

Proposed Mitigated Negative Declaration

Publication Date: June 5, 2020
Public Review Period: June 5, 2020 – July 6, 2020
State Clearinghouse Number:
Permit Sonoma File Number: **UPE16-0086**
Prepared by: Tricia Stevens
Phone: (916) 698-4592

Pursuant to Section 15071 of the State CEQA Guidelines, this proposed Mitigated Negative Declaration and the attached Initial Study, including the identified mitigation measures and monitoring program, constitute the environmental review conducted by the County of Sonoma as lead agency for the proposed project described below:

Project Name:	UPE16-0086
Project Applicant/Operator:	Kevin Skiles
Project Location/Address:	3890 Old Redwood Highway Santa Rosa, CA 95403
APN:	058-020-009
General Plan Land Use Designation:	Resource and Rural Development 20-acre density (RRD20)
Zoning Designation:	Resource and Rural Development (RRD20), Riparian Corridor 50/50, Scenic Resource (Community Separator), and Valley Oak Habitat Combining District
Decision Making Body:	Sonoma County Board of Zoning Adjustments
Appeal Body:	Sonoma County Board of Supervisors
Project Description:	See Item III, below

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" or "Less than Significant with Mitigation" as indicated in the attached Initial Study and in the summary table below.

Table 1: Summary of Topic Areas			
Topic Area	Abbreviation	Yes	No
Aesthetics	VIS		No
Agricultural & Forest Resources	AG		No
Air Quality	AIR	Yes	
Biological Resources	BIO	Yes	
Cultural Resources	CUL		No
Energy	ENE		No
Geology and Soils	GEO	Yes	
Greenhouse Gas Emission	GHG		No
Hazards and Hazardous Materials	HAZ	Yes	
Hydrology and Water Quality	HYDRO		No
Land Use and Planning	LU	Yes	
Mineral Resources	MIN		No
Noise	NOISE		No
Population and Housing	POP		No
Public Services	PS		No
Recreation	REC		No
Transportation and Traffic	TRAF	Yes	
Tribal Cultural Resources	TCR		No
Utility and Service Systems	UTL		No
Wildfire	WILD		No
Mandatory Findings of Significance			No

RESPONSIBLE AND TRUSTEE AGENCIES

The following lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project.

Table 2: Public Agencies		
Agency	Activity	Authorization
Bay Area Air Quality Management District (BAAQMD)	Stationary air emissions	BAAQMD Rules and Regulations (Regulation 2, Rule 1 – General Requirements; Regulation 2, Rule 2 – New Source Review; Regulation 9 – Rule 8 – NO _x and CO from Stationary Internal Combustion Engines; Regulation 11, Rule 18 – Reduction of Risk from Air Toxic Emissions at Existing Facilities; and other BAAQMD administered Statewide Air Toxics Control Measures (ATCM) for stationary diesel engines
Army Corps of Engineers	Wetlands	Section 404 of the Clean Water Act, 33 U.S.C. §1344 et seq.
State Water Resources Control Board	Public water system	Section 116525 of the California Health and Safety Code

ENVIRONMENTAL FINDING:

Based on the evaluation in the attached Initial Study, I find that the project described above could not have a significant effect on the environment, and a Mitigated Negative Declaration is proposed.

Based on the evaluation in the attached Initial Study, I find that the project described above will not have a significant adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included as conditions of approval for the project and a Mitigated Negative Declaration is proposed. The applicant has agreed in writing to incorporate identified mitigation measure into the project plans.

NAME _____

Date: _____



County of Sonoma
Permit & Resource Management Department

Initial Study

I. INTRODUCTION:

The applicant is applying for a Use Permit to construct a rural lodging and event center, named the Solstice, on a site that was previously used for a youth camp, which was destroyed by the 2017 Tubbs fire. The Solstice is located just north of the City of Santa Rosa, and is surrounded by an office building to the south, a senior living facility to the southeast, Cloverleaf Ranch, which is a large horse ranch, youth camp and riding academy, to the east and north, and a Kaiser Permanente health center to the west.

The proposed project would involve constructing 13 cabins, 12 for guests, and one for employees. It also would involve constructing a 9,861 square foot (sf) event barn, a 1,330-square-foot building to serve as the reception office and to offer some items for purchase by overnight guests, storage areas for golf carts, pool equipment, and other equipment, and a renovated pool area including a pool bar and equipment, restrooms, and storage. The project also included the construction of decking adjacent to the pond, and a dock the projects into the pond.

Other proposed features include:

- A Special Events tent erected to replace the existing dining hall. The tent would be erected less than ½ the calendar year
- Six acres of grapes would be planted.
- New septic system would be constructed to support new uses. The existing well is built to public water system standards and can meet project demand for potable water.

This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by Tricia Stevens, Contract Planner with MIG. Information on the project was provided by Kevin Skiles of Solstice, LLC. Other reports, documents, maps and studies referred to in this document are available for review at the Permit and Resource Management Department (Permit Sonoma).

Please contact Tricia Stevens, Contract Planner, at (916) 698-4592 for more information.

II. EXISTING SETTING

The project is located at 3890 Old Redwood Highway, Santa Rosa on a previously developed 22-acre parcel zoned Resource and Rural Development, 20-acre density (RRD20), Riparian Corridor (RC), and Scenic Resource (community separator), and Valley Oak Habitat (VOH).

III. PROJECT DESCRIPTION

Solstice, LLC proposes 23,025 sf of new development that would include guest cabins, an event barn, check-in building, storage areas, and a renovated pool area at 3890 Old Redwood Highway in Santa Rosa, California. The operation would employ six to eight full-time and 10 to 16 part-time employees.

Existing Uses: The project site formerly contained a recreational camp facility which was utilized for the past 50 years as a camp and special-events facility, hosting approximately 120 overnight campers as well as weddings, corporate picnics and other large events. Prior to the October 2017 wildfire, the project site

contained several bunkhouses, a kitchen and dining facility, a 100-year-old church which was previously relocated to the property, a pool, and two (2) single-family homes. The previous facility, known as Buzzard Gulch, had various levels of activities over the years and at the time of the original submittal (2016), the site was largely abandoned. All improvements were destroyed by the 2017 Tubbs fire.

Topography and Drainage: The project site drains from a small mound located near the center of the site, to the east and west. The lowest existing elevations are on the western boundary of the site.

Vegetation: The majority of the project site is grassland with scattered shrubs and trees. There is a pond on the eastern portion of the project site, and Piner Creek enters the pond from the north and exists from the south.

Proposed Buildings and Uses: The project involves constructing 13 cabins, 12 for guests, and one for employees. The cabins total 9,944 square feet and range in size from 442 to 1,049 square feet. It also would involve constructing a 9,861 square foot (sf) Event Barn, a 1,330-square-foot building to serve as the reception office and to offer some items for purchase by overnight guests, storage areas for golf carts, pool equipment, and other equipment, and a renovated pool area including a pool bar and equipment, restrooms, and storage. The project also included the construction of decking adjacent to the pond, and a dock the projects into the pond.

Special Events: The project includes 50 special events, such as weddings, including 20 events of up to 250 guests and 30 events up to 175 guests. Hours of events will be limited to 10 a.m. to 10 p.m. The applicant also proposes 50 special-dining events for up to 80 people.

Parking (Employees and Guests): The project would include 60 permanent parking spaces for guests and employees, and an area for 42 vehicles parked by valet. The visitor parking lot would be located at the end of the public access road from Old Redwood Highway, along the southern boundary of the project site. Employee parking would be located immediately adjacent to the northern access road, along northern boundary of the project site.

Landscaping: The project landscaping plan indicates approximately 130 trees to be planted along all sides of the project site and along internal circulation routes. Trees would be a combination of maple, redbud, laurel, crepe myrtle, and oak species, all of which are native and fire resistant. The proposed landscaping would provide substantial visual screening of the proposed project features from Old Redwood Highway. The proposed landscaping plan would also include groundcover, grasses and vines.

Access: All access and egress for visitor and employee vehicles would be one proposed driveway, off of Redwood Highway. Emergency vehicle access will be provided on the north side into the Cloverleaf Ranch.

Site Improvements: The proposed structures and features on the site will consist of the onsite buildings, asphalt paving, sidewalks and walkways, chain link fencing and gates, site lighting, landscaping, underground utilities, storm water management facilities, Low Impact Development (LID) features and related improvements. The applicant has prepared a Preliminary Standard Urban Stormwater Mitigation Plan (SUSMP) that will be evaluated in the hydrology section of this document. At total of 1,500 cubic yards of grading is proposed.

Domestic wastewater disposal: A new septic system would be constructed on site.

