regional Parks Department provides and manages regional parks to serve its residents. There are roughly 4,206 acres of County maintained regional parkland in Sonoma County.<sup>87</sup> There are 11 regional parks within the City of Santa Rosa. The closest regional park to the

<sup>86</sup> City of Santa Rosa. Departments. Website: <https://srcity.org/148/Departments>. Accessed March 21, 2019.

<sup>87</sup> Sonoma County General Plan 2020 Draft Environmental Impact Report, 4.9-53.

project site is Tom Schopflin Fields located at 4351 Old Redwood Highway, approximately 4.2 miles east of the project site.<sup>88</sup> With the exception of Schopflin Fields, Shiloh Ranch Regional, and Annadel State Park, these parks and facilities are within the UGB.

- 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?**

**Less than significant impact.** Using the City's parkland ratio of 3.5 acres per 1,000 residents, the proposed project's 123 residents would create a demand for 0.43 acre of parkland. The project applicant would provide the City in lieu-of fees for the development of parkland elsewhere. As such, the proposed project would not directly result in a need for new or expanded park facilities. Similar to the overall conclusion of the 2017 MND, impacts would be less than significant.

- 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?**

**Less than significant impact.** The proposed project would provide on-site amenities such as a recreational building, pool, and spa. These facilities are evaluated within this MND. No off-site recreational facilities are proposed. Similar to the overall conclusion of the 2017 MND, impacts would be less than significant.

## Mitigation Measures

None.

<sup>88</sup> Sonoma County Regional Parks. "Parks A-Z." Website: [http://parks.sonomacounty.ca.gov/Get\\_Outdoors/Parks\\_A-Z.aspx](http://parks.sonomacounty.ca.gov/Get_Outdoors/Parks_A-Z.aspx). Accessed October 10, 2016.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>17. Transportation</b> <i>Would the project:</i>				
a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to transportation. As described below, the proposed project would have less than significant impacts to transportation, which is consistent with the 2017 MND.

### Environmental Setting

The General Plan lays out a set of balanced, long-range, multi-modal transportation goals and policies intended to provide for a safe, efficient transportation system that minimizes environmental, financial, and neighborhood impacts. Roadway typologies in the City's transportation network include freeway, expressway, residential street, local connector street, City connector street, main street, and on-street primary bicycle. LOS is a standard measure of traffic service along a roadway or at an intersection. It ranges from A to F, where LOS A is best and LOS F is worst. The City of Santa Rosa has a LOS standard of D or better, where feasible and appropriate.<sup>89</sup>

U.S. Highway 101 (US 101) is the major north-south route in Sonoma County, providing regional linkages to the Bay Area, the coast, and northern California. Fountaingrove Parkway serves as an

<sup>89</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft Environmental Impact Report, page 4.C-7.

important thoroughfare in the vicinity of the project site. Access to the site is provided via Thomas Lake Harris Drive and Gullane Drive, a private driveway that runs east from Thomas Lake Harris Drive.<sup>90</sup>

The Sonoma County Transportation Authority (SCTA) is the countywide planning and programming agency for transportation-related issues, essentially serving as a Congestion Management Authority. The SCTA implements a Comprehensive Transportation Plan (CTP), which identifies key roadway segments and intersections throughout the County. CTP segments and intersections are located on major transportation routes, including freeways, county expressways, urban arterials, and rural highways. There are no CTP segments or intersections in the vicinity of the project site.

Regional access is via Fountaingrove Parkway and US 101. CityBus Route 1 stops at Fountaingrove Parkway/Thomas Lake Harris Drive, 0.7 mile from the project site. There is an existing Class I bike trail along Fountaingrove Parkway.

Potential traffic impacts of the project were analyzed in the Focused Traffic Study conducted by W-Trans dated August 30, 2019 (Appendix G).

Would the project:

- a) **Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

**Less than significant impact.** The Santa Rosa General Plan 2035 Policy T-D-1 establishes LOS D as the minimum overall roadway performance level during peak travel periods along all major corridors. The City's standard does not specify criteria for intersections; however, since intersections typically exist where corridor capacity constraints occur; acceptable intersection operation typically translates to acceptable corridor operation. The W-Trans traffic impact study analyzed two intersections in the vicinity of the project site: Thomas Lake Harris Drive/Gullane Drive and Fountaingrove Parkway/Thomas Lake Harris Drive (West).

### **Trip Generation**

Land uses such as the proposed project typically generate very low levels of traffic. The anticipated trip generation for the proposed project, shown in Table 22, was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 9<sup>th</sup> Edition, 2012, for a "Senior Adult Housing-Attached" (Land Use No. 252). Trip generation for this land use is based on the number of beds.

The proposed 82 units are expected to generate an average of 303 new trips on a daily basis, including 16 trips during the AM peak-hour and 21 trips during the PM peak-hour.

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<sup>90</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Transportation Element.

**Table 22: Trip Generation Summary**

Use	Units	Daily		AM Peak-hour				PM Peak-hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Senior Adult Housing	82	3.70	303	0.20	16	6	10	0.26	21	12	9
Notes: <sup>1</sup> ITE land use category 252—Senior Adult Housing Source: W-Trans 2019.											

### Existing plus Project Intersection Levels of Service

Completion and occupation of the proposed project would result in a less than significant increase in delay, with all of the study intersections continuing to operate at LOS A during the AM and PM peak-hours. A summary of the LOS calculations is contained in Table 23.

**Table 23: Existing and Existing plus Project Peak Hour Intersection Levels of Service**

Study Intersection Approach	Existing Conditions				Existing Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Thomas Lake Harris Drive/Gullane Drive	0.5	A	0.2	A	1.2	A	0.9	A
<i>Westbound (Gullane Drive) Approach</i>	9.1	A	9.0	A	9.2	A	9.1	A
2. Fountaingrove Parkway/Thomas Lake Harris Drive (West)	6.2	A	5.1	A	6.6	A	5.4	A
Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in <i>italics</i> . Source: W-Trans 2019.								

### Baseline plus Project Intersection Levels of Service

Baseline operating conditions were assessed to reflect the addition of traffic associated with known projects that may be constructed and/or become operational in the study area in the next 2 to 3 years. Relevant projects used in the Baseline scenario were selected based on the expected impact to the study area from the City's "Permit Santa Rosa" portal, and confirmed with City Staff in January 2019:

- **Canyon Oaks:** 96 apartment units on Thomas Lake Harris Drive, north of Emerald Isle site
- **Fir Ridge Workforce Housing:** 36 attached residential dwellings at 3700 Fir Ridge Drive
- **Fountaingrove Inn Condos:** 22 attached residential dwellings at 3586 Mendocino Avenue
- **Terrazzo at Fountaingrove:** 19 single-family detached residential dwellings at 1601 Fountaingrove Parkway

- **Skyfarm 3:** 30 single-family detached residential dwellings at 3925 Saint Andrews Drive
- **The Arbors:** 37 single-family detached residential dwellings at 3500 Lake Park Drive
- **Bicentennial Estates 2 and 3:** 14 single-family detached residential dwellings at 3450 Lake Park Drive
- **Round Barn Village:** 237 attached residential dwellings at 0 Round Barn Boulevard
- **Residence Inn:** 114-room hotel at 3558 Round Barn Circle

Under Baseline Plus Project conditions, the study intersections would also experience a less than significant increase in delay, with continued LOS A operation during the AM and PM peak-hours. A summary of the LOS calculations is contained in Table 24.

**Table 24: Baseline and Baseline Plus Project Peak-hour Intersection Levels of Service**

Study Intersection Approach	Baseline Conditions				Baseline Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Thomas Lake Harris Drive/Gullane Drive	0.3	A	0.1	A	0.9	A	0.6	A
<i>Westbound (Gullane Drive) Approach</i>	9.5	A	9.6	A	9.7	A	9.6	A
2. Fountaingrove Parkway/Thomas Lake Harris Drive (West)	8.1	A	6.5	A	8.5	A	6.8	A
Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in <i>italics</i> . Source: W-Trans 2019.								