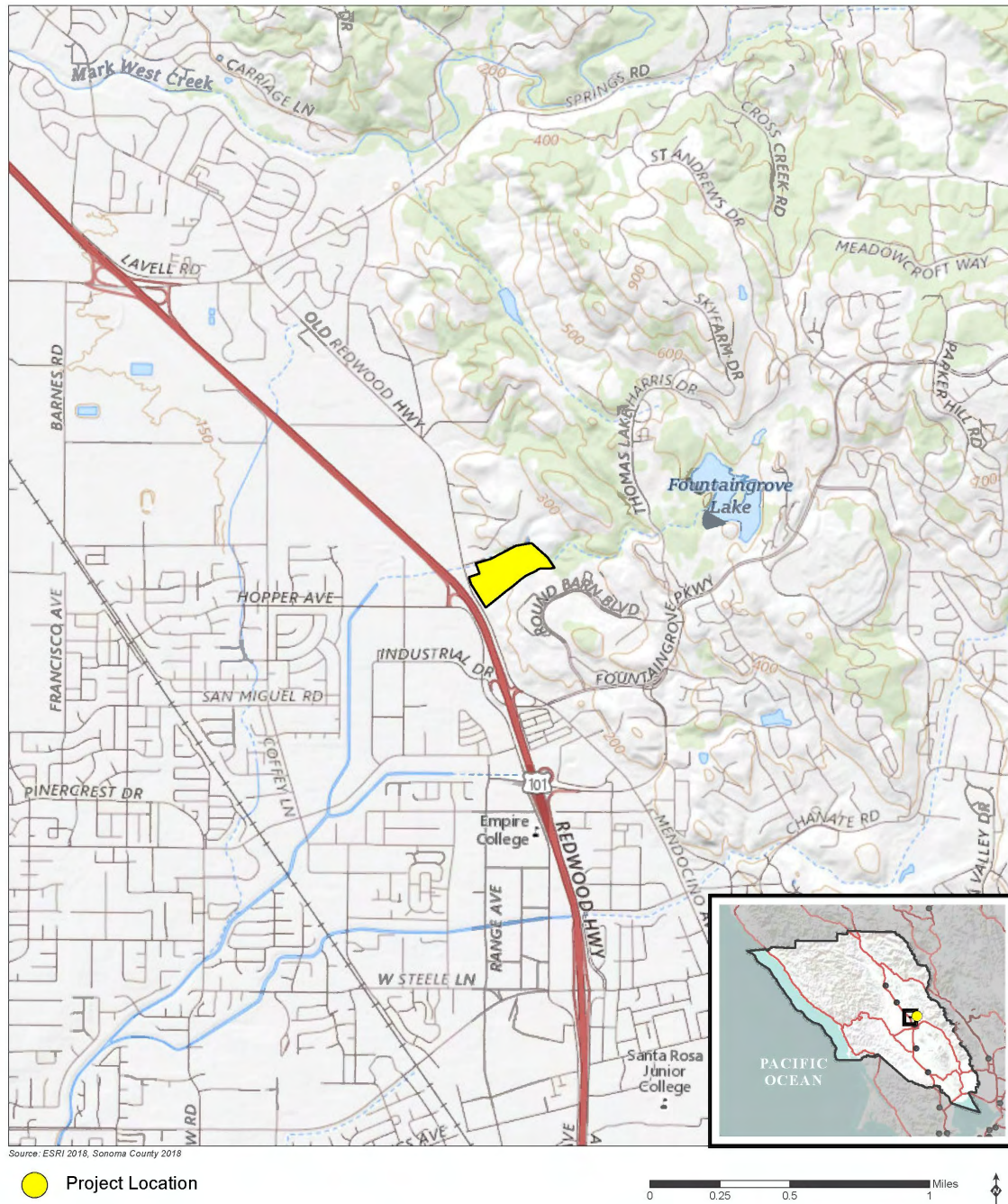


Figure 1 Project Vicinity Map

3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA





Source: ESRI 2019, Sonoma County 2018

- Project Boundary (20.90 ac)
- City of Santa Rosa

0 100 200 400 Feet



Figure 2 Project Site Map

3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA

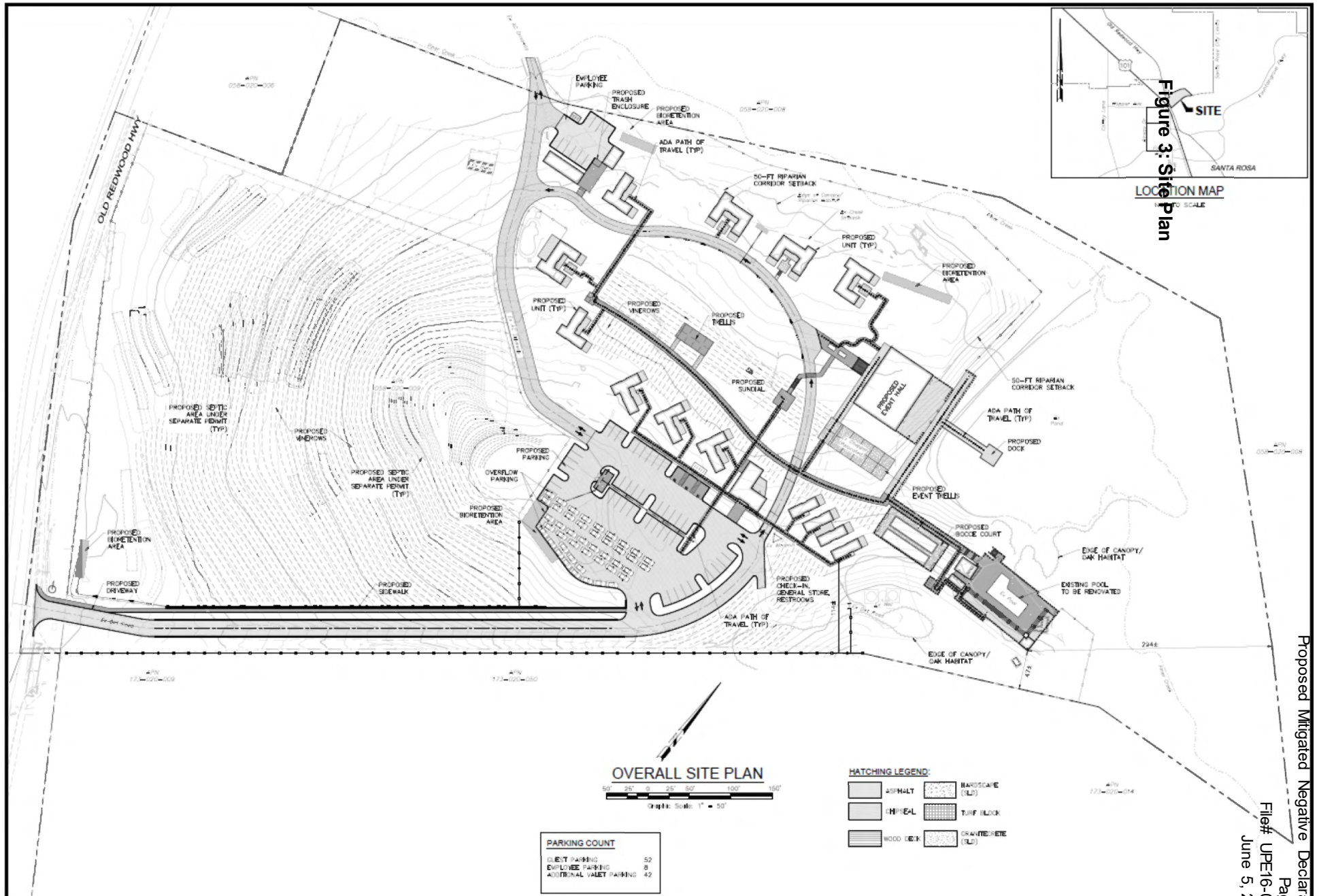


Figure 3 Site Plan

3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA

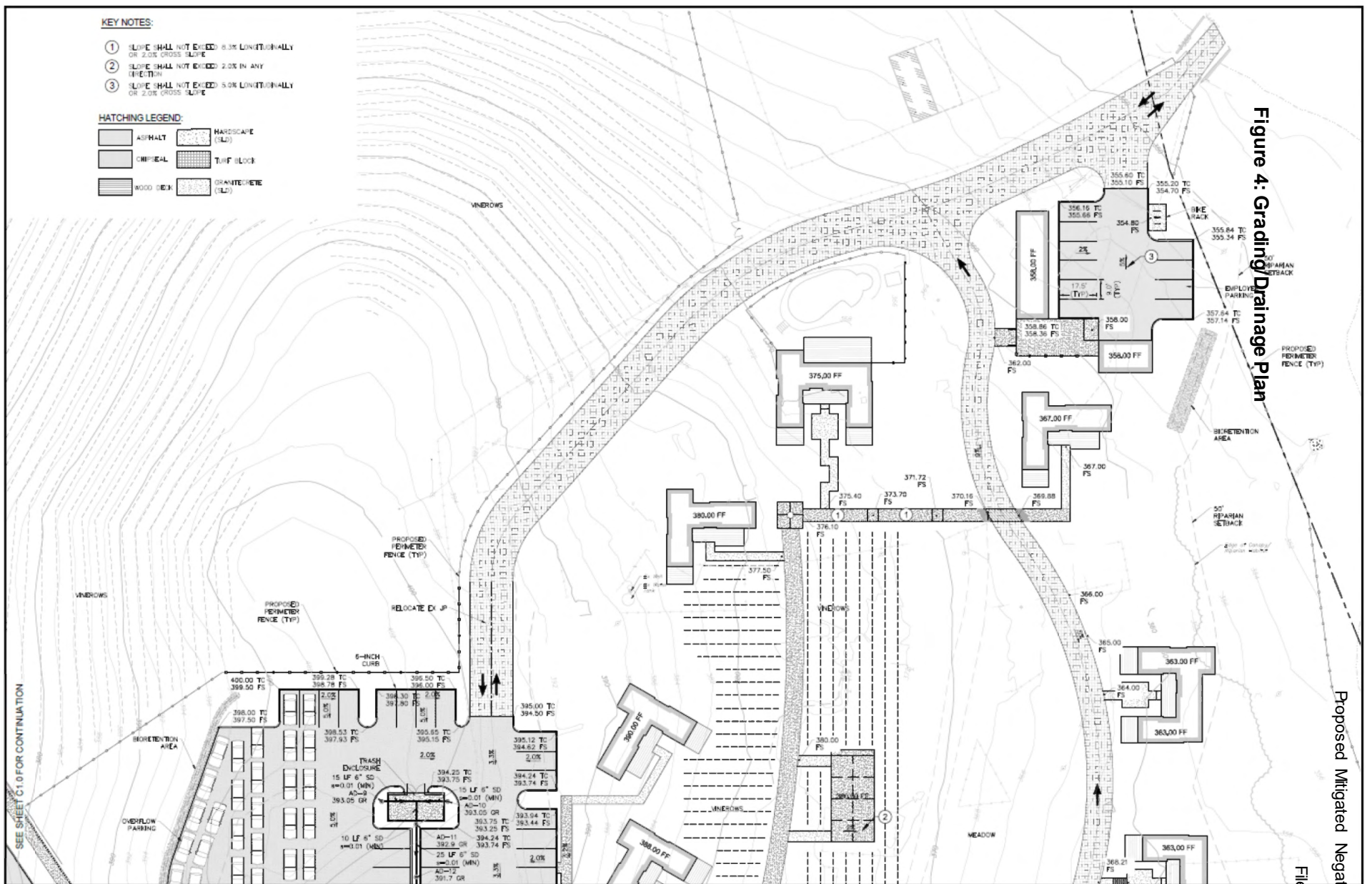


Figure 4a Preliminary Grading/Drainage Plan

3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA

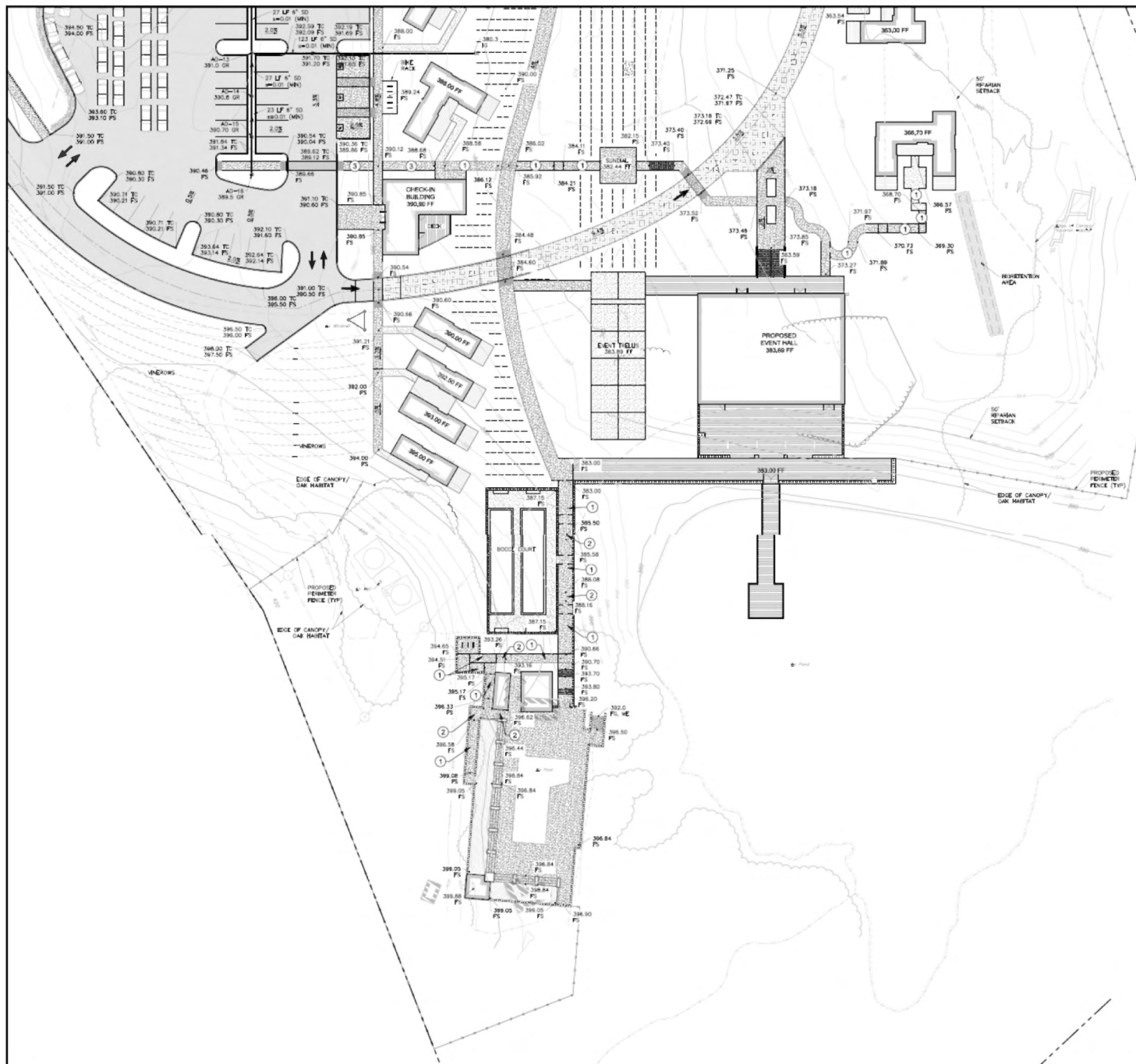


Figure 4b Preliminary Grading/Drainage Plan
 3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA

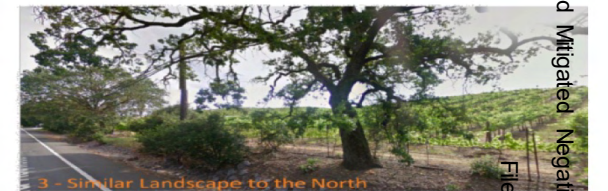


Figure 5a Visual Assessment

3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA

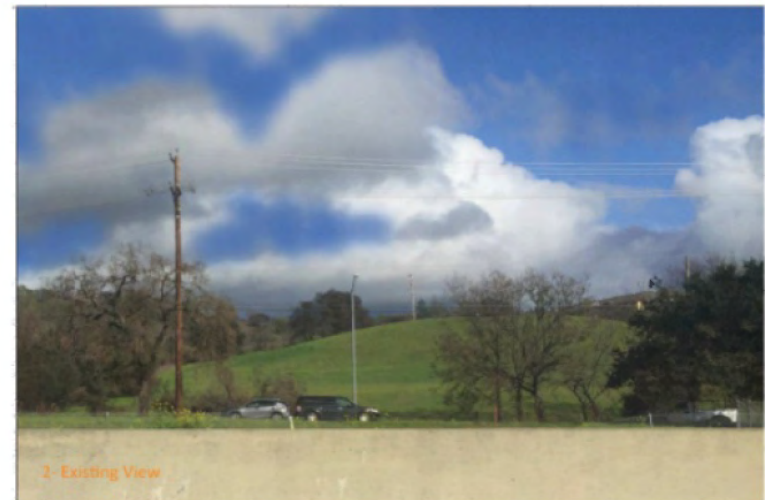
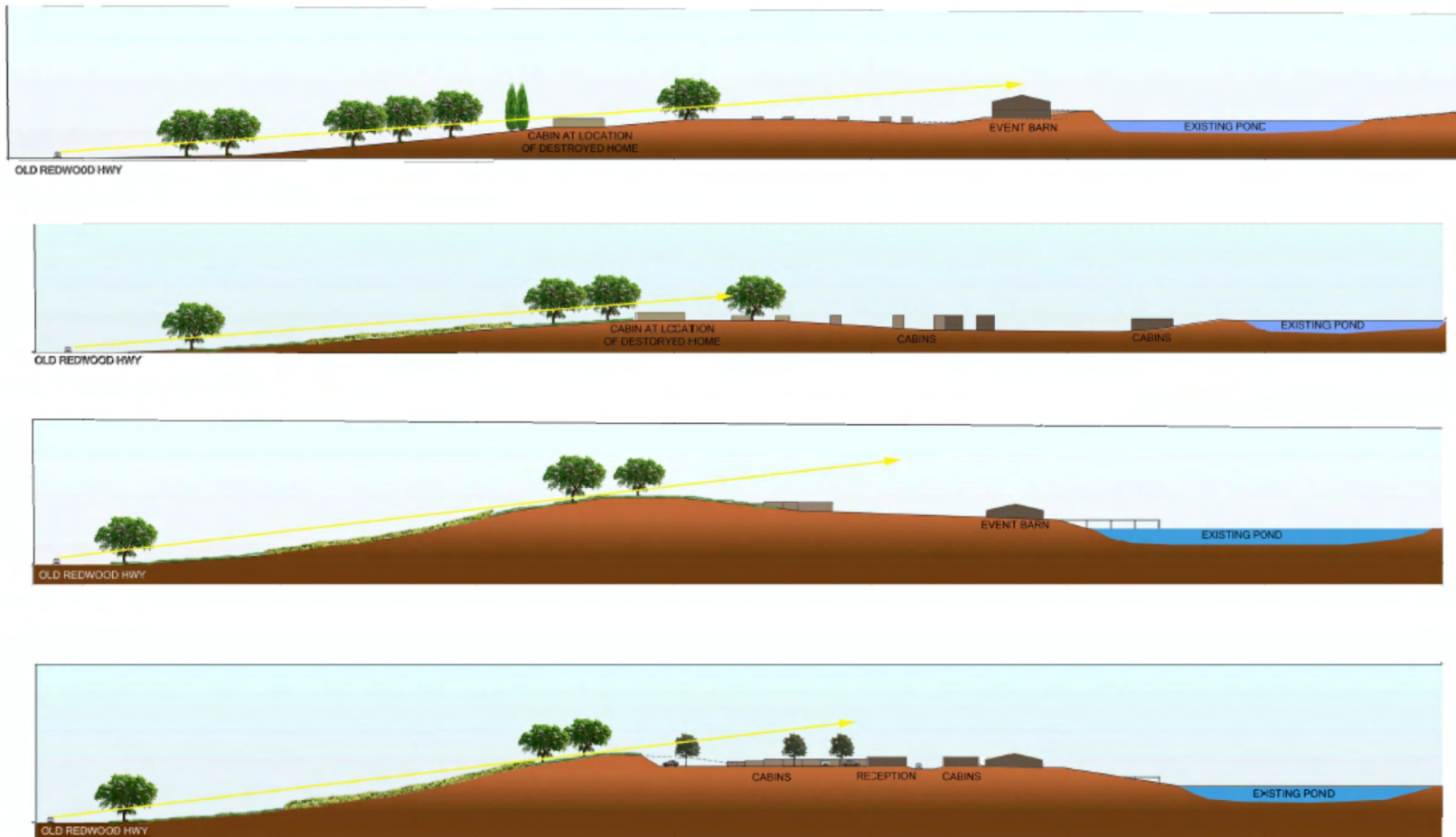


Figure 5b Visual Assessment

3890 Old Redwood Highway Project Site, City of Santa Rosa, Snoma County, CA



SECTION A-A



SECTION CUT KEY

Figure 5c Visual Assessment

3890 Old Redwood Highway Project Site, City of Santa Rosa, Sonoma County, CA

IV. SETTING

The project area is partially developed and located northeast of the City of Santa Rosa. The site is surrounded by properties designated for rural uses to the north and east, office and urban residential uses to the south and southeast, and medical office uses and Highway 101 to the west. The City of Santa Rosa abuts the site to the south and west. The topography of the project site is relatively flat on the western half of the property with slopes rising approximately 65 feet to the highest point of the hill. The eastern portion of the site is relatively flat where the event center is proposed. The site is not connected to a municipal water system.

V. ISSUES RAISED BY THE PUBLIC OR AGENCIES

A referral packet was circulated to responsible local and state agencies; and interested parties on December 18, 2018. As of March 19, 2019, the project planner received responses to the referral from the following local, state and federal departments: Sonoma County Department of Transportation and Public Works (DTPW), City of Santa Rosa Planning and Economic Development, County of Sonoma Department of Health Services, County of Sonoma Permit and Resource Management Department (PRMD), County of Sonoma Fire Prevention Services, and the United States Army Corps of Engineers (USACE) Regulatory Division. The Rincon Valley Fire Protection District also provided comments on the project. The referral responses included several requests for further information and requested several project conditions of approval. No letters were received from tribal entities. Comments most relevant to the IS/MND include:

- Acceptance of the Final Traffic Impact Study.
- Acceptance of the Hydrogeologic Study with the conclusion there is little potential to negatively impact groundwater supply,
- Comments and conditions of approval relating to grading, stormwater, and flooding.
- Review of Noise Study and conditions of approval from the Health Division.
- Comments and conditions from the Sonoma County Fire Department.
- Comments from the U.S. Army Corps of Engineers outlining requirements for Section 404 permits.

A neighborhood notification letter was sent on October 26, 2018 to residents within 300 feet of the subject property. The project planner has received one public comment on the proposed project from Greenbelt Alliance that opposes the project because it is inconsistent with General Plan policies on community separators, and voter-approved Measure K. Analysis of these issues is provided in Section 11 Land Use and Planning of this report.

VI. EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the State CEQA Guidelines and the County's implementing ordinances and guidelines. For each item, one of four responses is given:

No Impact: The project would not have the impact described. The project may have a beneficial effect, but there is no potential for the project to create or add increment to the impact described.

Less Than Significant Impact: The project would have the impact described, but the impact would not be significant. Mitigation is not required, although the project applicant may choose to modify the project to avoid the impacts.

Potentially Significant Unless Mitigated: The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less than significant level.

Potentially Significant Impact: The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for this project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of insignificance where feasible. All references and sources used in this Initial Study are listed in the Reference section at the end of this report and are incorporated herein by reference. Optimal Hospitality has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the proposed project, and to obtain all necessary permits.

1. AESTHETICS:

Except as provided in Public Resources Code Section 21099, would the project:

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

A scenic vista is a view from a particular location or composition of views along a roadway or trail. Scenic vistas often describe views of natural undisturbed land, but may also compose of natural and developed areas, or even developed and unnatural areas such as the scenic view of a rural historic town and surrounding agricultural lands.

The site is located in the Resources and Rural Development (RRD) General Plan designation and the RRD zoning district. The proposed project is an allowed use in the RRD zoning district with issuance of a conditional use permit. The site has a Scenic Resource (SR) designation as an established Community Separator. As defined in the Open Space and Resource Conservation Element of the Sonoma County General Plan, a Community Separator is defined as *rural open space and agricultural and resource lands that separate cities and other communities, prevent sprawl, protect natural resources, and provide city and community identity by providing visual relief from continuous urbanization*. The Community Separator designation seeks to preserve the visual identities of communities by maintaining open space areas between cities and communities and promoting low density rural development through adhering to specific development guidelines. Agricultural, scenic and natural resources are to be protected.

Highway 101 is designated as a Scenic Corridor in the Sonoma County General Plan. The goal for Scenic Corridors is to identify and preserve roadside landscapes that have a high visual quality as they contribute to the living environment of local residents and to the County's tourism economy. The proposed project is located approximately 115 feet from the northbound lanes of Highway 101. The site can be seen from Highway 101 with partial screening from existing trees between the Highway 101 and Old Redwood Highway.

Relevant General Plan policies:

Relevant Community Separator Policies:

Policy OSRC-1f: Unless there are existing design guidelines that have been adopted for the affected area, require that new structures within Community Separators meet the following criteria:

- 1) Site and design structures to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads.*
- 2) Minimize cuts and fills on hills and ridges.*
- 3) Minimize the removal of trees and other mature vegetation; avoid removal of specimen trees, tree groupings, and windbreaks.*

- 4) *Where existing topography and vegetation would not screen structures from view from public roads, install landscaping consisting of native vegetation in natural groupings that fits with the character of the area in order to substantially screen structures from view. Screening with native, fire retardant plants may be required.*
- 5) *Design structures to use building materials and color schemes that blend with the natural landscape and vegetation.*
- 6) *To the extent feasible, cluster structures on each parcel within existing built areas, and near existing natural features such as tree groupings.*
- 7) *Utilities are underground where economically practical.*
- 8) *On hills and ridges, avoid structures that project above the silhouette of the hill or ridge against the sky as viewed from public roads, and substantially screen driveways from view where practical.*
- 9) *Minimize impervious surfaces and encourage groundwater recharge with effective design features and materials that allow stormwater infiltration and detention.*

Relevant Scenic Corridor Policies:

Policy OSRC-3c: Establish a rural Scenic Corridor setback of 30 percent of the depth of the lot to a maximum of 200 feet from the centerline of the road unless a different setback is provided in the Land Use Policies for the Planning Areas. Prohibit development within the setback with the following exceptions:

Zoning Regulations – Community Separators

According to the Zoning Regulations (Section 26-64-020), (Community Separators and Scenic Landscape Units), structures located within community separators and scenic landscape units are subject to the following criteria:

- 1) Structures shall be sited below exposed ridgelines;
- 2) Structures shall use natural landforms and existing vegetation to screen them from view from public roads. On exposed sites, screening with native, fire resistant plants may be required;
- 3) Cuts and fills are discouraged, and where practical, driveways are screened from public view;
- 4) Utilities are placed underground where economically practical;

To demonstrate compliance with General Plan and Zoning scenic requirements, a visual analysis has been provided by the applicant. Section 2.c below analyzes the project in the context of the Sonoma County Visual Assessment Guidelines.

The proposed buildings and parking lot would be screened from Old Redwood Highway by a hill that slopes up from Old Redwood Highway. The proposed buildings would be behind the ridgeline, as demonstrated by the visual analysis (see Figure 5c Section A-A)

Views of the project site from Old Redwood Highway would be the most visible. Existing trees would be retained, and new screen trees would be planted consisting of evergreen and deciduous native oaks and California Black Walnut. Olive trees would be planted behind the screen trees, and the hillside would be planted with vineyards.

The most notable improvements along Old Redwood highway would be the paved driveway, wood fence, and entry signage (32 square feet) (see Figure 5b). A gravel/dirt driveway currently exists at this location and there are no known access alternatives. The driveway would be 24 feet in width and paved with asphalt, and a sidewalk will be located on the north side of the driveway. The open fencing along Old Redwood Highway would be four feet in height and constructed of wood slats painted white. Proposed landscaping around the entrance would consist of flowering accent trees, all of which are native trees. Septic leach fields and a bioretention area would also be located in the level area along Old Redwood Highway. The leach fields would be seeded with wildflower/meadow mix for

non-irrigated areas. There is an existing overhead power line along Old Redwood Highway that will remain.

Significance Level: Less Than Significant

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

Comment:

State Scenic highways refer to those highways that are officially designated by the California Department of Transportation (Caltrans) as scenic. There are no state scenic highways in the vicinity of the project site. Highway 101 to the west of the project site is designated a Scenic Corridor by the Sonoma County General Plan, it is not a designated California Scenic Highway. Therefore, the project would not substantially damage scenic resources within a state scenic highway.

Significance Level: No Impact

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 the applicable zoning and other regulations governing scenic quality?

Comment:

The public viewing points would be from Old Redwood Highway and Highway 101. The existing visual character of the project site is primarily open space. The buildings from the prior use of the property (Buzzard Gulch) were partially visible from Old Redwood Highway, but all the buildings were destroyed by the 2017 Tubbs fire. Current views include grassland, trees, an open wood fence, the hillside and power lines.

The surrounding character is primarily a built environment. The south view is an office building located in the City of Santa Rosa. Highway 101 is located to the west, with retail buildings on the west side of the highway. The views directly to the north include the Cloverleaf Ranch which contains a parking area for horse trailers and vehicles. To the northwest, the two-story Kaiser Permanente Vision office building surrounded by a large parking lot is located within the City of Santa Rosa.

As discussed in section 1.a, the proposed project would be consistent with the RRD land use designation for the site and would be generally consistent with the RRD zoning development requirements.

Based on County "Visual Assessment Guidelines," the project site sensitivity would be considered "High" because it is located in a zone designated to protect scenic resources, is in a community separator, and has a slope less than 40 percent. The hillside has an average slope of 15 percent with a maximum slope of 20 percent.

High: The site or any portion thereof is within a land use or zoning designation protecting scenic or natural resources, such as General Plan designated scenic landscape units, coastal zone, community separators, or scenic corridors. The site vicinity is generally characterized by the natural setting and forms a scenic backdrop for the community or scenic corridor. This category includes building and construction areas within the SR designation located on prominent hilltops, visible slopes less than 40 percent or where there are significant natural features of aesthetic value that are visible from public roads or public use areas (i.e. parks, trails etc.). This category also includes building or construction sites on prominent ridgelines that may not be designated as scenic resources but are visible from a designated scenic corridor.

At the request of the County, the applicant submitted a visual analysis consisting of before and after

photo simulations of four views from Old Redwood Highway and four cross-sections of view perspectives from the Highway (see Figure 5a-c). The photo simulations demonstrate the extent of screening provided by existing and proposed tree plantings and the view of vineyards on the hillside. The cross-sections demonstrate that none of the proposed buildings would be visible from Old Redwood Highway.

Based on the Visual Assessment Guidelines, the project site is characterized as “Subordinate” because the built portion of the proposed project is minimally visible from public view. While the planting of vineyards and screen trees would be introduced to the existing grasslands, the vineyards and trees would maintain open space views. The proposed identification sign, new fencing, and the paved driveway and sidewalk would be visible from Old Redwood Highway, but these elements would be consistent with the existing form, line, color, and texture of the project site’s visual character.

Subordinate: Project is minimally visible from public view. Element contrasts are weak – they can be seen but do not attract attention. Project generally repeats the form, line, color, texture, and night lighting of its surroundings.

The project’s visual effect on the visual character or quality of the site and its surroundings was determined based on County “Visual Assessment Guidelines” Table 3 Thresholds of Significance for Visual Impact Analysis.