### Future Plus Project Intersection Levels of Service

Upon the addition of project-generated traffic to future volumes, the study intersections would continue to operate acceptably at LOS B or better during both AM and PM peak-hours, with less than significant increases in delay. A summary of the future LOS calculations is contained in Table 25.

**Table 25: Future and Future Plus Project Peak-hour Intersection Levels of Service**

Study Intersection Approach	Future Conditions				Future Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Thomas Lake Harris Drive/Gullane Drive	0.2	A	0.1	A	0.5	A	0.3	A
<i>Westbound (Gullane Drive) Approach</i>	10.8	B	11.0	B	11.1	B	11.0	B

**Table 25 (cont.): Future and Future Plus Project Peak-hour Intersection Levels of Service**

Study Intersection Approach	Future Conditions				Future Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
2. Fountaingrove Parkway/Thomas Lake Harris Drive (West)	14.9	B	10.5	B	15.5	B	11.0	B
Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in <i>italics</i> . Source: W-Trans 2019.								

As shown above, the study intersections are expected to operate acceptably upon the addition of project trips to Existing, Baseline, and Future scenarios, resulting in a less than significant impact on traffic operation.

Given the demographics of the project's residents and the surrounding land use context, residents would primarily be expected to generate pedestrian and bicycle trips for recreational purposes. Given the distance to the nearest CityBus stop and the hilly terrain of the area, relatively few residents are likely to use fixed-route transit when travelling to and from the project site. The proposed project would effectively tie into the surrounding multimodal circulation network, making walking and bicycling viable means of travel for employees and visitors. The project includes construction of a new sidewalk along the Gullane Drive extension to the project site, connecting to existing sidewalks on Gullane Drive and Thomas Lake Harris Drive. A network of on-site sidewalks would connect each of the apartment buildings to the central recreation center and leasing office, as well as to the sidewalk on Gullane Drive. Bicyclists can access the regional bicycle network via Gullane Drive and Thomas Lake Harris Drive, which connects to the existing Class I bike trail along Fountaingrove Parkway. Therefore, the project would effectively tie into the surrounding multimodal circulation network, making walking and bicycling viable means of travel for the project's residents, employees, and visitors. Given the distance to the nearest CityBus stop and hilly terrain in the area, relatively few of the project's residents are likely to use fixed-route transit when traveling to and from the project site. For those residents, employees, and visitors who do choose to use transit, continuous pedestrian facilities exist between the project site and the transit stop. Project residents with limited mobility would qualify for door-to-door paratransit service operated by CityBus. It is anticipated that most transit trips made by residents would be via existing paratransit services offered by CityBus. The project's accessibility to transit facilities and services is therefore considered to be acceptable.

Overall, the project would not have significant adverse impacts on the performance of the transportation system for any travel mode, and impacts with respect to conflicts with measures of transportation system effectiveness would be less than significant.



**b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

**Less than significant impact.** Using the vehicle miles traveled (VMT) values produced by the CalEEMod model, the project-related vehicle trips would travel 700,735 miles annually. The proposed project would be located in an existing urbanized portion of Santa Rosa that is within 2 miles of shopping and services and accessible to transit, bicycles, and pedestrians. Thus, the proposed project would not result in longer-than-average trip lengths relative to regional VMT averages. Impacts would be less than significant.

**c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less than significant impact with mitigation incorporated.** The project site is located on a small knoll north of Fountaingrove Lake. Access to the site would be provided from a gated driveway extending from the end of Gullane Drive. The driveway would cross the existing paved path connecting Holes 12 and 13 of the Fountaingrove Golf Course. Pavement treatments and signage would be installed at the crossing for safety purposes. An EVA, built to City standards, would be provided through a deeded easement from the northwest corner of the site, through the Fountaingrove Golf Course property, to Thomas Lake Harris Drive. For the 25 mph posted speed limit on Thomas Lake Harris Drive, the recommended stopping distance at a private street is 150 feet and the site distance at Gullane Drive extends 250 feet to the north. Sight distance from Gullane Drive to the north and south at the Thomas Lake Harris intersection is adequate for observed average speeds. However, some drivers on Thomas Lake Harris Drive are exceeding the posted 25 mph posted speed limit, at speeds requiring a greater sight distance than is available at the Gullane Drive intersection. MM TRANS-1 would ensure adequate sight distance at Gullane Drive intersection. Similar to the overall conclusion of the 2017 MND, with the implementation of the mitigation measure, the impact would be less than significant.