Table 3: Thresholds of Significance for Visual Impact Analysis				
Sensitivity	Visual Dominance			
	<i>Dominant</i>	<i>Co-Dominant</i>	<i>Subordinate</i>	<i>Inevident</i>
<i>Maximum</i>	Significant	Significant	Significant	Less than significant
<i>High</i>	Significant	Significant	Less than significant	Less than significant
<i>Moderate</i>	Significant	Less than significant	Less than significant	Less than significant
<i>Low</i>	Less than significant	Less than significant	Less than significant	Less than significant

Considering the project site’s High visual sensitivity and the project’s “Subordinate” visual dominance, the project would be considered to have a “Less than significant” effect on the existing visual character or quality of the site and its surroundings,

Significance Level: Less Than Significant Impact

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

Comment:

According to the style/design book submitted by the applicant, the project design would incorporate lighting that is discrete and dark sky compliant, meaning the lighting would minimize light trespass and sky-glow by using shielded fixtures. The style/design book provides examples of downward facing wall fixtures and low-voltage bollards for pedestrian paths and parking areas. Pole lights would not be used in the parking area. Flood lights and upright fixtures would not be used. The entry signage would have subdued backlit lettering. No lighting is proposed along the driveway extending from Old Redwood Highway.

The Open Space and Resource Conservation Element of the General Plan provides the following guidance for outdoor lighting in scenic resource areas:

GOAL OSRC-4: Preserve and maintain views of the night time skies and visual character of urban, rural and natural areas, while allowing for nighttime lighting levels appropriate to the use and location.

Objective OSRC-4.1: Maintain night time lighting levels at the minimum necessary to provide for security and safety of the use and users to preserve night time skies and the night time character of urban, rural and natural areas.

Objective OSRC-4.2: Ensure that night time lighting levels for new development are designed to minimize light spillage offsite or upward into the sky.

The following policies shall be used to achieve these objectives:

*Policy OSRC-4a: Require that all new development projects, County projects, and signage utilize light fixtures that shield the light source so that light is cast downward and that are no more than the minimum height and power necessary to adequately light the proposed use.**

*Policy OSRC-4b: Prohibit continuous all night exterior lighting in rural areas, unless it is demonstrated to the decision making body that such lighting is necessary for security or operational purposes or that it is necessary for agricultural production or processing on a seasonal basis. Where lighting is necessary for the above purposes, minimize glare onto adjacent properties and into the night sky.**

*Policy OSRC-4c: Discourage light levels that are in excess of industry and State standards.**

Overall, lighting provisions incorporated into the project's design would minimize lighting effects on nighttime view in the area. Building and parking lot lighting would not be visible from Old Redwood; the only lighting visible would be the backlit entry sign. However, as a condition of approval, the project would be required to comply with Zoning Regulation Section 26.82.030 (g) pertaining to lighting: *"The color, size, height, lighting and landscaping of appurtenant signs and structures shall be elevated for compatibility with local architectural motif and the maintenance of view and vistas of natural landscapes, recognized historic landmarks, urban parks or landscaping.* In addition, Section 26.82.030 (n) provides: *"All lighting in parking areas shall be arranged to prevent direct glare or illumination onto adjacent properties."* An exterior lighting plan will be submitted prior to issuance of building permits to ensure that (1) no lighting is visible from Old Redwood Highway, with the exception of entry signage, (2) exterior lighting is low mounted, downward casting, and fully shielded to prevent glare; (3) lighting is Dark Sky Compliant; (4) light fixtures shall not be located at the periphery of the property and shall not spill over onto adjacent properties or into the sky; (5) flood lights would not be used; and (6) security lighting shall be motion-sensor activated

Significance Level: Less Than Significant

2. AGRICULTURE AND FOREST RESOURCES:

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:

- 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?**

Comment:

The project site is designated by the California Department of Conservation Division of Land Resource Protection Farmland Mapping and Monitoring Program as Urban and Built-Up Land, which is land that is occupied by structures with a building density of at least one (1) unit to 1.5 acres, or 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures. The property to the north of the site (Cloverleaf Ranch), under the Sonoma County Important Farmland 2016 Map, is designated as Farmland of Local Importance and Unique Farmland. Farmland of Local Importance includes the hay land producing areas of the Santa Rosa Plains, Petaluma Valley, and Tubbs Island Naval Reservation. The Project site is a youth camp that was destroyed during the 2017 Santa Rosa fire. The Project consists of construction of a new rural lodging and event center to replace the prior camp. The Project would not encroach into or convert nearby Unique or Important Local Farmland into a non-agricultural use. Impacts would not occur.

Significance Level: No Impact

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

Comment:

The Project site is not part of a Williamson Act contract. The Cloverleaf Ranch, located to the north and east of the site is under a Type II Williamson Act contract. A Type II contract is generally approved on non-prime agricultural or open space lands that are primarily used for grazing, hay farming, horse breeding, timber production, open space or any combination of agricultural and open space uses, including permanent crops. The Project site is a youth camp that was destroyed during the 2017 Santa Rosa fire. The Project consists of construction of a new rural lodging and event center to replace the prior camp. The Project would not conflict with existing zoning for agricultural use or Williamson Act contract. Therefore, no impact would occur.

Significance Level: No Impact

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**

Comment:

The project site and surrounding area is not in a Timberland Production zoning district, and it is comprised of a rural lodging and event center replacing a youth camp that burned down in 2017. Therefore, the proposed Project would not cause a rezoning of forest land.

Significance Level: No Impact

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

Comment:

As discussed in section 3.c, the project site is not comprised of forest land or timberland. The project would not result in loss of forest land or conversion of forest land to non-forest use.

Significance Level: No Impact

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?

Comment:

The project site is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on Cannabis Site Evaluation GIS Tool created by Permit Sonoma.¹ The project would not involve the conversion of land currently used for grazing purposes or other agricultural use. Therefore, no impact would occur.

Significance Level: Less Than Significant Impact

3. AIR QUALITY:

The methodologies and assumptions used in preparation of this section follow the CEQA Guidelines developed by the Bay Area Air Quality Management District (BAAQMD), as revised in May 2017 (BAAQMD 2017). Information on existing air quality conditions, federal and state ambient air quality standards, and pollutants of concern was obtained from the U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and BAAQMD.

Environmental Setting

Air quality is a function of pollutant emissions, and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

Federal, state, and local governments control air quality through the implementation of laws, ordinances, regulations, and standards. The federal and state governments have established ambient air quality standards for "criteria" pollutants considered harmful to the environment and public health. National Ambient Air Quality Standards (NAAQS) have been established for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), fine particulate matter (particles 2.5 microns in diameter and smaller, or PM_{2.5}), inhalable coarse particulate matter (particles 10 microns in diameter and smaller, or PM₁₀), and sulfur dioxide (SO₂). California Ambient Air Quality Standards (CAAQS) are more stringent than the national standards for the pollutants listed above and include the following additional pollutants: hydrogen sulfide (H₂S), sulfates (SO_x), and vinyl chloride. In addition to these criteria pollutants, the federal and state governments have classified certain pollutants as hazardous air pollutants (HAPs) or toxic air contaminants (TACs), such as asbestos and diesel particulate matter (DPM).

Sonoma County is served by two air districts with distinct boundaries, jurisdictions, rules, and policies.

¹ Sonoma County Permit Sonoma GIS Site Evaluation Tool, <http://sonomamap.maps.arcgis.com/apps/webappviewer/index.html?id=0b784d90045941798d780f288b6f7003>, accessed on 2/6/19.

The Bay Area Air Quality Management District (BAAQMD) covers the southern portion of the County. The Northern Sonoma County Air Pollution Control District (NSCAPCD) covers the northern and coastal regions of the County. The proposed project lies within the BAAQMD.

The project site is located in an area primarily comprised of open space and grasslands, with some commercial and residential development dispersed throughout the area. The Redwood Highway (SR-101) is located approximately 750 feet west of the center of the Project site. There are also nearby commercial uses that are sources of pollutants.

Existing Emissions Sources at Project Site

The Project consists of rural lodging and event center replacing a youth camp that burned in the 2017 Tubbs fire. The Project consists of construction of a new rural lodging and event center to replace the prior camp located just north of the City of Santa Rosa. Although not currently in use, the primary source of emissions associated with the site is vehicle trips to and from the site.

Sensitive Receptors

A sensitive receptor is generally defined as locations where human populations, especially children, seniors, and sick persons, are located where there is reasonable expectation of continuous human exposure to air pollutants. These typically include residences, hospitals, and schools. Sensitive receptors within 1,000 feet of the project site include the Kaiser Permanente Santa Rosa Medical Office Building to the northwest of the site and the Cloverleaf Ranch to the north and east of the site. There are no residences, schools, retirement communities, or places of worship within 1,000 feet of the project site. In addition, persons attending the proposed rural lodging and event center are also considered sensitive receptors.

Regulatory Setting

CARB In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, the California Air Resources Board (CARB) adopted a regulation to reduce Diesel Particulate Matter (DPM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. This regulation applies to all self-propelled off-road diesel vehicles over 25 horsepower (hp) used in California and most two-engine vehicles (except on-road two-engine sweepers), which are subject to the *Regulation for In-Use Off-Road Diesel Fueled Fleets (Off-Road regulation)*. Additionally, vehicles that are rented or leased (rental or leased fleets) are included in this regulation. The Off-Road regulation:

- Imposes limits on idling, requires a written idling policy prepared by the owner/operator of medium and large fleets, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Report System DOORs) and labeled;
- Restricts the adding of older vehicles into fleets; and,
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies, VDECS (i.e., exhaust retrofits).

Bay Area Air Quality Management District

The BAAQMD is the agency primarily responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants within the SFBAAB. The BAAQMD carries out this responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve

attainment of state and national air quality standards. The BAAQMD currently has 14 regulations containing more than 100 rules that control and limit emissions from sources of pollutants. Table summarizes the major BAAQMD rules and regulations that may apply to the proposed project.

Table 4: Potentially Applicable BAAQMD Rules and Regulations		
Regulation	Rule	Description
6 – Particulate Matter	1 – General Requirements	Limits visible particulate matter emissions.
8 – Organic Compounds	3 – Architectural Coatings	Limits the quantity of volatile organic compounds in architectural coatings.
9 – Inorganic Gaseous Pollutants	6 – NO _x Emission from Natural Gas-Fired Water Heaters	Limits emissions of NO _x from natural gas-fired water heaters and boilers.
11 – Hazardous Pollutants	2 - Asbestos Demolition, Renovation, and Manufacturing	Controls emissions of asbestos during potential demolition activities and establishes waste disposal procedures for asbestos containing materials.
Source: BAAQMD 2017b		

On April 19, 2017, the BAAQMD adopted the *2017 Clean Air Plan: Spare the Air, Cool the Climate (Clean Air Plan)*, which updates the District's *2010 Clean Air Plan*, and continues to provide the framework for assuring that the NAAQS and CAAQS would be attained and maintained in the Bay Area in compliance with state and federal requirements (BAAQMD 2017c). The BAAQMD's *2017 Clean Air Plan* is a multi-pollutant plan focused on protecting public health and the climate. Specifically, the primary goals of the 2017 Clean Air Plan are to:

- Attain all state and national quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.

The *Clean Air Plan* includes 85 distinct control measures to help the region reduce air pollutants and has a long-term strategic vision which forecasts what a clean air Bay Area will look like in the year 2050. The control measures aggressively target the largest source of GHG, ozone pollutants, and particulate matter emissions – transportation. The 2017 Clean Air Plan includes more incentives for electric vehicle infrastructure, off-road electrification projects such as Caltrain and shore power at ports, and reducing emissions from trucks, school buses, marine vessels, locomotives, and off-road equipment.

Analysis of Impacts

Would the project:

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

Comment:

Sonoma County is served by two air districts with distinct boundaries, jurisdictions, rules, and policies. The Bay Area Air Quality Management District (BAAQMD) covers the southern portion of the County. The Northern Sonoma County Air Pollution Control District (NSCAPCD) covers the northern and coastal regions of the County. The proposed project lies within San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the BAAQMD. The following discussion considers whether the proposed project would conflict with or obstruct implementation of an applicable air quality plan maintained by the BAAQMD.

In April 2017, the BAAQMD adopted its 2017 *Clean Air Plan: Spare the Air, Cool the Climate (Clean Air Plan)*, which provides the BAAQMD's framework for ensuring air quality standards would be attained and maintained in the Bay Area in compliance with state and federal requirements (BAAQMD 2017a). The BAAQMD's 2017 *Clean Air Plan* is a multi-pollutant plan focused on protecting public health and the climate. Specifically, the primary goals of the 2017 Clean Air Plan are to:

- Attain all state and national quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050

The *Clean Air Plan* includes increases in regional construction, area, mobile, and stationary source activities and operations in its emission inventories and plans for achieving attainment of air quality standards. Chapter 5 of the *Clean Air Plan* contains the BAAQMD's strategy for achieving the plan's climate and air quality goals. This control strategy is the backbone of the *Clean Air Plan*. It identifies 85 distinct control measures designed to comply with state and federal air quality standards and planning requirements, protect public health by reducing emissions of ozone precursors, PM, and TACs, and reduce greenhouse gases (GHG) emissions. The 85 control measures identified in the *Clean Air Plan* are grouped by nine economic-based "sectors": Agriculture, Buildings, Energy, Natural and Working Lands, Stationary Sources, Super GHGs, Transportation, Waste, and Water. Most of the 85 control measures implemented at the local and regional level by municipal government and the BAAQMD and thus are not directly applicable to the proposed project. The proposed project would not conflict with or obstruct implementation of the BAAQMD *Clean Air Plan* because: 1) It involves construction of a new rural lodging and event center to replace the prior camp, and does not include significant increases in, or new sources of, ozone precursor emissions, PM, or TACs (see also discussion b) and c) below); 2) it would not exacerbate or increase disparities in cancer risks from TAC emissions because the project would not generate substantial TAC emissions levels and is not located in an area recognized by the BAAQMD as being cumulatively impacted by TAC emissions (BAAQMD, 2018); and 3) it would not exceed BAAQMD-recommended GHG thresholds, which are designed to ensure Bay Area GHG emissions achieve State GHG reduction goals, because it would not involve activities that generate substantial levels of GHG emissions (see Section 8, Greenhouse Gas Emissions, in this Initial Study, for an evaluation of the project's GHG emissions).

Significance Level: Less than Significant Impact

b) Violate any air quality standard or result in a cumulatively considerable net increase an existing or projected air quality violation?

Comment:

The federal and state governments have established ambient air quality standards for “criteria” pollutants considered harmful to the environment and public health. National Ambient Air Quality Standards (NAAQS) have been established for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), fine particulate matter (particles 2.5 microns in diameter and smaller, or PM_{2.5}), inhalable coarse particulate matter (particles between 2.5 and 10 microns in diameter, or PM₁₀), and sulfur dioxide (SO₂). California Ambient Air Quality Standards (CAAQS) are more stringent than the national standards for the pollutants listed above and include the following additional pollutants: hydrogen sulfide (H₂S), sulfates (SO_x), and vinyl chloride. In addition to these criteria pollutants, the federal and state governments have classified certain pollutants as hazardous air pollutants (HAPs) or toxic air contaminants (TACs), such as asbestos and diesel particulate matter (DPM).

The proposed project is located within the SFBAB, under the jurisdiction of the BAAQMD. The BAAQMD’s *CEQA Air Quality Guidelines* contain screening criteria to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. Consistent with the BAAQMD’s guidance, if a project meets all the screening criteria, then the project would result in a less than significant air quality impact and a detailed air quality assessment is not required for the project.

The proposed project involves the construction of a new rural lodging and event center to replace the prior camp that contributed to local and regional air quality conditions through year 2017. An event center of this scale is not a land use type identified in the BAAQMD *CEQA Air Quality Guidelines* screening criteria (BAAQMD, 2017b, Table 3-1 and page 3-5); however, a general comparison can be made with other similar land use with similar emissions sources (e.g., area sources such as heating, energy use, vehicular sources of emissions). The “racquetball/health club” and “place of worship” land use screening thresholds were used for this air quality analysis.² These land use types are based on the description in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, and are defined as (CAPCOA, 2017):

- Racquetball/health club: Privately-owned facilities that primarily focus on individual fitness or training, and which typically provide exercise classes, spas, locker rooms, and small restaurants or snack bars.
- Place of worship: Buildings in which public services are held and which usually include an assembly hall, meeting rooms, classrooms, and occasionally dining catering or party facilities.

As described below, project construction and operation would be consistent with all BAAQMD *CEQA Air Quality Guidelines* screening criteria and would, therefore, not violate air quality standards, contribute to an air quality violation, or result in a significant air quality impact from project construction and operation emissions. The project’s consistency with BAAQMD construction and operational screening criteria are summarized in Table 5 below.

² The BAAQMD’s *CEQA Air Quality Guidelines* also include hotel and motel land uses; however, these land uses provide sleeping accommodations on a regular basis and are partially or fully occupied on a regular (i.e., non-intermittent basis). In contrast, the proposed project involves special events that generate a vehicle trips and emissions on an intermittent basis, and use of the lodging facilities is supplementary to the special event. Therefore, the racquetball/health club and place of worship land uses are considered most similar to the proposed project. These land uses also generally involve smaller screening sizes than hotel and motel land uses and are considered a conservative screening analysis. For example, the screening size for a racquetball/health club land use is 128,000 square feet, compared to 489 rooms for a hotel land use and 688 rooms for a motel land use. Hotel and motel land uses also include area, water, waste, and energy emissions sources that are different than the proposed project.

Table 5: Project Consistency with BAAQMD Construction and Operational Screening Criteria

Screening Criterion	Requirement	Project Consistency
1) Land Use Type and Size	Project is below all applicable construction and operational screening size criteria for relevant/related land uses: Racquetball/health club: • Construction: 277,000 square feet of building space • Operations: 128,000 square feet of building space Place of worship • Construction: 277,000 square feet of building space • Operations: 439,000 square feet of building space	The proposed project would have 13 cabins, a 9,861 square foot event barn, and a 1,330 square-foot reception office building (23,025 square feet of total new building development).
2) Basic Construction Measures	Project design and implementation includes all BAAQMD <i>Basic Construction Mitigation Measures</i>	The proposed project would incorporate all BAAQMD Basic Construction Mitigation Measures (BAAQMD, 2017, Table 8-2).
3) Demolition	Demolition activities are consistent with BAAQMD Regulation 11, Rule 3: Asbestos Demolition, Renovation, and Manufacturing	The project does not include demolition activities.
4) Construction Phases	Construction does not include simultaneous occurrence of more than two construction phases (e.g., grading, paving, and building construction would occur simultaneously)	The proposed project does not include simultaneous occurrence of more than two construction phases.
5) Multiple Land Uses	Construction does not include simultaneous construction of more than one land use type	The proposed project includes construction of only one land use type.
6) Site Preparation	Construction does not require extensive site preparation	The proposed project would not include extensive site preparation or extensive grading.
7) Material Transport	Construction does not require extensive material transport and considerable haul truck activity (greater than 10,000 cubic yards).	The project would result in less than 10,000 cubic yards of total material transport.
8) Carbon Monoxide Hotspots	A) Project is consistent with the applicable congestion management program, regional transportation plan, and local congestion management agency plans; and	As described in Section 17 (Transportation/Traffic), the proposed project would generate an average of 6 weekday a.m. peak hours trips, 6 weekday p.m. peak hour trips, and 128

Table 5: Project Consistency with BAAQMD Construction and Operational Screening Criteria

Screening Criterion	Requirement	Project Consistency
	B) The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour, or 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).	weekend peak hour trips. The project would not result in significant traffic impacts, conflict with an applicable congestion management program or plan, nor increase traffic volumes above BAAQMD CO hotspot screening levels.
Source: BAAQMD, 2017b (Table 3-1, Table 8-2, Page 3-5)		

Short-Term Construction Emissions: Project construction would generate short-term equipment exhaust and fugitive dust emissions from ground disturbance, construction equipment use, worker vehicle trips, and/or material deliveries associated with activities such as site preparation, grading, utility trenching, paving, building/structure construction, building/ structure remodeling, and application of architectural coatings. For all projects, the BAAQMD recommends implementation of eight “Basic Construction Mitigation Measures” to reduce construction fugitive dust emissions level; these basic measures are also used to meet the BAAQMD’s best management practices (BMPs) threshold of significance for construction fugitive dust emissions (i.e., the implementation of all basic construction measures renders fugitive dust impacts a less than significant impact). The County would implement these BMPs through Mitigation Measure AIR-1.

Mitigation Measure AIR-1: Implement Bay Area Air Quality Management District (BAAQMD) Basic Construction Mitigation Measures. To reduce potential fugitive dust that may be generated by project construction activities, the Applicant shall implement, as necessary, the following basic construction measures listed in Table 8-2 of the BAAQMD’s 2017 CEQA Air Quality Guidelines:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations. Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to help ensure compliance with applicable regulations.