**d) Result in inadequate emergency access?**

**Less than significant impact.** Access to the site would be provided via an eastward extension of Gullane Drive. Driveways and internal drive aisles use standard configurations that would be navigable by emergency response vehicles. The project also includes an EVA between the northern portion of the site and Thomas Lake Harris Drive, providing two points of access for emergency service providers. The project driveway crosses a narrow portion of the Fountaingrove Golf Course and a paved golf cart/walking path. In tandem with construction of the driveway, the path would be realigned appropriately to cross the road perpendicularly. Emergency access and on-site circulation are expected to function acceptably at the project site. Similar to the overall conclusion of the 2017 MND, impacts associated with emergency access would be less than significant.

## **Mitigation Measures**

- MM TRANS-1** Prior to issuance of the first certificate of occupancy, the applicant shall add edge line striping on Thomas Lake Harris Drive for a distance of approximately 300 feet to the north and south of Gullane Drive. This would reduce speeds on Thomas Lake Harris Drive and ensure provision of adequate sight distance at Gullane Drive. The City of Santa Rosa shall review and approve the striping plan.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>18. Utilities and Service Systems</b> <i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to utilities and service systems. As described below, the proposed project would have less than significant impacts to utilities and services systems, which is consistent with the 2017 MND.

### Environmental Setting

A majority of the City's water supply is derived from the Russian River watershed and is delivered under contractual agreement by the SCWA. The SCWA holds water rights to divert 92 million gallons of water per day (mgd) with an annual maximum of 75,000 acre-feet per year from the Russian River. The SCWA also has three groundwater wells in the Santa Rosa Plain, which provide an average

additional supply of 3,870 acre-feet per year.<sup>91</sup> The City of Santa Rosa demanded 16,679 acre-feet in 2015 and expected the demand to rise to 28,840 acre-feet by 2040.<sup>92</sup>

Stormwater generated in Santa Rosa drains through six drainage basins to the Laguna de Santa Rosa. The largest drainage basin includes Santa Rosa Creek, which drains the northern Santa Rosa area by six major creeks and various tributaries. Four creeks (Brush, Austin, Spring, and Matanzas) primarily drain the easterly portion, while Paulin and Piner Creeks drain the westerly portion. Santa Rosa Creek also drains stormwater runoff generated downtown and in surrounding neighborhoods. The number and location of creeks in northern Santa Rosa result in adequate stormwater drainage capacity in the northern area.<sup>93</sup> The City's SUSMP requires projects to design and implement post-development measures to reduce the potential stormwater impacts to local drainages.<sup>94</sup>

For solid waste, within the City of Santa Rosa, Recology provides solid waste and recycling collection services to commercial and residential customers. The City of Santa Rosa and Recology maintain an exclusive franchise agreement for the collection of solid waste, organic waste and recyclable materials in the City pursuant to Chapter 9-12 of the Santa Rosa City Code. Sonoma County disposes of solid waste to Redwood Sanitary Landfill, Potrero Hills Landfill, Vasco Road Landfill, and Keller Canyon Landfill, because the Central Disposal Facility that previously served the County is no longer operational. The closest landfill to the project site, Redwood Sanitary Landfill in Novato, has a permitted daily capacity of 2,300 tons and a total remaining permitted capacity of 26 million tons through 2039.<sup>95</sup>

The State of California has mandated a 50 percent waste diversion rate that must be met by all counties. The waste diversion rate is expected to rise, due to continued waste reduction programs such as composting, special waste, and household toxics. The County has also adopted several waste reduction initiatives, including the Carryout Bags Ordinance and Sonoma Green Business Program, to promote and divert the amount of waste away from landfills.<sup>96</sup>

The City's existing water distribution system is divided into 18 major pressure zones, and several smaller sub-zones, that are served by pipelines ranging in diameter from 4 to 24 inches. The majority of services are provided via 6-inch to 12-inch diameter mains.<sup>97</sup> The City's Utilities Department is responsible for the operation and management of the Santa Rosa Subregional Water Reclamation System, which operates the Laguna Wastewater Treatment Plant (WWTP). The Laguna WWTP is a tertiary level treatment facility that has an average daily dry weather flow of 16.5 mgd and is

<sup>91</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Public Services and Facilities Element, page 6-8.