Mitigation Monitoring

Mitigation Monitoring AIR-1: The Applicant shall include these measures on all appropriate bid, contract, and engineering and site plan (e.g., building, grading, and improvement plans) documents. The County shall review all appropriate bid, contract, and engineering and site plan documents for inclusion of dust control measures.

As shown in Table 5, the proposed project is consistent with all screening criteria after implementation of Mitigation Measure AIR-1 and, therefore, would not result in short-term construction emissions levels that exceed BAAQMD CEQA thresholds of significance.

Long Term Operations Emissions: Once operational, the proposed rural event center may result in emissions of criteria air pollutants from the following sources of pollutants:

- Small “area” sources including landscaping equipment and the use of consumer products such as paints, cleaners, and fertilizers that result in the evaporation of ozone-precursors and other pollutants into the atmosphere during product use.
- Mobile sources such as agricultural equipment and vehicles travelling to and from the proposed project (customers, vendors, workers), including dust generated from travel on paved and unpaved roads, etc.
- Other fugitive dust sources with travel on unpaved roads.

Since the proposed project would involve the construction of a rural lodging and event center replacing the youth camp that operated until 2017, not all of the project’s emissions would be new emissions. As shown in Table 5, the proposed project is below all applicable BAAQMD operational screening size criteria operational screening size criteria for relevant/related land uses (128,000 square feet of racquetball/health club building space or 439,000 square feet of place of worship building space) and thus would not result in a significant air quality impact from operations.

Cumulatively Considerable Net Increase in Air Quality Violations:

The San Francisco Bay Area Air Basin is an area of non-attainment for national and state ozone, state PM₁₀, and national and state PM_{2.5} air quality standards. Regarding cumulative impacts, the BAAQMD’s CEQA Air Quality Guidelines state (BAAQMD 2017b, pg. 2-1):

“SFBAAB’s non-attainment status is attributed to the region’s development history. Past, present, and future development projects contribute to the region’s adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project’s contribution to the cumulative impact is considerable, then the project’s impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project’s individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region’s existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.”

As described above and discussed under paragraph a), the proposed project does not conflict with the BAAQMD’s *Clean Air Plan* and would not result in construction or operational emissions that exceed BAAQMD construction or operational screening criteria. As such, the proposed project would not result in a cumulatively considerable contribution to regional air quality impacts.

Significance Level: Less than Significant with Mitigation Incorporated.

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

Comment:

Sensitive air quality receptors include specific subsets of the general population that are susceptible to poor air quality and the potential adverse health effects associated with poor air quality. In general, children, senior citizens, and individuals with pre-existing health issues, such as asthmatics, are considered sensitive receptors. CARB consider schools, schoolyards, parks and playgrounds, daycare facilities, nursing homes, hospitals, and residential areas as sensitive air quality land uses and receptors (CARB, 2005). The potential sensitive air quality receptors adjacent or in close proximity (within 1,000 feet) of the perimeter of the proposed project site include:

- Receptor 1: Kaiser Permanente medical office building; located approximately 0.15-miles west of the site.
- Receptor 2: Cloverleaf Ranch to the north and east of the site

Visitors to the rural lodging and event center may also be considered sensitive air quality receptors, although visitors would not temporary and would not be exposed to local air quality conditions for prolonged periods of time.

Risks and Hazards from Project Construction Emissions and Vehicle Trips: Project-related construction activities would emit PM_{2.5} from equipment exhaust. Nearly all the project's PM_{2.5} emissions from equipment exhaust would be DPM, which is a TAC. Potential construction activities could include minor site grading, foundation installation, trenching, and paving. These activities would occur intermittently during the daytime weekday period for less than year. Building construction and finishing would require little to no diesel-powered construction equipment other than an equipment lift or vendor truck. Although project construction would emit air pollutants including DPM, these emissions would be well below the BAAQMD's construction screening criteria (see discussion b) above) and Mitigation Measure AIR-1 would further reduce construction-related pollutant concentrations by limiting construction activities, requiring equipment to be inspected, tuned, and maintained during construction, and restricting idling to no more than five minutes. Furthermore, the sensitive receptors in close proximity to construction work areas (i.e., visitors of the nearby medical office building and staff at the proposed event) would not be continuously exposed to outdoor pollutant concentrations associated with project construction activities for a prolonged period of time, and any exposure that would occur be for only a fraction of the 70-year averaging time period used to evaluate incremental risks over the typical lifetime exposure scenario. The combination of low emission levels and limited receptor exposure to construction-generated DPM emissions would render potential risks and hazards from construction DPM emissions a less than significant impact.

As described under discussion b) above, the proposed project would generate an average of 6 weekday a.m. peak hours trips, 6 weekday p.m. peak hour trips, and 8 weekend peak hour trips. These trip generation rates would not increase traffic volumes above BAAQMD carbon monoxide screening levels of 44,000 vehicles per hour or 24,000 vehicles per hour where features such as tunnels, garages, underpasses, canyons, and below grade roadways restrict air flow and mixing. The project, therefore, would not result in substantial CO concentrations from vehicle trips or idling.

Risks and Hazards to Rural Lodging and Event Center Receptors: The closest stationary source of emissions to the project is a medical office building at 3925 Old Redwood Highway (approximately 800 feet from the project site). The emissions from the medical office building facility are below the BAAQMD's acute and chronic trigger levels that require the preparation of a health risk assessment (i.e., the facility's emissions levels are sufficiently low enough that a health risk assessment was not required pursuant to BAAQMD Regulation 2, Rule 5 during permitting). As such, this facility would not expose receptors at the proposed use to significant air quality risks or hazards. There are no other stationary sources of emissions within 1,000 feet of the project site.

The closest highway to the project site is a north-south directional link of U.S. 101. This highway segment has an annual average daily traffic volume above 100,000 vehicle per day and is located approximately 100 feet from the project's southwestern property boundary and more than 600 feet from proposed development areas (i.e., cabins). According to the BAAQMD's *Highway Screening Analysis Tool – Sonoma County (20 feet)*, this link of U.S. 101 has the following risks:

Table 6: U.S. 101 Risks and Hazards at 500 feet

	PM2.5 ($\mu\text{g}/\text{m}^3$) ^(A)	Increased Cancer Risk ^(B) Per Million Population	Non-Cancer Hazard Index ^(C)	
			Chronic	Acute
Estimated Project Risk ^(D)	0.06	6.4	0.006	0.019
BAAQMD Risk Threshold (Individual Project)	0.3	10	1	1

Source: BAAQMD 2011 and 2017b.

Table Notes:

- A. $\text{PM}_{2.5}$ concentration units are micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). BAAQMD threshold represents the annual average $\text{PM}_{2.5}$ receptor exposure that should not be exceeded.
- B. Increased cancer risk level expressed in terms of excess cancer cases per million population. BAAQMD threshold represents the cancer burden or number of excess cancer cases that could occur in a general population such as community or city based on a lifetime of exposure (70 years) to carcinogens.
- C. Non-carcinogenic risk level expressed in terms of the sum of all hazard quotients for all chemicals a receptor is exposed to, or Hazard Index (HI).
- D. Risks are based on a distance of 500 feet from the edge of U.S. 101 and an elevation of 20 feet because the location where cabins would be rebuilt is situated approximately 50 feet above the highway grade.

As shown in Table 6, the risks and hazards from vehicle emissions associated with U.S. 101 would not exceed BAAQMD risk and hazard thresholds at a distance of 500 feet. It is important to note the BAAQMD screening analysis tool assumed near-continuous exposure to emissions from a highway. With the exception of one employee residence, the proposed project involves temporary receptors only, and thus long-term carcinogenic and chronic non-carcinogenic risks would be substantially less than presented above. Acute, non-carcinogenic risks are based on 1-hour exposure; thus, worst-case acute risks are presented for the proposed project's temporary receptors and employee receptors.

Exacerbation of U.S. 100 Risks and Hazards: The California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015) ruled CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project." The opinion also holds that when a project has "potentially significant exacerbating effects on existing environmental hazards" those impacts are properly within the scope of CEQA because they can be viewed as impacts of the project on "existing conditions" rather than impacts of the environment on the project. The Supreme Court provided the example of a project that threatens to disperse existing buried environmental contaminants that would otherwise remain undisturbed. The Court concluded that it is proper under CEQA to undertake an analysis of the dispersal of existing contaminants because such an analysis would be focused on how the project "would worsen existing conditions." Consistent with this court ruling, the proposed project would not significantly exacerbate health risks associated with U.S. 101 vehicle emissions for several reasons. First, according to the Traffic Impact Analysis prepared for the project, the proposed project would generate 6 weekday a.m. peak hours trips, 6 weekday p.m. peak hour trips, and 8 weekend peak hour trips, and only a portion of these would be diesel trips. Even if all project trips were added to U.S. 101, the project would increase diesel vehicle trips on U.S. 101 by less than 0.001% on a daily basis. This change is not considered a significant exacerbation of the existing conditions and, therefore, is a less than significant impact.

Significance Level: Less than Significant.

d) Result in substantial emissions (such as odors or dust) adversely affecting a substantial number of people?

Comment:

Construction of the project would generate typical dust and odors associated with construction activities, such as fuel and oil odors, paving odors and painting/coating odors. The dust and odors generated by the project would be intermittent and localized in nature and would disperse quickly. Dust would also be controlled through the implementation of mitigation measure AIR-1.

Once operational, the proposed project would not generate substantial amounts of dust or odors that could affect a substantial number of people because operational activities. The project would not involve sustained use of equipment or activities that would generate high levels of dust or strong odors.

Therefore, the proposed project would not result in substantial emissions of dust or odors that would affect a substantial number of people.

Significance Level: Less than Significant

4. BIOLOGICAL RESOURCES:

This section of the MND provides an analysis of potential project-related impacts to biological resources. A Biological Resources Assessment Report.³ was prepared for the project site on July 25, 2016 by biologist Lucy Macmillan and botanist Dr. Roy Buck, the project applicant's biological consultants. Updated Biological Resource Evaluation letters were prepared by Ms. Macmillan on May 3, 2017, October 4, 2018, and July 15, 2019. The Biological Resources Assessment provides an overview of the biological resources on the project site, including federal and state jurisdictional habitats and special-status plant and wildlife species. The Biological Resource Evaluation letters evaluate past changes to the project site plan, provide updates to the biological resource impact evaluation following the October 2017 Tubbs Fire, and respond to requests for additional information pertaining to special-status wildlife impact mitigation and riparian setback requirements. A Tree Preservation and Mitigation Report⁴ was prepared for the project site on November 14, 2018 by Horticultural Associates. Subsequent arborist reports were prepared by Horticultural Associates on May 23, 2017 and July 18, 2019. These reports provide tree survey maps, data, and management recommendations pre- and post-fire. Lastly, a Riparian Revegetation Recommendations report was prepared by Don MacNair, Registered Landscape Architect, in July 2019.⁵ The biological assessment and arborist reports were reviewed by MIG biologists to verify their adequacy, completeness, and accuracy for use as the basis of the following discussion. Based on information and data collected and analyzed, mitigation measures are provided herein to minimize and/or avoid potential biological resource impacts in accordance with the CEQA Guidelines.

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 Wildlife or U.S. Fish and Wildlife Service?**

Regulatory Framework

The following discussion identifies federal and state environmental regulations that serve to protect sensitive biological resources and are relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act (FESA)

FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of

³ Macmillan, Lucy, M.S. and Dr. Roy Buck. 2016. *Biological Resources Assessment, Solstice Sonoma Project, 3980 Old Redwood Highway, Santa Rosa, California (APN 058-020-009)*. July 2016.

⁴ Meserve, John C. 2017. *Tree Preservation and Mitigation Report, 3890 Old Redwood Highway, Santa Rosa, California*. May 23, 2017.

⁵ MacNair, Don, RLA #2800. *Riparian Revegetation Recommendations, Solstice, 3890 Old Redwood Highway, Santa Rosa, California APN 058-020-009*. July 2019.

Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) are charged with implementing and enforcing the FESA. USFWS has authority over terrestrial and continental aquatic species, and NOAA Fisheries has authority over species that spend all or part of their life cycle at sea, such as salmonids. Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." USFWS's regulations define harm to mean "an act which actually kills or injures wildlife." Such an act may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3). Take can be permitted under FESA pursuant to Sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

Critical Habitat

Critical habitat is a term defined in FESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. FESA requires federal agencies to consult with USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is similar to that already provided to species by the FESA jeopardy standard. However, areas that are currently unoccupied by the species, but which are needed for the species' recovery, are protected by the prohibition against adverse modification of critical habitat.

Essential Fish Habitat

Essential Fish Habitat (EFH) is regulated through the NMFS, a division of the National Oceanic and Atmospheric Administration (NOAA). Protection of EFH is mandated through changes implemented in 1996 to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to protect the loss of habitat necessary to maintain sustainable fisheries in the United States. The Magnuson-Stevens Act defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" [16 USC 1802(10)]. NMFS further defines essential fish habitat as areas that "contain habitat essential to the long-term survival and health of our nation's fisheries." EFH can include the water column, certain bottom types such as sandy or rocky bottoms, vegetation such as eelgrass or kelp, or structurally complex coral or oyster reefs. Under regulatory guidelines issued by NMFS, any federal agency that authorizes, funds, or undertakes action that may affect EFH is required to consult with NMFS (50 CFR 600.920).

Migratory Bird Treaty Act of 1918 (MBTA)

The Federal Migratory Bird Treaty Act (MBTA) (16 USC. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

State

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The California Department of Fish and Wildlife (CDFW) is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code (CFGC), but CDFW has interpreted “take” to include the killing of a member of a species which is the proximate result of habitat modification.

California Fully Protected Species and Species of Special Concern

The classification of California “fully protected” (CFP) was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with “fully protected” species state that these species “...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with “fully protected” species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California Species of Special Concern (CSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

Nesting Birds

Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” In addition, under CFGC Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Passerines and non-passerine land birds are further protected under CFGC Section 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by CDFW.

Non-Game Mammals

Sections 4150-4155 of the CFGC protect non-game mammals, including bats. Section 4150 states “A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a non-game mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission.” The non-game mammals that may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under CFGC.

Other Special-Status Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (<http://www.cnps.org/cnps/rareplants/inventory/>).

The Inventory employs the California Rare Plant Ranking (CRPR) to assign plants to the following categories:

- 1A Presumed extinct in California
- 1B Rare, threatened, or endangered in California and elsewhere
- 2 Rare, threatened, or endangered in California, but more common elsewhere
- 3 Plants for which more information is needed – A review list
- 4 Plants of limited distribution – A watch list

Additional endangerment codes are assigned to each taxon as follows:

- 1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat)
- 2 Fairly endangered in California (20-80% occurrences threatened)
- 3 Not very endangered in California (<20% of occurrences threatened, or no current threats known)

CRPR 1A, 1B, and 2 plants consist of individuals that may qualify for listing by state and federal agencies. As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was created in 1977 with the intent to preserve, protect, and enhance rare and endangered plants in California (CFGC Sections 1900 to 1913). The NPPA is administered by CDFW, which has the authority to designate native plants as endangered or rare and to protect them from “take.” CDFW maintains a list of plant species that have been officially classified as endangered, threatened, or rare. These special-status plants have special protection under California law, and projects that directly impact them may not qualify for a categorical exemption under the CEQA Guidelines.

Comment:

An intermittent stream known as “Piner Creek” borders the northern portion of the project site. An impounded section of this intermittent stream has created an approximately two-acre pond in the northeastern portion of the site. The project site contains six (6) habitat types: California annual grassland, willow riparian forest, coast live oak forest, willow riparian/oak forest, pond, and developed/ruderal. The developed/ruderal habitat type is characterized by intensive human disturbance and alteration. California annual grassland occupies the largest portion of the site, followed by the developed/ruderal habitat type.

Special-Status Species

The potential occurrences of special-status plant and animal species on the project site were initially evaluated by conducting a database search of CDFW’s California Natural Diversity Database (CNDDB) and the CNPS Electronic Inventory within the Santa Rosa and eight surrounding USGS 7.5-minute quadrangles. The potential occurrences of special-status plant and wildlife species were then evaluated based on the habitat requirements of each species relative to the conditions observed during the habitat evaluation conducted by biologists Lucy Macmillan and Roy Buck on June 16, 2016.

Potential special-status species impacts and associated impact avoidance, minimization, and mitigation measures are discussed below.

Special-Status Plant Species

Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened, or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act (CEQA) Guidelines, Section 15380 (Endangered, Rare, or Threatened Species).

No special-status plant species that are endemic to the project site were observed by the applicant's consultants. Nineteen special-status plant species were initially determined to have low or very low potential to occur on the site. All of these except fragrant fritillary (*Fritillaria liliacea*) would have been observable at the time of the June 2016 survey. Fragrant fritillary was determined by the applicant's biologists to have low potential to occur because this species occurs only in heavy clay soil. This soil type does not appear to be present on the site, and the Natural Resources Conservation Service (2016) maps the soils on the site as Spreckels loam, Felta very gravelly loam, and Zamora silty clay loam, soil types that do not appear to be suitable for this species.

One species occurring on the site, northern California black walnut (*Juglans hindsii*), is a special-status species where it is native. However, this species is widely naturalized. The Biological Resources Assessment indicates that it is doubtful that this species is native to Sonoma County, and CNPS does not list Sonoma County as one of the counties where the species is native. Northern California black walnut appears to be naturalized rather than native in the survey area, as all of the trees present are too young to have predated the settlement of the area. Therefore, this species is not recognized as a special-status species on the project site.

The project site is not expected to support special-status plant species based upon the lack of suitable habitat and/or the lack of their observance during reported blooming periods. Therefore, project implementation is expected to have a less-than-significant impact to special-status plant species, and no mitigation is required.

Significance Level:

Less than Significant

Special-Status Wildlife Species

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; California fully protected and species of special concern; non-game mammals protected by Sections 4150-4155 of the CFGC; and nesting birds protected by the CDFW under CFGC Sections 3503 and 3513.

Based on the habitat types mapped and described on the project site, it was determined that the site provides suitable habitat for nesting birds, special-status bats, California giant salamander (*Dicamptodon ensatus*), foothill-yellow legged frog (*Rana boylei*), and western pond turtle (*Emys marmorata*). This determination was made due to the presence of essential habitat requirements for the species, the presence of known occurrences within five miles of the project site, and/or the project site's location within the species' known range of distribution. A discussion of these species and their habitats are provided below.

Protected Nesting Birds. The site contains several large trees and therefore provides habitat for a variety of nesting songbirds and raptors. Songbirds and raptors are protected under the federal Migratory Bird Treaty Act (50 CFR 10.13). Their nest, eggs, and young are also protected under the California Fish and Wildlife Code (§3503, §3503.5, and §3800). In addition, raptors such as the white-tailed kite (*Elanus leucurus*) are "fully protected" under the Fish and Wildlife Code (§3511). Fully protected raptors cannot be taken or possessed (that is, kept in captivity) at any time. Nesting season

for birds in California generally occurs between February 1 and August 31. If construction activities occur during the nesting season, injury to individuals or nest abandonment could occur. In addition, noise and increased construction activity could temporarily disturb nesting or foraging activities, potentially resulting in the abandonment of nest sites. The loss of an active nest of common or special-status bird species would be considered a violation of CFGC and would be considered a significant impact pursuant to the CEQA Guidelines. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts to nesting birds to a less-than-significant level.

Special-Status Bat Species. Numerous trees on the project site provide potential roosting habitat for various special-status bat species known to occur in the project region including but not limited to pallid bat (*Antrozous pallidus*), Pacific western big-eared bat (*Corynorhinus townsendii townsendii*), and long-eared myotis (*Myotis evotis*). These bat species are CDFW Species of Special Concern and may roost in tree snags and in crevices, cavities, and foliage within mature trees. Maternity roosting season for bats is typically April through November. Impacts to special-status bats would be considered a significant impact pursuant to CEQA guidelines. Therefore, implementation of Mitigation Measures BIO-1 and BIO-3 is required to reduce potential impacts to a less-than-significant level.

Western Pond Turtle (WPT). Western pond turtle is the only native freshwater turtle in California and is a CDFW Species of Special Concern. This turtle inhabits annual and perennial aquatic habitats, such as coastal lagoons, lakes, ponds, marshes, rivers, and streams from sea level to 5,500 feet in elevation. It also occupies man-made habitats such as stock ponds, wastewater storage, percolation ponds, canals, and reservoirs. This species requires low-flowing or stagnant freshwater aquatic habitat with suitable basking structures, including rocks, logs, algal mats, mud banks, and sand. To escape periods of high water flow, high salinity, or prolonged dry conditions, WPT may move upstream and/or take refuge in vegetated, upland habitat for up to four months. Although upland habitat is utilized for refuge and nesting, this species preferentially utilizes aquatic and riparian corridors for movement and dispersal. This species requires open, dry upland habitat with friable soils for nesting and prefers to nest on unshaded slopes within 5 to 100 meters of suitable aquatic habitat. Western pond turtle nests from late April through July. Eggs are typically laid from March to August, with most eggs being laid in May and June. Females venture from water for several hours in the late afternoon or evening during the nesting season to excavate a nest, lay eggs, and bury the eggs to incubate and protect them. Nests are well-concealed, though native mammals are occasionally able to locate and predate upon eggs. Hatchlings generally emerge in late fall but may overwinter in the nest and emerge in early spring of the following year.

An occurrence of WPT has been documented by CNDDDB on the project site within the impounded section of Piner Creek. Suitable aquatic and upland habitat is present and WPT is still presumed present on the site. Therefore, WPT may nest on or near the project site and disperse through the project site, especially following precipitation events. Project construction could adversely affect the WPT and could lead to the eventual decline of the species, if still present on the site. Vegetation clearing and grubbing, grading, and construction of the various project components would result in the temporary and permanent loss of aquatic and/or upland habitat and could result in the direct mortality, injury, or harassment of WPT, especially during the breeding season when males are moving away from aquatic habitat in search of females, and females are nesting. Mortality or injury could occur from being crushed by earth-moving equipment and construction debris. Noise and vibration from construction equipment could harass WPTs, causing them to leave the area, potentially increasing the risk of predation or being struck by construction equipment. The presence of trash/debris could attract predators, which could subsequently harass or prey on turtles. In addition, accidental spill of fuel, oils, or other chemicals used during construction activities could degrade water and habitat quality, adversely affecting WPTs.

Post-project operational impacts to WPT similar to those discussed above could occur following occupancy of the development area. For example, turtles moving to and from the onsite pond could be killed, injured, and/or harassed from human foot traffic and/or vehicles. Pesticides, herbicides, and fertilizers commonly used in landscape areas could degrade the water and habitat quality of the onsite pond. Establishment of non-native species/predators, intentionally or accidentally introduced,

could further impair conditions of the aquatic and upland habitats on the project site for turtles. There is also potential for mortality, injury, and/or harassment of individual turtles by domestic pets, as well as those animals (e.g., raccoon (*Procyon lotor*), coyote (*Canis latrans*), etc.) that typically thrive in and near developments.

Potential loss of WPT as a result of project development is considered a potentially significant impact. Implementation of Mitigation Measures BIO-1, BIO-4, and BIO-5 would be required to reduce potential impacts to a less-than-significant level.

Foothill-yellow legged frog (FYLF), CDFW Species of Special Concern, Candidate for State Threatened Listing. On July 7, 2017 FYLF became a candidate for listing under CESA. Previously as a CDFW Species of Special Concern, measures for FYLF were only reviewed and determined through the CEQA process. However, species listed under CESA, including candidates for listing, receive additional protections, and take without a permit is illegal. FYLF occurs in aquatic habitats within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows or seeps, riparian forests, and riparian woodland. Typically, this species prefers partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, and requires cobble-sized substrate for egg-laying.

According to the CNDDDB, six occurrences of FYLF have been documented within five miles of the project site. The Biological Resources Assessment identifies Piner Creek and the instream impoundment as potential breeding habitat for FYLF. Similar to WPT, adult FYLF may disperse through portions of the project site that provide upland estivation habitat, especially following precipitation events. Potentially significant impacts to FYLF could occur as a result of vegetation clearing, grubbing, grading, and intensive heavy-machinery operation, and other construction-related activities. Implementation of Mitigation Measures BIO-1 and BIO-4 is required to reduce such impacts to less-than-significant levels.

California giant salamander. California giant salamander is a CDFW Species of Special Concern. This species is known from coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Adults may be found under rocks, logs and other debris adjacent to water sources. Aquatic larvae are found in cold, clear streams, sometimes in lakes or ponds. Although no occurrences of California giant salamander have been documented by the CNDDDB within 5 miles of the project site, the Biological Resources Assessment concludes that Piner Creek and the instream pond provide potentially suitable breeding habitat. To avoid potentially significant impacts similar to those described for WPT and FYLF, implementation of Mitigation Measures BIO-1 and BIO-4 would be required to reduce such impacts to less-than-significant levels.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Because project construction activities could result in the disturbance of songbird and/or raptor nesting sites, roosting special-status bat species, California giant salamander, FYLF, and WPT, the following shall be required by the County to avoid, minimize, and/or mitigate potential project-related impacts.

Mitigation Measure BIO-1: Conduct Environmental Awareness Training for Construction Employees

Prior to beginning construction activities (including, but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), a qualified biologist⁶ shall develop and conduct an environmental awareness training program for crew members who are involved in project construction. The training shall describe the importance of sensitive biological resources, including potential California giant salamander, FYLF, and WPT dispersal habitat, songbird and/or raptor nest sites, bat roost sites, and adjacent state and federal jurisdictional habitats. The biologist shall also explain the importance of other responsibilities related to the protection of wildlife during construction, such as inspecting open trenches and looking under vehicles and machinery prior to moving them to ensure there are no lizards, snakes, small mammals, or other wildlife that could become trapped, injured, or killed in construction areas or under equipment. In addition, the Lake and Streambed Alteration Agreement (LSAA) expected to be issued for this project (refer discussion under criterion 4(b) below) may require additional species-specific impact avoidance and minimization measures that shall be addressed as part of the training program.

The environmental awareness program shall be provided to all construction personnel to describe the life history of special-status species on or adjacent to the project site, the need to avoid impacts to sensitive biological resources, any terms and conditions required by state and federal agencies, and the penalties for not complying with biological mitigation requirements. If new construction workers are added to the project, the contractor and/or their project manager(s) shall ensure that all personnel receive the mandatory training before starting work. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions shall be provided to each construction worker.

Mitigation Measure BIO-2: Nesting Bird Impact Avoidance Measures

The following measures shall be taken to avoid potential inadvertent destruction or disturbance of nesting birds on and near the project site as a result of construction-related vegetation removal and site disturbance:

- a) To avoid impacts to nesting birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) shall occur outside the avian nesting season (generally prior to February 1 or after August 31). Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest.
- b) If construction-related activities are scheduled to occur during the nesting season (generally February 1 through August 31), a qualified biologist (as defined in Mitigation Measure BIO-1) shall conduct a habitat assessment and preconstruction nesting survey for nesting bird species no more than seven (7) days prior to initiation of work. In addition, the qualified biologist conducting the surveys shall be familiar with the breeding behaviors and nest structures of birds known to nest on the project site. Surveys shall be conducted at the appropriate times of day during periods of peak activity (e.g., early

⁶ A qualified biologist is an individual who possesses, at a minimum, a bachelor's or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present on the project site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species.

morning or dusk) and shall be of sufficient duration to observe movement patterns. Surveys shall be conducted on the project site and within 100 feet of the construction limits for nesting non-raptors and 500 feet for nesting raptors, as feasible. If the survey area is found to be absent of nesting birds, no further mitigation would be required. However, if project activities are delayed by more than seven (7) days, an additional nesting bird survey shall be performed.

- c) If pre-construction nesting bird surveys result in the location of active nests, no site disturbance (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 100 feet of non-raptor nests and 500 feet of raptor nests. Monitoring by a qualified biologist shall be required to insure compliance with the relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented. Active nests found inside the limits of the buffer zones or nests within the vicinity of the project site showing signs of distress from project construction activity, as determined by the qualified biologist, shall be monitored daily during the duration of project construction for changes in breeding behavior. If changes in behavior are observed (e.g., distress, disruptions), the buffer shall be immediately adjusted by the qualified biologist until no further interruptions to breeding behavior are detected. The nest protection buffers may be reduced if the qualified biologist determines in coordination with CDFW that construction activities would not be likely to adversely affect the nest. If buffers are reduced, twice-weekly monitoring may need to be conducted to confirm that construction activity is not resulting in detectable adverse effects on nesting birds or their young. The qualified biologist and CDFW may agree upon an alternative monitoring schedule depending on the construction activity, season, and species potentially subject to impact. Construction shall not commence within the prescribed buffer areas until a qualified biologist has determined that the young have fledged or the nest site is otherwise no longer in use.

Following completion of pre-construction nesting bird surveys (if required), a report of the findings shall be prepared by a qualified biologist and submitted to the County prior to the initiation of construction-related activities that have the potential to disturb any active nests during the nesting season. This report shall include, but shall not be limited to, (1) a discussion of the survey methods and results; (2) photographs of the habitats surveyed; and (3) a map showing the site boundary, survey area, and the location of any nests encountered.

Mitigation Measure BIO-3: Special-Status Bat Roost Impact Avoidance Measures

To avoid and/or minimize potential project-related impacts to special-status bats, the following shall be implemented:

- A qualified wildlife biologist (as defined under Mitigation Measure BIO-1) shall conduct a pre-construction habitat assessment of all trees located within 50 feet from the project site (where access is feasible) to determine if the trees provide suitable bat roost habitat (e.g., snags, large trees, trees with cavities or flaking bark, leafy trees) and to search for evidence of bat use (e.g., guano, urine staining, smells associated with bats, sounds indicating bat presence). The survey shall be conducted no more than 30 days prior the initiation of construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, and grading). If no evidence of bat roosts is found, then no further action is required.
- If evidence of bat use is found, then evening emergence surveys shall be conducted to determine whether a site is occupied. The survey shall determine if the roost is a maternity roost (if construction work is being performed during the bat maternity season, which is typically May 1 through August 31), hibernacula, or day roost. If a maternity roost is present, delay of construction may be necessary until after the roost is vacated, or a disturbance exclusion buffer of at least 50 feet would be established around the maternity roost, or as determined by a qualified biologist in coordination with CDFW.

- If non-maternity bat roosts are detected/observed within trees that must be removed, a bat exclusion plan will be prepared and submitted to CDFW. The exclusion plan will describe the method of exclusion, which may include the use of one-way doors at roost entrances (bats may leave but not re-enter), or sealing roost entrances when the site can be confirmed by a bat expert to contain no bats. No bats will be excluded until the plan is approved by CDFW and alternative roosting habitat is available. The bats will be excluded from the roosting site prior to the commencement of construction activities.
- Following completion of pre-construction bat surveys (if required following the habitat assessment), a report of the findings shall be prepared by a qualified biologist and submitted to the County prior to the initiation of construction-related activities that have the potential to disturb any occupied bat roosts. This report shall include, but shall not be limited to, (1) a discussion of the survey methods and results; (2) photographs of the habitats surveyed; and (3) a map showing the site boundary, survey area, and the location of any roost sites encountered (if applicable).

Mitigation Measure BIO-4: Special-Status Amphibian and Reptile Impact Avoidance Measures

Due to the proximity of the project site to suitable aquatic breeding habitat for special-status amphibians and reptiles, construction activities may impact WPT, FYLF, and California giant salamander while breeding, estivating, and/or dispersing onto the site, especially following precipitation events. To avoid impacting these species, the following measures shall be implemented prior to and during construction:

- Install special-status amphibian and WPT exclusion fencing as follows:
 - Under the supervision of a qualified biologist (as defined under Mitigation Measure BIO-1) and within 3 to 5 days prior to initiating work on the project site (including but not limited to installation of exclusion fencing, equipment mobilization and staging, clearing, grubbing, vegetation removal, demolition, and grading), the contractor shall install temporary exclusion fencing where ground disturbance will occur adjacent to Piner Creek and the instream pond that provides suitable habitat for WPT, FYLF, and California giant salamander. The exact location and alignment of the exclusion fence shall be determined by the qualified biologist.
 - The fencing shall be of a material that meets CDFW standards for species exclusion, a minimum height of 3 feet above ground surface, with an additional 4 to 6 inches of fence material buried such that species cannot crawl under the fence, and shall include escape funnels to allow species to exit the work areas. Specifications and detailed installation instructions shall be included on project bid documents in order to guide the selected construction contractor.
 - The exclusion fence shall not cross the intermittent creek to allow wildlife movement to continue through the creek corridor when work is not occurring.
 - The qualified biologist shall ensure daily visual inspections of the fence for any amphibians or reptiles that may get trapped by the fence. These daily checks shall be conducted by the qualified biologist for the first week of construction. If no special-status amphibian or reptile species are observed, the qualified biologist may train the contractor to conduct daily inspections and call the qualified biologist if any species are encountered.
 - The contractor shall ensure that the temporary exclusion fencing is continuously maintained until all construction activities are completed.
- Following exclusion fence installation, the qualified biologist shall perform a pre-construction surveys for FYLF, WPT, and California giant salamander within the boundaries of the project site plus a 500-foot buffer of the construction area where access is feasible.
- In the event that an individual WPT or California giant salamander is found during preconstruction surveys, it shall be left alone to move away from the project site on its own volition. If it does not move on its own, the qualified biologist shall notify CDFW and relocate the individual(s) at least 500 feet away from the construction location. Relocation areas shall be of suitable habitat, on shallow banks with slow moving water, and shall be far enough

away so as not to be affected by construction activities, as determined by the qualified biologist.

- Unless explicitly authorized by CDFW (e.g., through issuance of an Incidental Take Permit [ITP] or other means), FYLF shall not be relocated if encountered on the project site. If they do not disperse away from the project site on their own, the qualified biologist shall monitor the FYLF and consult with CDFW to determine the appropriate course of action, which may include obtaining an ITP. Construction activities shall not resume until CDFW has provided written approval of the proposed avoidance measures or issued an ITP for FYLF (if applicable).
- Following completion of pre-construction surveys, a report of the findings shall be prepared by a qualified biologist and submitted to the County prior to the initiation of construction-related activities that have the potential to harm WPT, FYLF, or California giant salamander. This report shall include, but shall not be limited to, (1) a discussion of the survey methods and results; (2) photographs of the habitats surveyed; and (3) a map showing the site boundary, survey area, and the location of any individual special-status species encountered (if applicable).
- Work shall be avoided if precipitation has been recorded on the project site within a 24-hour window. The NOAA weather forecast may be utilized to plan project work accordingly.
- To avoid impacting breeding FYLF, WPT, and California giant salamander, dock construction within the onsite pond shall not occur during the breeding season of these species.⁷

Mitigation Measure BIO-5: Prepare and Implement WPT Habitat Protection Plan

Due to the assumed presence of WPT on the project site, the preparation and implementation of a WPT Habitat Protection Plan shall be required to avoid and/or minimize post-project impacts associated with operation of the events facility. This plan shall be prepared by a qualified biologist (as defined in Mitigation Measure BIO-1) in coordination with the CDFW during the Lake and Streambed Alteration Agreement (LSAA) application process discussed below under criterion 4(b). The WPT Habitat Protection Plan shall include measures to preserve, protect, and manage WPT breeding and estivation habitat affected by the proposed project. The CDFW-approved plan shall outline pre-construction and construction avoidance and minimization measures (e.g., pre-construction surveys, seasonal work restrictions, worker education program, exclusion fencing, on-site biological monitor, erosion and sediment and non-sediment control measures) and post-construction conservation measures (e.g., long-term habitat protection, species monitoring, and resident and visitor education program).

Mitigation Monitoring BIO-1 through BIO-5:

If FYLF are found during the pre-construction surveys, then a copy of CDFW's written concurrence with proposed impact avoidance measures or a copy of CDFW's 2081 Incidental Take Permit (ITP) shall be provided to Sonoma County prior to the commencement of grading on the project site. In addition, prior to issuance of any grading permit(s), the County shall review and approve the results of all pre-construction surveys and any measures recommended by the biologist to avoid sensitive species (i.e., active bird nest and/or bat roost protection buffers) which shall be noted on the final project plans. CDFW approval of the WPT Habitat Protection Plan shall be required by the County as a condition of project approval. The County shall not issue a grading permit until the applicant has submitted evidence to the County that Mitigation Measures BIO-1 through BIO-5 have been completed.

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

⁷ The breeding season for FYLF and California giant salamander is during the wet season in early to late winter to spring, usually November through early May. The breeding season for WPT is typically from March to August.

Regulatory Framework

California Fish and Game Code Sections 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by CDFW under Sections 1600-1603 of the CFGC. Any activity that will do one or more of the following - (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake - generally requires a 1602 Lake and Streambed Alteration Agreement (LSAA). The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life." This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW 1994). In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 LSAA from CDFW.

Sensitive Natural Communities

Sensitive natural communities are vegetation communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by CDFW (e.g., California Natural Diversity Database - CNDDDB) or the USFWS. The CNDDDB identifies a number of natural communities as rare, which are given the highest inventory priority. Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA Guidelines.

California Oak Woodland Statute

In September 2004, State Bill 1334 was passed and added to the State Public Resources Code as Statute 21083.4, requiring Counties to determine in their CEQA documents whether a project in its jurisdiction may result in a conversion of oak woodlands that would have a significant effect on the environment. In addition, if the County determines that a project may result in a significant impact to oak woodlands, the County shall require one or more of the following mitigation alternatives to mitigate for the impact:

- 1) Conserving oak woodlands through the use of conservation easements.
- 2) Plant an appropriate number of trees, including maintaining the plantings and replacing dead or diseased trees. Required maintenance of trees terminates seven years after the trees are planted. This type of mitigation shall not fulfill more than half of the mitigation requirement for the project. This type of mitigation may also be used to restore former oak woodlands.
- 3) Contribute funds to the Oak Woodlands Conservation Fund.
- 4) Other mitigation measures developed by the County.

The CFGC (Section 1361) defines oak woodland habitat as "an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover."

Comment:

Sensitive vegetation communities include riparian habitats or other sensitive natural communities identified in local or regional plans, policies, or regulations, or designated by the USFWS, NOAA Fisheries, or CDFW. The Biological Resources Assessment report classifies willow riparian forest, willow riparian/oak forest, and coast live oak forest habitat types on the project site as sensitive natural

communities. Willow riparian forest occurs around the pond inlet, along the southeast and northeast banks of the pond, immediately below (west of) the pond's wooden dam structure, and in two areas bordering the intermittent stream channel (Piner Creek) along the northern site boundary. Riparian habitats are considered sensitive, and mixed willow riparian forests and woodlands are recognized as "high priority" habitat types for inventory by the CNDDDB. In addition, the onsite pond is an impounded section of an intermittent tributary and is subject to regulation by CDFW under Sections 1600-1603 of the CFGC. Removal of riparian vegetation and alteration of the pond's bed and banks are expected to occur as a result of construction of a dock across the pond and development of an event center deck, ADA pathways, bocce ball court, and improvements to the existing pool area along the bank of the pond. Impacts to sensitive natural communities would be considered potentially significant pursuant to the CEQA Guidelines.

In order to ensure compliance with Section 1600-1603 of the California Fish and Game Code, the project proponent will need to prepare and submit an LSAA Notification Package to seek formal authorization to perform work on and below the banks of the impounded section of Piner Creek. The project proponent would be responsible for conducting all project activities in accordance with the LSAA, including the implementation of jurisdictional habitat and special-status species impact avoidance and minimization measures.

To compensate for unavoidable impacts, including the loss or degradation of a stream, lake, or riparian habitat, it is anticipated that CDFW will require the preparation of a Habitat Mitigation and Monitoring Plan (HMMP). If required, the plan shall be prepared through consultation with CDFW in compliance with all permit conditions and shall incorporate information from the existing Riparian Revegetation Recommendations report prepared by landscape architect Don MacNair during July 2019. The amount of required compensatory habitat acreage will be based on the functions and values of impacted features. Habitat creation, restoration, and/or enhancement at a minimum of a 2:1 ratio of created to removed/disturbed in-kind habitat is typically required. The project proponent would be responsible for implementation of the HMMP. The HMMP shall include, but shall not be limited to, the following information: (1) the location and extent of the proposed riparian mitigation area(s); (2) the proposed native plant palette and density of plantings, including an analysis of natural water availability for long-term plant survival; (3) site preparation methods and planting techniques; (4) maintenance activities and scheduling of such activities to protect and enhance the riparian habitat; (5) success criteria and methods to monitor the success of mitigation area for a minimum of a five year period following completion of restoration, enhancement, or creation activities; (6) remedial actions if the established success criteria are not achieved; and (7) the mechanism(s) to ensure preservation of the mitigation area(s).