<sup>92</sup> City of Santa Rosa. 2015 Urban Water Management Plan, page ES-2. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

<sup>93</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Public Services and Facilities Element, page 6-13.

<sup>94</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.

<sup>95</sup> California Department of Resources Recycling and Recovery (CalRecycle). 2017. Redwood Landfill. Website: <http://www.calrecycle.ca.gov/SWFacilities/Directory/21-AA-0001/Detail/>. Accessed April 15, 2019.

<sup>96</sup> Sonoma County Waste Management Agency. Sonoma County 2018 Recycling Guide. Website: <http://www.recyclenow.org/pdf/2018-Recycling-Guide-Condensed-English-Rev25-for-web.pdf>. Accessed March 27, 2019.

<sup>97</sup> City of Santa Rosa. 2015 Urban Water Management Plan, page 3-4. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

permitted for 21.34 mgd average daily dry weather flow.<sup>98</sup> Laguna WWTP serves the cities of Santa Rosa, Rohnert Park, Sebastopol, and Cotati. In 2015, Laguna WWTP treated an estimated 13,119 AF.<sup>99</sup> The primary point of discharge is via Delta Pond at the confluence of Santa Rosa Creek and Laguna de Santa Rosa. The North Coast RWQCB regulates wastewater discharges, which cannot exceed 5 percent of the Russian River flow.<sup>100</sup>

Would the project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

**Less than significant impact.** The need for new or expanded water, wastewater, storm drainage, and energy facilities are addressed as follows.

### Water Facilities

The proposed project is estimated to use 17,835 gallons per day and its water supply demands are accounted for in the City's UWMP projections. Thus, no new sources of water supply would need to be procured. The project would be served with a looped 4-inch to 8-inch diameter water system that would connect to the City of Santa Rosa municipal water system at manholes within Gullane Drive and Thomas Lake Harris Drive. No off-site infrastructure would be required. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

### Wastewater Facilities

The project would be served by a 6-inch diameter force and gravity sewer system that would connect to the City of Santa Rosa municipal sewer system at manholes within Gullane Drive and Thomas Lake Harris Drive. Wastewater from the project would mainly consist of effluent typical of residential units. The proposed project's wastewater would not exceed the capacity of the City's wastewater treatment facility, and no off-site wastewater facilities would be required. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

### Stormwater Drainage

The project would install an on-site storm drainage system consisting of inlets and underground piping that would discharge to several rip-rap outfalls located throughout the project site. The outfalls would discharge either into infiltration trenches or overland. No off-site infrastructure would be required. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

<sup>98</sup> City of Santa Rosa. 2015 Urban Water Management Plan, page 6-12. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

<sup>99</sup> City of Santa Rosa. 2015 Urban Water Management Plan, page 6-14. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

<sup>100</sup> *Ibid.*

## Energy Facilities

The project would be served with electricity generated by Sonoma Clean Power and delivered by Pacific Gas and Electric Company (PG&E).<sup>101,102</sup> The project would be served with natural gas procured and delivered by PG&E. All service laterals would be located underground. No off-site infrastructure would be required. Impacts associated with energy facilities would be less than significant. Impacts would be less than significant.

## Telecommunications

There are no telecommunications facilities located on-site. However, the project would not need new telecommunications facilities (e.g. underground optical fibers or cell towers) because it is located in an urban area that already contains sufficient telecommunications facilities. Therefore, impacts related to need for relocation or construction of new or expanded telecommunications facilities would be less than significant.