As an alternative to onsite riparian habitat creation, equivalent mitigation credits may be purchased at a mitigation bank to offset impacts to the pond and associated riparian habitat. A mitigation plan would need to be prepared that provides detailed information about the bank and how the purchase of credits will result in no net loss of waters of the state. Purchase of mitigation credits shall be subject to approval and verification by CDFW prior to the initiation of ground disturbing activities.

Therefore, this impact is less than significant based on compliance with California Fish and Game Code Sections 1600-1603.

While oak woodland is not recognized as a "high priority" habitat type by CNDDDB, this community is protected by state law (Public Resources Code Section 21083.4). Coast live oak woodland is mapped outside of the planned development area to the south and southeast of the pond and along Piner Creek immediately below (west of) the pond. The project footprint is located within areas identified as "developed/ruderal" in the Biological Assessment Report. Prior to the 2017 Tubbs Fire, developed/ruderal areas supported a residence and numerous other buildings, driveways, a paved parking area, landscaped areas, and a small horse pasture and barn. Also included in this land cover type were several areas that support several native tree species that are typically associated with oak woodland communities. A majority of the trees in the development area were destroyed by the fire and require removal for public safety purposes, as described in detail under criterion 4(e) below.

Therefore, project implementation would not result in a loss or conversion of oak woodland. Impacts to oak woodlands would be considered less than significant, and no mitigation is required.

Significance Level:

Less than Significant

- 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?**

Regulatory Framework

Federal

The Clean Water Act (CWA)

The CWA is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (EPA). However, the EPA depends on other agencies, such as the individual states and the U.S. Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Sections 404 and 401 of the CWA apply to activities that would impact waters of the U.S. The USACE enforces Section 404 of the CWA, and the California State Water Resources Control Board (State Water Board) enforces Section 401.

Section 404. As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into “waters of the U.S.” “Waters of the U.S.” include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks. Wetlands are defined as those areas “that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3(b)). The discharge of dredged or fill material into waters of the U.S. is prohibited under the CWA except when it is in compliance with Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE’s administration of the Section 404 program and may override a USACE decision with respect to permitting. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

Section 401. Any applicant for a federal permit to impact waters of the U.S. under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The “401 Certification” is provided by the State Water Board through the local Regional Water Quality Control Board (RWQCB). The RWQCB issues and enforces permits for discharge of treated water, landfills, storm water runoff, filling of any surface waters or wetlands, dredging, agricultural activities, and wastewater recycling. The RWQCB recommends the “401 Certification” application be made at the same time that any applications are provided to other agencies, such as the USACE, USFWS, or NOAA Fisheries. The application is not final until completion of environmental review under CEQA. The application to the RWQCB is similar to the pre-construction notification that is required by the USACE. It must include a description of the habitat that is being impacted, a description of how the impact is proposed to be minimized, and proposed mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as good as or better than the water-based habitat that is being removed.

National Pollutant Discharge Elimination System (NPDES)

The NPDES program requires permitting for activities that discharge pollutants into waters of the

United States. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Board and administered by each regional water quality control board. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the State Water Board's General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The project would require coverage under the Construction General Permit.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Act (Porter-Cologne Act) (California Water Code § 13260) requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the "waters of the State" to file a report of discharge with the RWQCB through an application for waste discharge. "Waters of the State" are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. If a project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the Water Board has the option to regulate the dredge and fill activities under its state authority through its Waste Discharge Requirements (WDR) program.

Comment:

The Biological Resources Assessment identifies Piner Creek and the instream pond on the project site as waters of the U.S. and state that are potentially subject to USACE and RWQCB jurisdiction. The pond, located near the northeast corner of the site, was created by damming intermittent Piner Creek. The creek flows into the pond at its eastern end and flows out of the pond via a weir and spillway at its northwest corner. Piner Creek closely parallels the northern property boundary, then flows into Santa Rosa Creek approximately four miles downstream. Santa Rosa Creek is confluent to the Russian River via Laguna de Santa Rosa. At the time of survey, the pond was filled with water to a depth of several feet. Downstream of the spillway the creek bed was dry and the width of the ordinary high water mark at this location was approximately 15 feet. Upstream of the pond, the creek drains into the pond and had standing water to a depth of approximately two to three feet deep within with an ordinary high water mark of approximately six feet.

Construction of the proposed dock within the impounded section of Piner Creek, as depicted on the site plans, would result in direct impacts to state and federal protected wetlands and waters. Any alterations of, or discharges into, waters of the U.S. and state must be performed in conformance with the Sections 404 and 401 of the CWA via certification and permitting prior to any grading or construction that may impact jurisdictional area(s), as applicable. Impacts to potentially jurisdictional wetland and waters are considered potentially significant.

The project applicant will need to submit a jurisdictional delineation of waters of the U.S. to the USACE in order to verify of the limits of their jurisdiction and determine the exact acreage of waters of the U.S. and waters of the state that would be affected as a result of project implementation. If the USACE determines that jurisdictional waters of the U.S. will be impacted by the project, the appropriate CWA Section 404 permit shall be acquired by the applicant for the construction of the proposed project. In addition, the applicant will be required to submit an application to the RWQCB for Section 401 Water Quality Certification. These permits shall be acquired, and all conditions shall be agreed to prior to project construction. Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from

the agencies indicating that a permit is not required. The project applicant will be responsible for complying with all conditions outlined in the applicable USACE and RWQCB permits.

The applicant may be required to prepare a Habitat Mitigation and Monitoring Plan (HMMP), as discussed above under criterion 4(b), to be submitted with the USACE and RWQCB permit applications. Compensatory mitigation may include in-kind creation, restoration, and/or enhancement at an up to 2:1 ratio of created to filled wetlands, pending coordination with the agencies (unless it is determined by the regulatory agencies, through the permit process, that a different ratio is sufficient to mitigate impacts to jurisdictional waters of the U.S.). It should be noted that the amount of required compensatory mitigation would be based upon impact calculations of areas subject to CWA 404 and 401 jurisdiction and the ratio of impacted to created wetlands, which may differ from areas regulated by CDFW.

As an alternative to wetland restoration, equivalent mitigation credits may be purchased at a mitigation bank or the Applicant may enter into an in-lieu fee agreement to offset impacts to jurisdictional features. Purchase of mitigation credits shall be subject to approval and verification by USACE and RWQCB. A qualified biologist shall prepare a mitigation plan that provides detailed information about the bank or in-lieu fee agreement, and how this approach will result in no net loss of wetlands. The mitigation plan shall be prepared pursuant to, and through consultation with, the USACE and RWQCB.

If the project does not require a federal permit, but does involve dredge or fill activities that may result in a fill discharge to "Waters of the State", the Regional Board has the option to regulate the project under its state authority (Porter-Cologne) in the form of Waste Discharge Requirements or Waiver of Waste Discharge Requirements.

Impacts to state and federal protected wetlands are less than significant with compliance with Sections 404 and 401 of the CWA, or other requirements or the Regional Water Quality Board.

In addition, Permit Sonoma requires the project applicant to prepare a grading plan and drainage plan which include performance standards and BMPs for pre-construction, construction, and post-construction to prevent and/or minimize the discharge of pollutants, including sediment, from the project site to adjacent state and federal regulated aquatic features. Furthermore, the applicant is required to obtain coverage under the SWRCB's Construction General Permit, which requires preparation of a SWPPP and implementation of BMPs to protect the quality of storm water runoff.

Significance Level: Less than Significant

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Comment:

Wildlife corridors are linear and/or regional habitats that provide connectivity between or to other naturally vegetated open spaces. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (e.g., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for their known or likely importance to local wildlife. Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat,

which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability.

Although the habitats on project site may serve as local travel routes for resident wildlife species in the vicinity of the site as they move within their home ranges in search of food, cover, and other needs, project construction and operation would not substantially interfere with regional wildlife movement or wildlife migration patterns. Passage of wildlife across the site is likely already restricted to the west by U.S. 101 and surrounding development. With regard to native wildlife nursery sites, there are no known sites present on the project site; however, the site may provide breeding habitat for birds, bats, amphibian, and reptile species. Potential impacts to breeding habitat would be reduced to a less-than-significant level with implementation of Mitigation Measures BIO-1 through BIO-5. Project construction and operation may affect individual animals using the site but is not anticipated to cause wildlife populations to drop below self-sustaining levels. Therefore, potential effects to wildlife movement and corridors, and wildlife nursery sites resulting from project construction and operation are considered less than significant, and no mitigation is required.

Significance Level:

Less than Significant

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

Regulatory Framework

Sonoma County General Plan

The *Sonoma County General Plan 2020* (Sonoma County 2008) Land Use Element and Open Space & Resource Conservation Element both contain goals, objectives, and policies to protect natural resource lands including, but not limited to, biotic areas, special-status species habitat, marshes and wetlands, sensitive natural communities, and habitat connectivity corridors, as summarized below.

Biotic Habitat Areas

The 2020 General Plan Open Space and Resource Conservation Element provides policies for protection of biotic habitats both within and outside the designated areas. Currently available information on the location and value of native habitats and sensitive resources is limited and changes over time as sites are assessed, new occurrences are reported, and additional locations are identified. As more habitat mapping information becomes available in the future, changes in designations will be considered along with possible policy changes. Regular collection and updating of reliable information and refinement of best management practices are necessary to protect the County's biotic resources over the long term. Following are the types of biotic habitat addressed by Policies OSRC-7a through 7u that are pertinent to the proposed project:

Special-Status Species Habitat

Special-status species are plant and animals which are listed or candidate species under the Federal or State Endangered Species Acts and other species considered rare enough to warrant special consideration. Reported occurrences of special-status species are compiled by the California Natural Diversity Data Base (CNDDB) of the CDFW and are routinely updated as new information becomes available. Detailed surveys are typically necessary to confirm the presence or absence of special-status species.

Sensitive Natural Communities

CDFW has identified certain natural habitats as sensitive natural communities which are rare and vulnerable to further loss. Sensitive natural communities identified in Sonoma County include coastal salt marsh, brackish water marsh, freshwater marsh, freshwater seeps, native grasslands, several types of forest and woodland (including riparian, valley oak, Oregon white oak, black oak, buckeye, Sargent cypress, and pygmy cypress), old growth redwood and Douglas fir forest, mixed serpentine chaparral, coastal scrub, prairie, bluff, and dunes. Many of these communities support populations of special-

status species and are important to native wildlife.

Habitat Connectivity Corridors

Maintaining and improving opportunities for habitat connectivity throughout the County are essential for protecting biodiversity and sustaining native plant and animal populations. Linkages and corridors are needed to allow movement across the landscape and to connect wetlands and other important habitat areas to undeveloped lands and permanent open space. Important linkages and corridors include lands south of Glen Ellen connecting Sonoma Mountain and the Mayacamas Range and lands connecting the Laguna de Santa Rosa to agricultural areas south of Highway 116. It should be noted that riparian corridors also provide habitat connectivity.

Riparian Corridors

Sonoma County General Plan Policies OSRC-8a through 8n protect streamside conservation areas along designated riparian corridors. Areas along streams that naturally support native vegetation and wetlands are referred to as "Riparian Corridors." Specifically, Policy OSRC-8b establishes the following streamside conservation areas along both sides of designated Riparian Corridors as follows, measured from the top of the higher bank on each side of the stream as determined by PRMD:

1. Russian River Riparian Corridor: 200'
2. Flatland Riparian Corridors: 100'
3. Other Riparian Corridors: 50'

Sonoma County Ordinances

Riparian Corridor (RC) Combining Zone

The RC combining zone is established to protect biotic resource communities, including critical habitat areas within and along riparian corridors, for their habitat and environmental value, and to implement the provisions of the General Plan Open Space & Resource Conservation Element and Water Resources Element. These provisions are intended to protect and enhance riparian corridors and functions along designated streams, balancing the need for agricultural production, urban development, timber and mining operations, and other land uses with the preservation of riparian vegetation, protection of water resources, floodplain management, wildlife habitat and movement, stream shade, fisheries, water quality, channel stability, groundwater recharge, opportunities for recreation, education and aesthetic appreciation, and other riparian functions and values.

Valley Oak Habitat (VOH) Combining District

The VOH combining district is established to protect and enhance valley oaks and valley oak woodlands and to implement the provisions of *Sonoma County General Plan 2020* Resource Conservation Element Section 5.1. Design review approval may be required for projects in the VOH, which would include measures to protect and enhance valley oaks on the project site, such as requiring that valley oaks shall comprise a minimum of fifty percent (50%) of the required landscape trees for the development project.

Tree Protection

The Sonoma County Tree Protection Ordinance (Sonoma County Code of Ordinances, Chapter 26, Article 88, Sec. 26-88-010 [m]) establishes policies for protected tree species in Sonoma County. Projects shall be designed to minimize the destruction of protected trees. With development permits, a site plan shall be submitted that depicts the location of all protected trees greater than nine inches (9") in circumference and their protected perimeters in areas that will be impacted by the proposed development, such as the building envelopes, access roads, and leachfields. Protected trees are defined (Chapter 26, Article 02, Sec. 26-02-140) as the following species: big leaf maple (*Acer macrophyllum*), black oak (*Quercus kelloggii*), blue oak (*Quercus douglasii*), coast live oak (*Quercus agrifolia*), interior live oak (*Quercus wislizenii*), madrone (*Arbutus menziesii*), oracle oak (*Quercus morehus*), Oregon oak (*Quercus garryana*), redwood (*Sequoia sempervirens*), valley oak (*Quercus lobata*), California bay (*Umbellularia californica*), and their hybrids. Lot line adjustments, zoning permits, and agricultural uses are exempt from this requirement.

Removal of Trees and Other Vegetation

Construction grading and drainage shall not remove or disturb trees and other vegetation except in compliance with the department's best management practices for construction grading and drainage and the approved plans and specifications. Construction grading and drainage shall be conducted in compliance with the following requirements.

- A. The limits of work-related ground disturbance shall be clearly identified and delineated on the approved plans and specifications and defined and marked on the site to prevent damage to surrounding trees and other vegetation.
- B. Trees and other vegetation within the limits of work-related ground disturbance that are to be retained shall be identified and protected from damage by marking, fencing, or other measures. (Ord. No. 6219 , § I (Exh. A), 12-19-2017)

Setbacks For Lakes, Ponds, And Reservoirs

Construction grading shall be set back fifty feet (50') from the high-water mark of lakes, ponds, and reservoirs, unless a greater setback is required by the general plan, local coastal plan, or zoning code. The setback requirements in this section shall not apply to construction grading for construction drainage; trails; public projects; resource conservation, restoration, or enhancement projects; or lake, pond, or reservoir maintenance. (Ord. No. 6219 , § I (Exh. A), 12-19-2017)

Comment:

With implementation of Mitigation Measures BIO-1 through BIO-5, the project would be consistent with *Sonoma County General Plan 2020* Land Use Element and Open Space & Resource Conservation Element goals, policies, and objectives to protect natural resources and lands including, but not limited to, watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

The project is located within Sonoma County a Riparian Corridor Combining Zone 50/50 (RC 50/50), and Valley Oak Habitat Combining District (VOH). Project implementation would not impact valley oak woodland and would therefore be consistent with the County's policies for projects located in the VOH district. Pursuant to Sonoma County ordinance and General Plan policies pertaining to riparian corridor protection, Piner Creek and the instream pond have a 50-foot development setback requirement. The proposed development meets this requirement on the northern end of the property where cabins are proposed to be constructed in an area that was undeveloped prior to the 2017 Tubbs Fire. Several proposed project elements are located within the 50-foot setback, including the event center deck, ADA pathways, and improvements within the existing pool and patio area.

Section 26.65.030 A.4 of the Zoning Ordinance provides that an exception to the prohibition of structures within the setback area may be granted if the finding is made that the affected area has no substantial value for riparian functions. The Director of PRMD has concluded and recommends to the hearing body that the exception for the decking be granted based on the following findings:

1. The decking is located on top of a man-made berm that was not originally a part of the riparian corridor.
2. When the site was developed as the Buzzard Gulch youth camp, the berm area was used for recreational access to the pond and consists of gravel and grasses.
3. The Biological Report for the Solstice project (original pre-fire report dated July 2016) makes the following statements about the dam:

*The dam is occupied by herbaceous vegetation except along its western margin. Giant horsetail is abundant close to the water's edge, along with the non-native grasses dallis grass (*Paspalum dilatatum*) and common velvet grass, (*Holcus lanatus*). Both of these grasses are indicators of somewhat moist conditions. Other common species on the dam include the non-native rye grass, brome fescue, slender wild oat, soft chess, and narrow-leaf bird's-foot trefoil (*Lotus tenuis*) and the native species American bird's-foot trefoil. The herbaceous*

vegetation is bordered on the west side of the dam by a mixture of small coast live oaks and arroyo willows and thickets of Himalayan blackberry and French broom. The portion of the dam occupied by herbaceous vegetation is here mapped as part of the developed/ruderal habitat type.

The Biological Report supports the finding that the berm area has been disturbed and has minimal value for riparian functions.

4. Construction of the deck does not involve substantial grading or additional disturbance of the pond or riparian area adjacent to the actual creek.
5. The Coast Live Oaks and Arroyo Willows on the west side of the dam were destroyed by the fire, and the area will be replanted with native trees and grasses.

No new ground will be disturbed for construction in areas within the 50-foot setback. Therefore, project implementation would be consistent with Sonoma County policies and ordinances protecting riparian corridors and ponds.

The Sonoma County Tree Protection Ordinance designates 'protected' trees as defined by Chapter 26, Article 02, Sec. 26-02-140 and provides mandatory standards and regulations for effects on protected trees. An initial Tree Preservation and Mitigation report, prepared by Horticultural Associates on May 23, 2017, identified 85 trees within the planned development area. Of the 85 trees that were surveyed, 54 were native to the project site and had a circumference greater than nine inches (9"). These tree species include coast live oak, valley oak, black oak, California bay laurel, and coast redwood, and would be considered protected trees as defined by the County's tree ordinance. A follow-up survey report with an updated tree health assessment was prepared on November 14, 2018 after the October 2017 Tubbs Fire. It was determined by the arborist that 41 of the 85 trees need to be removed due to extensive fire damage, and 13 protected trees sustained moderate fire damage but may be preserved with remedial pruning. These results were verified for the existing pool area in a third report prepared by Horticulture Associates on July 18, 2019. Based on results of the third arborist report, it was determined that 3 additional trees may be preserved with remedial pruning. Project construction will only result in the removal of trees that were severely damaged by the wildfire and require removal for public safety purposes; therefore, impacts to County-protected trees would be considered less than significant, and no mitigation is required.

Significance Level:

Less than Significant with Mitigation Incorporated (BIO-1 through BIO-5)

Mitigation Monitoring:

See Mitigation Monitoring BIO-1 through BIO-5.

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?

Comment:

The project site is not located within the plan area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan, including the Santa Rosa Plain Conservation Area.

Significance Level:

No Impact

5. CULTURAL RESOURCES:

Would the project:

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

Comments:

On August 8, 2016, Archaeological Resource Services (ARS) conducted a Cultural Resources Evaluation for the proposed Solstice Project.⁸ The evaluation results identified twenty-four buildings, located within the project site, in which three (3) of these buildings to include the main residence were determined to be 45 years or older, thus requiring an evaluation to determine if these buildings are eligible for listing in the National Register for Historic Places (NRHP), the California Register for Historic Resources (CRHR), or Local Register. On October 2017, the "Tubbs Fire" damaged the Project Site and surrounding communities.⁹ After the fire, a reconnaissance survey determined that all 24 buildings including the three (3) age eligible buildings were completely destroyed by the fire. As currently conceived, the project now proposes the new construction of 13 cabins, an event barn, a reception office, support facilities, and new landscaping.

Significance Level: No Impact

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

Comment:

A cultural resources records search from the Northwest Information Center (CHRIS-NWIC), an archaeological field survey, and a Native American Sacred Lands File Search through the Native American Heritage Commission indicates that there are no archaeological (prehistoric and historic) resources located within the Project Boundaries. There is one (1) previously recorded prehistoric site (CA-SON-515) located on the opposite bank of an unnamed creek that divides the project site from the Cloverleaf Ranch to the north. There are two (2) known but unrecorded prehistoric Native American sites located within a one-mile radius of the project site.¹⁰ Sonoma County has notified all the relevant tribes about the proposed project, and none requested AB 52 consultation.

Therefore, the proposed project would result in no substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. Despite the heavy disturbances of the project site, due to the Tubbs Fire, and unrelated modern human activities prior to the fire that may have displaced archaeological resources on the surface, it is possible that intact archaeological resources exist at depth. Section 11.14.050 of the Sonoma Grading Ordinance establishes uniformly applied development standards to reduce the potential for impacts on cultural resources to a less than significant level by requiring that all work be halted in the vicinity where human remains or archaeological resources are discovered during construction grading and drainage, and that the Director of Permit Sonoma and the County Coroner be notified to ensure compliance with State law regarding the proper disposition of human remains, including those

⁸ Archaeological Resources Service. 8, August 2016. A Cultural Resources Evaluation of the Proposed Solstice Development at 3890 Old Redwood Highway, Santa Rosa, Sonoma County, California. Prepared by Archaeological Resources Services, Rohnert Park, California; prepared for Kevin Skiles, Developer. The Evaluation is on file at the Northwest Information Center at Sonoma State University.

⁹ California Department of Forestry and Fire Protection. 8, October 2017. Tubbs Fire: CAL FIRE Sonoma-Lake Napa Unit. Electronically available at: http://cdfdata.fire.ca.gov/incidents/incidents_details_info?incident_id=1867

¹⁰ Archaeological Resources Service. 8, August 2016. A Cultural Resources Evaluation of the Proposed Solstice Development at 3890 Old Redwood Highway, Santa Rosa, Sonoma County, California. Prepared by Archaeological Resources Services, Rohnert Park, California; prepared for Kevin Skiles, Developer. The Evaluation is on file at the Northwest Information Center at Sonoma State University.

identified to be Native American. Similarly, if archaeological resources or suspected archaeological resources are discovered, the Director of Permit Sonoma shall notify the State Historic Preservation Office and the Northwest Information Center at Sonoma State University, and the permittee shall retain a qualified archaeologist to evaluate the find to ensure proper disposition of the archaeological resources or suspected archaeological resources. The director shall provide notice of the find to any tribes that have been identified as having cultural ties and affiliation with the geographic area in which the archaeological resources or suspected archaeological resources were discovered, if the tribe or tribes have requested notice and provided a contact person and current address to which the notice is to be sent. The director may consult with and solicit comments from notified tribes to aid in the evaluation, protection, and proper disposition of the archaeological resources or suspected archaeological resources.

Archaeological resources may include historic or prehistoric ruins, burial grounds, pottery, arrowheads, midden, or culturally modified soil deposits. Artifacts associated with prehistoric ruins may include humanly modified stone, shell, bone, or other cultural materials such as charcoal, ash, and burned rock indicative of food procurement or processing activities. Prehistoric domestic features may include hearths, fire pits, or floor depressions. Mortuary features are typically represented by human skeletal remains.

Significance Level: Less than Significant Impact

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

Comment:

Although no burial sites are known in the vicinity of the project, the site would be disturbed by grading and construction activities, which could uncover undocumented materials. However, Sonoma County Municipal Code Section 11.14.050 provides procedures for protection of human remains, including those identified to be Native American. Implementation of this standard County policy would ensure that this impact would be less-than-significant.

Significance Level: Less than Significant Impact

6. Energy

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?**

Comment:

Energy would be consumed during construction and operation of the proposed project. Energy in the form of gasoline and diesel fuel would be required during deconstruction of existing facilities and construction of new ones (e.g., the 13 cabins, event barn, and office / storage building). The energy required for these activities is a necessary component of construction, and would not be used in an inefficient manner. Construction would consume energy from gasoline and diesel fuels, and the proposed project would include measures that would reduce the amount of fuel consumption during construction, such as minimizing idling time of diesel-powered construction equipment (Refer to Section 3b of this MND. The proposed rural lodging and event center would also consume energy during its operation. The structures would be subject to Part 11 of the Title 24 Building Standards Code (referred to as the California Green Building Standards Code; CALGreen Code). The CALGreen Code requires implementation of minimum energy efficiency standards that reduce wasteful consumption. The cabins would be developed with deep roof overhangs that would provide sun screening, and have windows and sun shafts that provide natural light reducing the need for interior lighting that consumes energy (Solstice, 2017). Due to the standards the new facility would be required to comply with and design of the structures, the proposed structures would be more efficient than those on the site prior to the Tubbs fire in 2017. The project would not result in a significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources.

Significance Level: Less Than Significant

- b) **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Comment:

There are no state or local plans applicable to the proposed project. As described in under response a) above, the project would comply with the Title 24 Building Code, Sonoma County Ordinance 7D2-1, which pertains to energy efficiency, and includes design features that would reduce unnecessary consumption of energy.

Significance Level: No Impact.

7. GEOLOGY AND SOILS:

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.**

Comment:

The project site is not within a fault hazard zone as defined by the Alquist-Priolo fault maps and

identified in the County's General Plan.¹¹ The site is approximately 0.35 miles west of the Healdsburg-Rogers Creek Fault Hazard Zone. As such, the Project is located in an area that has potential for earthquake damage. However, adherence to the seismic design guidelines of the California Building Code (CBC) would ensure that impacts related to earthquakes would remain less than significant.

Significance Level: Less than Significant Impact

ii. Strong seismic ground shaking?

Comment:

All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, and other faults. The design and construction of new structures are subject to engineering standards of the California Building Code (CBC), which take into account soil properties, seismic shaking, and foundation type. All construction-related work, including earthwork, grading, trenching, backfilling and compaction operations, would be conducted in accordance with Sonoma County Code Chapter 11. All construction activities would meet the CBC regulations for seismic safety, including designing all earthwork, cuts and fills, drainage, pavements, utilities, foundations, and structural components in conformance with the specifications and criteria contained in the project final geotechnical report, as required by Section 1803 of the CBC, which shall be completed and submitted to Permit Sonoma prior to the issuance of grading permits. In addition, construction plans would be subject to review and approval of Permit Sonoma prior to the issuance of a building permit. All work would be subject to inspection by Permit Sonoma and is required to conform to all applicable code requirements and approved improvement plans prior to the issuance of a certificate of occupancy. Project conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements. The project would therefore not expose people to substantial risk of injury from seismic shaking.

Significance Level: Less than Significant Impact

iii. Seismic-related ground failure, including liquefaction?

Comment:

Strong ground shaking can result in liquefaction, the sudden loss of shear strength in saturated sandy material, resulting ground failure. The project site is not located within a liquefaction hazard area according to the Sonoma County General Plan 2020 Public Safety Element.¹² Moreover, the proposed project would be subject to standard CBC measures to provide for sound structural design that include considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. As stated in Section 1803 of the CBC, a geotechnical report is required for projects involving human occupancy in areas where soils are subject to liquefaction. Prior to the issuance of grading permits, the Applicant shall provide a geotechnical report that addresses any potential for soil liquefaction (see ii. above). Therefore, with adherence to CBC requirements, project impacts with relation to liquefaction would be less than significant.

Significance Level: Less than Significant Impact

iv. Landslides?

Comment:

¹¹ Sonoma County General Plan 2020, Public Safety Element, Figure PS-1b, Earthquake Fault Hazard Areas, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Public-Safety--Earthquake-Fault-Hazard-Areas/>, accessed on 2/11/19.

¹² Sonoma County General Plan 2020, Public Safety Element, Figure PS-1c, Liquefaction Hazard Areas, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Public-Safety-Liquefaction-Hazard-Areas/>, accessed on 2/11/19.

Steep slopes characterize much of Sonoma County, particularly the northern and eastern portion of the County. Where these areas are underlain by weak or unconsolidated earth materials landslides are a hazard. If the project includes structures located in the footprint of a mapped landslide or within a landslide hazard area building or grading could destabilize slopes resulting in slope failure. The project would be located in a Class XII Landslide Hazard Area according to the General Plan Public Safety Element, Figure PS-1d.¹³ This area is characterized as having moderate slopes. Therefore, the project site could be susceptible to landslides. However, all structures would be required to meet building permit requirements, including seismic safety standards and soil test/compaction requirements. Further, pursuant to General Plan Policy PS-1f,¹⁴ prior to project approval, the applicant shall provide the County with a geologic (geotechnical) report that describes the hazards (including from expansive soils) and includes necessary measures to reduce risks to acceptable levels. An engineer's or geologist's certification shall be provided to ensure that risks have been reduced to a level acceptable to the County.

Significance Level: Less than Significant Impact

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

Comment:

The project includes minimal grading activities which require the issuance of a grading permit. Improper grading, both during and post construction, has the potential to increase the volume of runoff from a site which could have adverse downstream flooding and further erosional impacts, and increase soil erosion on and off site which could adversely impact downstream water quality.

As discussed in section 10 (Hydrology and Water Quality), erosion and sediment control provisions of the Drainage and Storm Water Management Ordinance (Chapter 11, Sonoma County Code) and Building Ordinance (Chapter 7, Sonoma County Code) require implementation of flow control best management practices to reduce runoff. The applicant is required to submit an Erosion and Sediment Control Plan prepared by a registered professional engineer as an integral part of the grading plan. The Erosion and Sediment Control Plan is subject to review and approval of the Permit Sonoma prior to the issuance of a grading permit. The Plan will include temporary erosion control measures to be used during construction of cut and fill slopes, excavation for foundations, and other grading operations at the site to prevent discharge of sediment and contaminants into the drainage system. The Erosion and Sediment Control Plan will include the following measures as applicable:

- a. Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
- b. All drainage ways, wetland areas and creek channels shall be protected from silt and sediment in storm runoff through the use of silt fences, diversion berms and check dams. Fill slopes shall be compacted to stabilize. All exposed surface areas shall be mulched and reseeded and all cut and fill slopes shall be protected with hay mulch and /or erosion control blankets as appropriate.
- c. All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15th. Erosion control measures shall remain in place until the end of the rainy season, but may not be removed before April 15th. The applicant shall be responsible for notifying construction contractors about erosion control requirement

Required inspection by Permit Sonoma staff insures that all grading and erosion control measures are constructed according to the approved plans. These ordinance requirements and adopted best

¹³ Sonoma County General Plan 2020, Public Safety Element, Figure PS-1d, Deep-Seated Landslide Hazard Areas, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/General-Plan/Public-Safety-Deep-seated-Landslide-Hazard-Areas/>, accessed on 2/11/19.

¹⁴ Sonoma County General Plan 2020 Public Safety Element, Policy PS-1f, <http://sonomacounty.ca.gov/WorkArea/DownloadAsset.aspx?id=2147542572>, accessed on 2/11/19.

management practices are specifically designed to maintain potential water quantity impacts at a less than significant level during and post construction.

If project construction occurs during wet weather, it is possible that stormwater could carry soil offsite into local storm drains. Standard construction erosion control measures at the project site (ABAG, 1995), which would be required as conditions of approval of the use permit, would minimize this effect.

Significance Level: Less than Significant Impact

- 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?**

Comment:

The project site is subject to seismic shaking and other geologic hazards as described in section 6.a.ii, iii, and iv

Significance Level: 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?**

Comment:

Table 18-1-B of the Uniform Building Code is an index of the relative expansive characteristics of soil as determined through laboratory testing. The project site contains some soils that have moderate to high potential for shrink-swell, which could result in soil expansion. The final geotechnical report required by Mitigation Measure GEO-3 would include an analysis of expansive soil hazards and recommended stabilization measures. With implementation of these measures, combined with conformance with standard CBC and other applicable State and local regulations (all of which shall be required as conditions of approval for the project), potential hazards from expansive soils would be less than significant.

Significance Level: Less than Significant Impact

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

Comment:

The project includes a new septic system to support the new uses. This septic system would be designed to meet all applicable County requirements; including requirements that address the adequacy of site soils for septic system installation. The inclusion of geotechnical recommendations and adherence with building code requirements, therefore, would render any potential impacts related to seismic hazards and soils less than significant.

Significance Level: No Impact

- f) **Directly or indirectly destroy a unique paleontological resources or site or unique geological feature?**

Comment:

Results of the on-line paleontological resources record search through the University of California Museum of Paleontology (UCMP) database indicate that there are no known vertebrate fossil localities that have been previously identified within the project site or within a mile radius. The UCMP database has identified 192 fossil localities that were discovered within the same sedimentary deposits at depths that extend into the project site.

An examination of the Geological Map of California indicates that the project site consists of surface sediments composed of Quaternary alluvial fan deposits that are underlain by Plio-Pleistocene Non-Marine deposits. These Plio-Pleistocene Non-Marine deposits have the potential to contain significant vertebrate fossils at relatively shallow depth (4-10 feet). Excavations that extend below 4-feet may well uncover significant vertebrate fossil remains and, therefore, should be closely monitored to quickly and professionally collect any vertebrate fossil remains without impeding development. As a result, recommended mitigation measures are provided to reduce potentially significant impacts to a less than significant level regarding previously undiscovered paleontological resources or unique geological features that may be accidentally encountered during project implementation to less than a significant level.

Significance Level: Less than Significant Impact with Mitigation Incorporated.

Mitigation:

Mitigation Measure GEO-1: If paleontological resources are encountered, excavation shall halt in the vicinity of the resources, a buffer area of at least 50 feet shall be established around the find, and the applicant shall notify PRMD of the find within three business days. Construction activities will not resume until a treatment and recovery plan is prepared, approved by PRMD, and implemented. The treatment and recovery plan may include, as necessary for the treatment and recovery of the find, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and/or a report of findings.

Mitigation Monitoring:

Mitigation Monitoring GEO-1: If a paleontological resource is discovered onsite, excavation shall halt in the vicinity of the resource. PRMD shall review and approve a paleontological treatment and recovery plan before ground-disturbing activities may continue.

8. GREENHOUSE GAS EMISSIONS:

The methodologies and assumptions used in preparation of this section follow the CEQA Guidelines developed by the Bay Area Air Quality Management District (BAAQMD), as revised in May 2017 (BAAQMD 2017).

Environmental Setting

Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHG). Many chemical compounds found in the earth's atmosphere exhibit the GHG property. GHG allow sunlight to enter the atmosphere freely. When sunlight strikes the earth's surface, it is either absorbed or reflected back toward space. Earth that has absorbed sunlight warms up and emits infrared radiation toward space. GHG absorb this infrared radiation and "trap" the energy in the earth's atmosphere. Entrapment of too much infrared radiation produces an effect commonly referred to as "Global Warming", although the term "Global Climate Change" is preferred because effects are not just limited to higher global temperatures.

GHG that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants because climate regulation is global in scale, both in terms of causes and effects. Some GHG are emitted to the atmosphere naturally by biological and geological processes such as evaporation

(water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments such as swamps or exposed permafrost (methane); however, GHG emissions from human activities such as fuel combustion (e.g., carbon dioxide) and refrigerants use (e.g., hydrofluorocarbons) significantly contribute to overall GHG concentrations in the atmosphere, climate regulation, and global climate change.

Human production of GHG has increased steadily since pre-industrial times (approximately pre-1880) and atmospheric carbon dioxide concentrations have increased from a pre-industrial value of 280 parts per million (ppm) in the early 1800's to 408 ppm in January 2018 (NOAA 2018). The effects of increased GHG concentrations in the atmosphere include climate change (increasing temperature and shifts in precipitation patterns and amounts), reduced ice and snow cover, sea level rise, and acidification of oceans. These effects in turn will impact food and water supplies, infrastructure, ecosystems, and overall public health and welfare.

The 1997 United Nations' Kyoto Protocol international treaty set targets for reductions in emissions of four specific GHGs – carbon dioxide, methane, nitrous oxide, and sulfur hexafluoride – and two groups of gases – hydrofluorocarbons and perfluorocarbons. These GHG are the primary GHG emitted into the atmosphere by human activities. The six common GHG's are described below.

Carbon Dioxide (CO₂). CO₂ is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned.

Methane (CH₄). CH₄ is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock.

Nitrous oxide (N₂O). N₂O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.

Sulfur hexafluoride (SF₆). SF₆ is commonly used as an electrical insulator in high voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF₆ occur during maintenance and servicing as well as from leaks of electrical equipment.

Hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). HFCs and PFCs are generated in a variety of industrial processes.

GHG emissions from human activities contribute to overall GHG concentrations in the atmosphere and the corresponding effects of global climate change (e.g., rising temperatures, increased severe weather events such as drought and flooding). GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO₂, which has a GWP of one. By comparison, CH₄ has a GWP of 25, which means that one molecule of CH₄ has 25 times the effect on global warming as one molecule of CO₂. Multiplying the estimated emissions for non-CO₂ GHGs by their GWP determines their carbon dioxide equivalent (CO₂e), which enables a project's combined global warming potential to be expressed in terms of mass CO₂ emissions.

Existing GHG Emission Sources at the Project Site

As described in Section 3, Air Quality, the project site is a former youth camp that burnt down in the 2017 Tubbs fire and is being replaced by a rural lodging and event center. The youth camp generated emissions, primarily from vehicle trips to and from the site. However, since the site is not in use at this time those emissions are not currently being generated at the site.

Regulatory Framework

California Global Warming Solutions Act (AB32) and Related Legislation

CARB is the lead agency for implementing Assembly Bill (AB) 32, the California Global Warming Solutions Act adopted by the Legislature in 2006. AB 32 requires the CARB to prepare a Scoping Plan containing the main strategies that will be used to achieve reductions in GHG emissions in California.

In 2007, CARB approved a statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million metric tons of carbon dioxide equivalents (MTCO₂e) (CARB 2007). In 2008, CARB adopted its *Climate Change Scoping Plan*, which projects, absent regulation or under a “business as usual” (BAU) scenario, 2020 statewide GHG emissions levels of 596 million MTCO₂e and identifies the numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 174 million MTCO₂e of reductions and reduce statewide GHG emissions to 1990 levels by 2020 (CARB 2009). In 2011, CARB released a supplement to the 2008 *Scoping Plan Functional Equivalent Document* (FED) that included an updated 2020 BAU statewide GHG emissions level projection of 507 million MTCO₂e (CARB 2011), and in 2014 CARB adopted its First Update to the Climate Change Scoping Plan (CARB 2014).

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, sets a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. By directing state agencies to take measures consistent with their existing authority to reduce GHG emissions, this order establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through Executive Order B-30-15, Governor Brown went on to sign SB-32 and AB-197 on September 8, 2016. SB-32 made the GHG reduction target to reduce GHG emissions by 40 percent below 1990 levels by 2030 a requirement as opposed to a goal. AB-197 gives the Legislature additional authority over CARB to ensure the most successful strategies for lowering emissions are implemented, and requires CARB to, “protect the state’s most impacted and disadvantaged communities ...[and] consider the social costs of the emissions of greenhouse gases.”

On December 14, 2017 CARB adopted the second update to the Scoping Plan, the *2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update)*. The primary objective of the *2017 Scoping Plan Update* is to identify the measures needed to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030), as established under Executive Order B-30-15 and SB 32. The *2017 Scoping Plan Update* identifies an increasing need for coordination among state, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. It notes emission reduction targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 MMTCO₂e and 83 MMTCO₂e by 2020 and 2050, respectively. To achieve these goals, the *2017 Scoping Plan Update* includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons by 2050.

The major elements of the *2017 Scoping Plan Update* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero emission vehicle (ZEV) buses and trucks;
- LCFS, with an increased stringency (18 percent by 2030);
- Implementation of SB 350, which expands the RPS to 50 percent and doubles energy efficiency savings by 2030;
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks;
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH₄ and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030;
- Continued implementation of SB 375;
- Post-2020 Cap-and-Trade Program that includes declining caps;

- 20 percent reduction in GHG emissions from refineries by 2030; and

Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Plan Bay Area

Plan Bay Area, initially adopted by the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) on July 18, 2013, is the integrated long-range transportation, land-use, and housing plan developed for the Bay Area pursuant to SB 375. The success of *Plan Bay Area* implementation is evaluated on thirteen different goals with corresponding performance targets. One of these goals, reducing per-capita CO₂ emissions from cars and light-duty trucks by 15 percent, is directly related to GHG emissions.¹⁵

BAAQMD 2017 Clean Air Plan

As discussed in Section 3, Air Quality, the BAAQMD's 2017 *Clean Air Plan* is a multi-pollutant plan focused on protecting public health and the climate. The *Clean Air Plan* lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, consistent with GHG reduction targets adopted by the state of California. As opposed to focusing solely on the nearer 2030 GHG reduction target, the *Clean Air Plan* makes a concerted effort to imagine and plan for a successful and sustainable Bay Area in the year 2050. In 2050, the Bay area is envisioned as a region where:

- Energy efficient buildings are heated, cooled, and powered by renewable energy;
- The transportation network has been redeveloped with an emphasis on non-vehicular modes of transportation and mass-transit;
- The electricity grid is powered by 100 percent renewable energy; and
- Bay Area residents have adopted lower-carbon intensive lifestyles (e.g., purchasing low-carbon goods in addition to recycling and putting organic waste to productive use).