**b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

**Less than significant impact.** The project would be served by the City of Santa Rosa's potable water system. Using the City of Santa Rosa 2015 UWMP water use rate of 145 gallons per capita per day (gpcd), the proposed project is estimated to use 17,835 gpcd. The project site is within the City's Urban Growth Boundary and is designated for residential use by the General Plan; as such, its water demand is accounted for in the UWMP's projections. The UWMP forecasts a surplus of water under 2040 conditions and, therefore, adequate water supply would be available. Based on current water demand projects for the proposed project, the City would have sufficient water supply. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

**c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**Less than significant impact.** The Laguna WWTP has an average daily dry weather flow of 16.5 mgd and permitted to treat a dry weather flow of 21.34 mgd. As such, there 4.84 mgd of available treatment capacity.

The City's Sanitary Sewer System Master Plan provides a wastewater generation rate of 50 gpcd for residential uses.<sup>103</sup> The proposed project would house approximately 123 seniors and employ four staff members. The project would generate 6,350 gpcd of wastewater, which is less than 1 percent of the available 4.84 mgd capacity at Laguna WWTP. Thus, there is sufficient capacity at the treatment plant

<sup>101</sup> Sonoma Clean Power. 2019. Frequently Asked Questions. Website: <https://sonomacleanpower.org/frequently-asked-questions>. Accessed: June 14, 2019.

<sup>102</sup> In 2002, California passed California's Community Choice Aggregation law, which makes public programs like Sonoma Clean Power the default service provider. Using a conservative approach, FCS assumed PG&E was the service provider.

<sup>103</sup> City of Santa Rosa (prepared by ARCADIS). 2014. Sanitary Sewer System Master Plan Update. Website: <https://srcity.org/DocumentCenter/View/8911/Santa-Rosa-Master-Plan-PDF?bidId=>. Accessed: July 1, 2019. April.

to serve the proposed project in addition to existing commitments. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

**d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less than significant impact.** There is sufficient landfill capacity available to accommodate the construction and operational phase of the project. Central Disposal Site has a capacity of roughly 9.1 million cubic yards and has a maximum daily throughput of 2,500 tons daily. Using a waste disposal rate of 3,650 pounds/dwelling unit/year, the project would generate 150 tons (210 cubic yards) of solid waste annually. This value represents less than 0.001 percent of the landfill facility's daily permitted throughput, and the facility would have adequate capacity to serve the project. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

**e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?**

**Less than significant impact.** Recology is the City of Santa Rosa's franchise waste hauler and provides solid waste, organic, and recyclable material pick-up to residential and non-residential customers within the city limits. Recology provides separate collection containers to its customers for organic and recyclable materials, thereby allowing them to be separated from the solid waste stream. Recology would provide the project with dumpsters (or other containers) for organics and recycling. This would further City and State efforts to meeting recycling and waste reduction targets. Similar to the conclusion of the 2017 MND, impacts would be less than significant.

## Mitigation Measures

None.



Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>19. Wildfire</b> <i>If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Environmental Setting

The project would implement a defensible space plan consisting of four vegetation management zones around the perimeter of the project. Vegetation within the required defensible space zones shall be modified to prevent the rapid transmission of fire from the wildland to the project structures.

CAL FIRE prepares maps of VHFHS Zones that are used to develop recommendations for cities and planning. CAL FIRE categorizes parcels into VHFHS and Non-VHFHS zones. According to the VHFHS Zones in the LRA map for Sonoma County, the project site is within an area of local responsibility and not within a VHFHS Zone.<sup>104</sup> Figure 12-5 of the Santa Rosa General Plan 2035 identifies the project site within the Wildland-Urban Interface (WUI) Zone. According to the International Association of Fire Chiefs, the WUI Zone is defined as:

<sup>104</sup> California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LRA, Sonoma County. Website: [http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl\\_map.49.pdf](http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl_map.49.pdf). Accessed March 25, 2019.

... areas where homes are built near or among lands prone to wildland fire ... [t]he WUI is not a place, per se, but a set of conditions that can exist in nearly every community. It can be a major subdivision or it can be four homes on an open range. According to the National Fire Protection Association, conditions include (but are not limited to): the amount, type, and distribution of vegetation; the flammability of the structures (homes, businesses, outbuildings, decks, fences) in the area, and their proximity to fire-prone vegetation and to other combustible structures; weather patterns and general climate conditions; topography; hydrology; average lot size; and road construction. The WUI exists in every state in the country.<sup>105</sup>

The City has identified a WUI Zone that encompasses four types of fire hazard zones: moderate, high, very high, and mutual threat. Approximately 30 percent of Santa Rosa is located within the WUI zone.<sup>106</sup>

The project site was affected by the 2017 Tubbs Fire. Following the fire, the project site's trees within the development area were inventoried. It was determined that several trees were damaged or destroyed by the fire. Subsequently, multiple trees within the development area were removed under a prior approval with the City of Santa Rosa. Surrounding properties were affected by the fire, including the single-family residential uses to the northwest (Oaks Unit 1) and northeast (Lake Pointe and Skyfarm) that were destroyed.

Would the project:

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

**Less than significant impact.** Access to the site would be provided from a gated driveway extending from the end of Gullane Drive. The driveway would cross the existing paved path connecting Holes 12 and 13 of the Fountaingrove Golf Course. Pavement treatments and signage would be installed at the crossing for safety purposes. An EVA would be provided through a deeded easement from the northwest corner of the site, through the Fountaingrove Golf Course property, to Thomas Lake Harris Drive. The Focused Traffic Study concluded that emergency access and on-site circulation would be expected to function acceptably at the project site.<sup>107</sup> Furthermore, the LHMP designates emergency evacuation routes, including US 101, SR 12 and Fountaingrove Parkway/Mission Boulevard.<sup>108</sup> Located on a wooded knoll at the eastern end of Gullane Drive, the project would not interfere with evacuation along these routes or otherwise conflict with an adopted emergency response plan. Impacts would be less than significant.

<sup>105</sup> International Association of Fire Chiefs. 2019. Wildland Urban Interface. Website: <https://www.wildlandfirersg.org/About/Wildland-Urban-Interface>. Accessed: June 17, 2019.

<sup>106</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, figure 12-5.

<sup>107</sup> W-Trans. 2019. Focused Traffic Study for the Emerald Isle Senior Housing Project. August 30.

<sup>108</sup> City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan, page 19.

- 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?**

**Less than significant impact.** The project site is surrounded by the Fountaingrove Golf Course with residential development to the west and north. The site is located in an area designated as a Non-VHFHS Zone on CAL FIRE's VHFHS Zone in the LRA map for Sonoma County. However, the project site is within a WUI Zone according to the Fire Hazard Zones figure in the Santa Rosa General Plan 2035.<sup>109</sup> According to the General Plan Policy NS-G-5, developments in WUI Zones require fire prevention and control measures. In compliance with the General Plan policy, the project would implement a defensible space plan to reduce the potential for wildfire spread surrounding the area. The project would also comply with applicable fire safety provisions of the CBC. Impacts would be less than significant.

- 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 ongoing impacts to the environment?**

**Less than significant impact.** In compliance with General Plan Policy NS-G-5, the project would implement a defensible space plan consisting of four vegetation management zones around the perimeter of the project, reducing fire fuel around the proposed structures and reducing the risk involving wildland fires. Further, the proposed facility would be equipped with fire sprinklers and would comply with the applicable fire safety provisions of the CBC, thereby reducing the risk of damage from fire to the maximum extent practicable. The SRFD reviewed the project and concluded that the associated infrastructure is compliant with SRFD requirements and, if properly maintained at all times, should not pose a temporary or ongoing impact to the environment.<sup>110</sup> Impacts would be less than significant.

- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**Less than significant impact.** The project site was affected by the 2017 Tubbs Fire. At the time of the fire, the site did not experience flooding, landslides, or post-fire slope instability. The project includes landscaping and grading in compliance with geotechnical recommendations to ensure stability of site slopes. In addition, the project would install separate site storm drain systems that have been designed to maintain the existing distribution of runoff from the site to prevent flooding, erosion, and associated instability. Where surface sheet flow of runoff is not feasible, drainage would be captured in the proposed underground pipe systems and conveyed to locations of downstream concentrated flow, in a few cases utilizing existing storm drain easements through the off-site golf course property to do so. The SRFD reviewed the project and concluded that the project would require proper maintenance and housekeeping of all properties and structures (as defined in the Defensible Space Plan).<sup>111</sup> With implementation of the geotechnical recommendations, as well as

<sup>109</sup> City of Santa Rosa. 2009. Santa Rosa General Plan 2035, figure 12-5.

<sup>110</sup> Ian Hardage, Assistant Fire Marshall, Santa Rosa Fire Department. Personal Communication with FirstCarbon Solutions, email. June 14, 2019.

<sup>111</sup> Ian Hardage, Assistant Fire Marshall, Santa Rosa Fire Department. Personal Communication with FirstCarbon Solutions, email. June 14,

implementation of the proposed storm drainage, and proper maintenance and housekeeping, impacts would be less than significant.

## **Mitigation Measures**

None.

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2019.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
<b>20. Mandatory Findings of Significance</b>				
a) Does the project have the potential to substantially 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, substantially 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Evaluation

### Introduction

There are no substantial changes in the proposed project, or new information of substantial importance since the 2017 MND that would result in any new significant environmental effects, or substantial increases in the severity of previously identified significant effects related to mandatory findings of significance. As described below, the proposed project would have less than significant impacts related to mandatory findings of significance, which is consistent with the 2017 MND.

- a) **Does the project have the potential to substantially 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, substantially 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?**

**Less than significant impact with mitigation incorporated.** The project would involve the construction of 82 for-rent condominium multi-family dwelling units with related amenities and infrastructure and the implementation of a range of mitigation and actions designed to reduce impacts. With implementation of the proposed mitigation measures, impacts to biological resources,

air quality, and cultural resources would be reduced to a less than significant level. While unlikely, there is the potential to uncover undiscovered archaeological, paleontological or human remains in the course of construction activities on-site, and accordingly mitigation would be required avoid the accidental destruction or disturbance of previously undiscovered cultural resources. Overall, with implementation of these mitigation measures, the project would not substantially degrade the quality of the environment and associated impacts would be less than significant.

- 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)?**

**Less than significant impact with mitigation incorporated.** The project would involve the construction of 82 for-rent condominium multi-family dwelling units with related amenities and infrastructure. The project would not require a change in the General Plan land use designation applicable to the site and would not conflict with the General Plan buildout projections. Potentially significant site-specific impacts to migratory birds, trees, previously undiscovered historical or cultural resources, and soil stability would be mitigated to less than significant levels with the implementation of MMs BIO-1a, MM BIO-1b, MM BIO-2, MM CUL-1, MM GEO-1, MM GEO-2, MM GEO-3, and MM GEO-4. Potentially significant area impacts related to air quality, noise, and transportation would be reduced to a less than significant level with implementation of MMs AIR-1, MM AIR-2, MM NOI-1, and MM TRANS-1. Overall, with implementation of these mitigation measures, the project would not substantially degrade the quality of the environment and associated impacts would be less than significant. Other projects constructed within the City of Santa Rosa would be required to demonstrate regulatory compliance and implement similar mitigation measures as needed. Therefore, this project would not have impacts that are individually limited, but cumulatively considerable.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less than significant impact.** Compliance with existing regulations and implementation of City of Santa Rosa standard permit conditions would ensure that the project would not result in substantial adverse effects on human beings, including effects related to air pollution, seismic and geologic hazards, hazardous materials, flooding and natural disasters, or noise and vibration. Therefore, impacts would be less than significant.

## Mitigation Measures

Implement MMs AIR-1, MM AIR-2, MM BIO-1a, MM BIO-1b, MM BIO-2, MM CUL-1, MM GEO-1, MM GEO-2, MM GEO-3, MM GEO-4, MM NOI-1, and MM TRANS-1.

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### 3.1.1 - Environmental Consultant

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Biologist .....	Robert Carrol
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