The *Clean Air Plan* includes a comprehensive, multi-pollutant control strategy that is broken up into 85 distinct measures and categorized based on the same economic sector framework used by CARB for the AB 32 Scoping Plan Update.¹⁶ The accumulation of all 85 control measures being implemented support the three overarching goals of the plan. These goals are:

- Attain all state and national air quality standards;
- Eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants; and
- Reduce Bay Area GHG Emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The BAAQMD CEQA Air Quality Guidelines contain methodologies and thresholds of significance for evaluating GHG emissions from land use development projects. The BAAQMD thresholds were developed specifically for the Bay Area after considering the latest Bay Area GHG inventory and the effects of AB 32 scoping plan measures that would reduce regional emissions.

¹⁵ Per the efficiency metrics established by CARB, *Plan Bay Area* is required to demonstrate that the regional plan is capable of reducing per capita passenger vehicle and light duty truck CO₂ emissions by seven percent by 2020 and 15 percent by 2035, as compared to the 2005 baseline. Per SB 375, these reductions are required to be demonstrated without taking into account Pavely, LCFS, and any other Scoping Plan provisions adopted since 2007 that are expected to further reduce CO₂ emissions and result in a decrease in total CO₂ emissions over time.

¹⁶ The sectors included in the AB 32 Scoping Plan Update are: stationary (industrial) sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

BAAQMD provides guidance to achieve GHG reductions from new land use developments to close the gap between projected regional emissions with AB 32 scoping plan measures and the AB 32 targets. The recommendations include a bright-line operational emissions threshold of 1,100 metric tons (MT) of CO₂e (equivalent carbon dioxide) per year or an efficiency metric of 4.6 MT of CO₂e per year per service population if the bright-line threshold is exceeded. Service population is the sum of residents plus full-time workers. There are no other quantified thresholds adopted by other agencies or the County to evaluate GHG emissions from land use projects. Projects that have operational emissions below 1,100 MT of CO₂e per year or the efficiency metric are considered to have less than significant GHG emissions. For stationary sources (e.g. emergency back-up generators) BAAQMD uses a threshold of 10,000 MT of CO₂e per year.

Sonoma County Regional Climate Action Plan

In July, 2016 the Regional Climate Plan Authority (RCPA) adopted a Climate Action Plan to serve as a guiding document to identify methods that the County and member jurisdictions can implement to create a more sustainable, healthy, and livable community by reducing GHG emissions. The County's *Climate Action 2020 and Beyond* provides estimates of 2010 GHG emissions; assesses progress towards meeting GHG reduction targets; and suggests next steps for implementation (RCPA 2016). The County has adopted a Climate Change Action Resolution (May 8, 2018) which resolved to reduce GHG emissions by 40% below 1990 levels by 2030 and 80% below 1990 levels by 2050" and noted twenty strategies for reducing GHG emissions, including increasing carbon sequestration, increasing renewable energy use, and reducing emissions from the consumption of goods and services. The Plan is focused on near term actions that will put Sonoma County on a path towards a 2050 goal of 80% below 1990 levels.

Would the project:

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

Comment:

The project's greenhouse gas (GHG) impacts were addressed by a Greenhouse Gas Emissions Assessment prepared by Illingworth and Rodkin Inc. on September 21, 2017. This assessment was based on the original project that included 25 cabins and larger events. On November 30, 2018, the consultant provided a memorandum addressing the revised project, with a conclusion that the revised project would have 20 percent reduction in emissions over the original project. Thus, the original conclusion of less than significant impacts would not change.

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions from the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

GHG emissions for the construction period and the full-build out scenario of the proposed project were computed using the California Emissions Estimator Model version 2016.3.1 (CalEEMod). Construction emissions were based on CalEEMod defaults for the size and type of the project. The model calculates emissions of GHG in the form of equivalent carbon dioxide emissions, or CO₂e. CalEEMod also computes emissions from traffic generated by the project as well as emissions associated with energy usage, water usage, and solid waste generation. CalEEMod is the model recommended by BAAQMD for predicting emissions from land use development projects, such as this one. *Attachment 1* of the Assessment includes the CalEEMod output worksheets.

Land Use Types

The following land use types were input to the model. In cases where the exact proposed land use was

not available in the model (such as kitchen), a similar land use was chosen. It should be noted that while the proposed kitchen would mostly be used for limited dining events, it was conservatively run in CalEEMod as operating year round for energy use, water use, and waste.

- Hotel= 36 rooms (project traffic report)
- General Office Building = 2,500 square feet
- Place of Worship = 785 square feet
- City Park (Grapes/Agriculture) = 5.5 acres
- High Turnover Sit Down Restaurant (Kitchen) = 2,580 square feet
- Racquet Club (Event Barn) = 13,250 square feet
- Recreational Swimming Pool = 1,100 square feet
- Parking Lot = 160 parking spaces

Construction Emissions

The CalEEMod model was used to forecast annual construction GHG emissions of 586 MT of CO₂e. Neither the County nor BAAQMD have quantified thresholds for construction activities. However, the annual emissions would be below the 1,100 MT project operational emission threshold considered significant by BAAQMD. BAAQMD encourages the incorporation of best management practices (BMPs) to reduce GHG emissions during construction where feasible and applicable. BMPs to be incorporated into construction of the proposed project include, but are not limited to: using local building materials of at least 10 percent and recycling or reusing at least 50 percent of construction waste and demolition materials.

Operational Emissions

The CalEEMod model along with the project-specific information was used to calculate operational period GHG emissions associated with operation of a fully developed site under the proposed project. The model uses mobile emission factors from the California Air Resources Board's EMFAC2014 model. This model is sensitive to the year selected, since vehicle emissions continue to be reduced due to fuel efficiency standards and low carbon fuels. Adjustments to the modeling are described below.

Year of Analysis

Emissions associated with vehicle travel depend on the year of analysis. The earlier the year, the higher the emission rates, as CalEEMod uses the California Air Resources Board's EMFAC2014 motor vehicle emissions model. This model assumes reduced emission rates as newer vehicles with lower emission rates replace older, more polluting vehicles through attrition of the overall vehicle fleet. The earliest full year the project could be possibly constructed and operational would be 2020.

CalEEMod Traffic Inputs

The CalEEMod default daily trip rate for hotel was used and 36 rooms were entered, consistent with the project traffic report. In addition, separate runs were conducted to compute mobile emissions associated with the proposed fifty (50) 80-person, thirty (30) 200-person, and twenty (20) 300-person special events.

Energy Consumption

CalEEMod has a default rate of 641.3 pounds of CO₂ per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. The derived 2019 rate for PG&E was estimated at 307 pounds of CO₂ per megawatt of electricity delivered and is based on the California Public Utilities Commission (CPUC) GHG Calculator.¹ The 2013 Title 24 Building Standards are included in CalEEMod.

Solid Waste Generation

Emissions from solid waste generation are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with transporting and landfilling of solid waste generated by the project.

Water Usage

Emissions from water usage are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with electricity usage associated with conveyance and treatment of water and wastewater associated with the project.

Land Use Change and Sequestration

Implementation of the proposed project would remove approximately 6 acres of grassland and replace it with 5.5 acres of cropland, which was entered into the model. In addition, the project proposes the planting of approximately 98 new trees.

Operational Emissions

The CalEEMod model, along with project-specific information, was used to estimate annual emissions associated with operation of the fully developed site under the proposed project. In 2019, as shown in Table 7, annual increased emissions resulting from operation of the proposed project are estimated to be 592 MT of CO₂e, which would be less than the BAAQMD significance threshold of 1,100 MT of CO₂e per year.

Table 7. Annual GHG emissions of CO₂e (MT/year)	
Source Category	2019 Proposed Project
Area	<1
Energy Consumption	276
Mobile	262
Fifty 80-person events	13
Thirty 200-person events	19
Twenty 300-person events	19
Waste	70
Water Usage	10
Removal of 6 acres grassland	26
Addition of 6 acres cropland	-34
Addition of 130 new trees	-69
Total	592
BAAQMD Threshold	1,100 MT of CO₂e/year

As shown in Table 7 above, the proposed project would be consistent with BAAQMD operational screening criteria and therefore result in less than significant GHG emissions. Because the screening criteria does not include the exact operations that would be involved in the proposed project, the Racquetball/health club use and the Place of worship use were selected because their operating and emissions generating characteristics best represent the proposed Project use. The BAAQMD does not maintain GHG screening criteria for construction emissions; however, construction GHG emissions are usually amortized over the lifetime of a project (typically assumed to be 30 years) and included in a project's estimate of annual operational GHG emissions. As discussed in Section 3, Air Quality, the County is including BAAQMD-recommended basic construction measures into the project as Mitigation Measure AIR-1, which would reduce fuel combustion and GHG emissions by requiring equipment to be properly maintained and limiting idling emissions. GHG emissions associated with construction activities

are not anticipated to be substantial and would not change the significance conclusion pertaining to GHG emissions.

In addition, the proposed project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's Scoping Plan. The project must comply with requirements of CALGreen and the Title 24 Building Code, which require high-efficiency water fixtures and water-efficient irrigation systems. In addition, solar voltaic is proposed for the event barn.

Significance Level: Less Than Significant Impact

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

Comment:

The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG. As described in Section 3, Air Quality, discussion (a), as well as under discussion (a) above, the proposed project would be consistent with the BAAQMD's 2017 Clean Air Plan, the BAAQMD's CEQA Guidelines, and the AB32 Scoping Plan. Therefore, the project would not generate GHG emissions that conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Significance Level: Less Than Significant Impact

9. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

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

Comment:

Construction of the project, as well as ongoing maintenance over time, may involve the intermittent transport, use and disposal of potentially hazardous materials, including fuels and lubricants, paints, solvents, and other materials commonly used in construction and maintenance. During construction activities, any on-site hazardous materials that may be used, stored, or transported would be required to follow standard protocols (as determined by the U.S. EPA, California Department of Health and Safety, and Sonoma County) for maintaining health and safety.

Construction of project roads and infrastructure may involve short-term transport, storage, and use of hazardous materials, but the roads and infrastructure do not propose any long-term operations that would require routine or ongoing transport, use, or disposal of hazardous materials beyond periodic maintenance needs. These normal activities would be subject to applicable local, State, and federal regulations.

Project construction may also involve short-term transport, storage, and use of hazardous materials. Future project use of any hazardous substances that may be generated, stored, transported, used, or disposed would be subject to applicable local, State, and federal regulations. These future uses would be unlikely to involve routine transport, use, or disposal of hazardous materials, or result in hazardous emissions. With existing General Plan policies and federal, State and local regulation and oversight of hazardous materials, the potential threat to public health and safety or the environment from hazardous materials transport, use or disposal would represent a less-than-significant impact.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure HAZ-1: The construction contract shall require that any storage of flammable liquids be in compliance with the Sonoma County Fire Code and section 7-1.01G of the Caltrans Standard Specification (2006) (or the functional equivalent) for the protection of surface waters. In the event of a spill of hazardous materials the Contractor shall immediately call the emergency number 9-1-1 to report the spill, and shall take appropriate actions to contain the spill to prevent further migration of the hazardous materials to storm water drains or surface waters.

Mitigation Monitoring:

Mitigation Monitoring HAZ-1: The County shall be contacted in the event of an accidental hazardous materials spill, and shall verify that appropriate clean-up procedures have been completed.

- 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?**

Comment:

During construction there could be spills of hazardous materials. See section 9.a.

Significance Level: Less than Significant Impact

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

Comment:

The project site is not located within 0.25 miles of an existing or proposed school. The nearest public school (Cardinal Newman High School) is located about 0.65 miles to the northwest of the project site.

Significance Level: Less than Significant Impact

- 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?**

Comment:

There are no known hazardous materials sites within or adjacent to the project limits, based on a review of the following databases on February 11, 2019.

1. The State Water Resources Control Board Geotracker database,¹⁷
2. The Department of Toxic Substances Control EnviroStor database (formerly known as Calsites),¹⁸ and
3. The California Integrated Waste Management Board Solid Waste Information System (SWIS).¹⁹

The project site is undeveloped; an Environmental/Initial Site Assessment report was not prepared for this project.

Significance Level: No Impact

¹⁷ State Water Resources Control Board Geotracker Database, <http://geotracker.waterboards.ca.gov/>, accessed on 2/11/19.

¹⁸ The Department of Toxic Substances Control EnviroStor Database, <http://www.envirostor.dtsc.ca.gov/public/>, accessed on 2/11/19.

¹⁹ The California Integrated Waste Management Board of Solid Waste Information System (SWIS), <http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx>, accessed on 2/11/19.

- 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?**

Comment:

The Charles M. Schulz Sonoma County Airport is located 4.65 miles northwest from the project site. However, the project site is located outside all Sonoma County Airport Safety Zones as defined by the Sonoma County airport Referral Area map (Exhibit C4).²⁰

Significance Level: Less than Significant Impact

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

Comment:

The project would not impair implementation of, or physically interfere with the County's adopted emergency operations plan. There is no separate emergency evacuation plan for the County. The project would not result in a significant change in existing circulation patterns, and would have no effect on emergency response routes.

Significance Level: No Impact

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

Comment:

According to the Sonoma County General Plan (Figure PS-1g, Wildland Fire Hazard Areas), the proposed project site is located within a State Responsibility Area (SRA) and is designated a Moderate fire hazard severity zone. As noted in the General Plan Public Safety Element (p. PS-14), *"The Moderate Fire Hazard Severity Zone includes: a) wildland areas of low fire frequency supporting modest fire behavior; and b) developed/urbanized areas with a very high density of non-burnable surfaces and low vegetation cover that is highly fragmented and low in flammability."*

The project site is located in an area characterized by hilly grasslands interspersed with commercial, industrial and residential development and road and highway facilities. The main source of fire ignition is human activity, such as debris burning, vehicles (including trucks), and electrical power/power lines. In addition, as noted in the Sonoma County Community Wildfire Protection Plan (p. 89): *"State Route 101...is a major truck route and vehicle accidents frequently result in vehicle fires that spread into the grasslands."*

Environmental factors that influence risk of fire on the project site include topography, weather, and fuel sources. The topography of the area varies between approximately 120 and 250 feet within about 400 feet of the project site. The front portion of the site can be considered relatively flat compared to the hill areas at the rear of the project site, and to mountains farther east (Sonoma and Mayacamas Mountains) and west (Coastal Range). The project site does not have geographic features that contribute to and/or augment fire intensity such as steep inclines, gulches, and canyons. The county's cool, wet winters promote vegetation growth throughout the spring, and the hot dry summers, especially inland, result in greater fire susceptibility in vegetation. The "fire season" follows this pattern and is generally considered to run from May through October.²¹

According to the Sonoma County Community Wildfire Protection Plan (p. 8), *"The months of August, September and October have the greatest potential for wildland fires as vegetation dries out, humidity levels fall, and off shore winds blow."* Although prevailing winds are from the south and southwest

²⁰ Sonoma County Airport Referral Area, <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Comprehensive-Airport-Land-Use/Sonoma-County-Airport/> accessed on 2/11/19

²¹ Sonoma County Hazard Mitigation Plan Update, Wildland Fire Hazards, April 2017, p. WH-4.

from 5 to 10 miles per hour, they often strengthen to 10 to 15 miles per hour (and more). The Wildfire Protection Plan (p. 89) acknowledges that risk: *"Daily westerly winds have the potential to cause grass fires to grow quickly and impact structures in the fire's path."* With summer temperatures that can range from 80° to 100°, and generally lower humidity levels, fire risk increases. In the fall, fueled by off-shore "Santa Ana" winds (from the northeast), fire conditions can become serious.²² Potential fuel sources include grasslands, trees, vegetation, and structures (residential and commercial).

The project site is located in an area with greater fire hazard risks (i.e., more dense vegetation cover, more topographic features to channel fire). Moreover, the project site was destroyed during the 2017 Tubbs fire; therefore, fire risk remains a concern. Construction of the project would be required to conform to County Fire Safe Standards (County Code Chapter 13) related to fire sprinklers, emergency and vehicle access, emergency water supply, fuel modification and defensible space. The project would also be required to conform to State Building Code requirements (Chapter 7A), including use of ignition-resistant construction methods and materials, minimum fire-resistance construction standards, and minimum fire separation distances. In addition, because the project is in an SRA, it would need to comply with State Fire Code standards (Section 4906) for construction in a Wildland-Urban Interface Fire Area, which require maintaining and managing vegetation and fuels around buildings and structures.

In addition to the direct risk of fire on people and structures, other effects of fire (i.e., smoke, ash, chemical fire retardants) can result in adverse health effects, especially related to elevated pollutant levels that could be carried by wind and exacerbate respiratory problems or contaminate food and water sources. Other indirect effects of fire include those related to power loss, such as loss of refrigeration (e.g., "boiled water" notices, spoiled food).

The County implements the fire safety standards of the Uniform Fire Code, National Fire Code, and Uniform Building Code through the Sonoma County Chapter 13 (collectively referred to as the "Fire Code"). In addition, Sonoma County has local fire safety standards set forth in Article V of Chapter 13 is entitled "Fire Safe Standards." It establishes minimum fire safe standards to ensure that all new development within the unincorporated area of the county will provide a basic level of fire protection around itself making it easier and safer for fire fighters to fight wildland and structure fires. The Fire Safe Standards include requirements for emergency access, minimum emergency water supply, fuel modification and defensible space, sprinklers, and road naming and addressing. The County's Fire Safe standards, which must be certified by the State, are generally more stringent than those required by the California Fire Code.

Prior to project approval, the County would ensure the project design meets all requirements of the County's Fire Safe Standards and the Fire Code, including the minimum building fire separation distances detailed in Tables 4905.4 (A) and 4905.4 (B) based on building structure materials. Specifically, Sonoma County Fire Prevention Division and the Local Fire Protection District have provided the following conditions of approval to ensure compliance with applicable codes:

1. Prior to any construction, or changes in use of existing building or facilities, applicable Fire Code construction permits required by Chapter 1, Division II of the California Fire Code as adopted and amended by Sonoma County Code shall be obtained from the Sonoma County Fire Prevention Division.
 - a. Prior to any construction, or changes in use of existing building or facilities, applicable Fire Code construction permits required by Chapter 1, Division II of the California Fire Code as adopted and amended by Sonoma County Code shall be obtained from the Sonoma County Fire Prevention Division.
 - b. Pursuant to Public Resources Code 4442, the County shall include a note on all construction plans that internal combustion engines shall be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

²² Ibid., p. WH-4.

2. Owners and Operators shall provide evidence to Sonoma County Fire that the fire service features for buildings, structures and premises will comply with the California Fire Code as adopted and amended by Sonoma County Code. Including but not limited to: fire apparatus access roads; access to building openings and roofs; premises identification and road naming; gate access & key boxes; fire protection water supplies; and building features.
 - a. **Access roads:** *minimum emergency access is required to provide safe access for emergency fire equipment and civilian evacuation concurrently, and to allow unobstructed traffic circulation during a wildfire or other emergency. The proposed access road is 24 foot paved driveway with turnarounds that meet or exceed with the same practical effect the State Board of Forestry's Fire Safe Standards and the County's local fire safe standards.*
 - b. **Premises Identification and Road Naming:** *Approved road names & signs, address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road shall be provided.*
 - c. **Gates:** *Where gates or similar barriers are installed across access roads, an approved lock shall be installed as required by the fire code official.*
 - d. **Water Supply:** *An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises.*
 - e. **Building features:** *Fire sprinklers and fire alarm system may be required based on existing and new use.*
3. Owners and Operators shall provide evidence to Sonoma County Fire that applicable Fire Code Operational Permits required by Chapter 1, Division II of the California Fire Code as adopted and amended by Sonoma County Code will be obtained from Sonoma County Fire or the local fire code official.
4. Owners and Operators shall provide a written "Fire Safety and Evacuation Plan" (as required by Section 403 and 404 of the California Fire Code) to Sonoma County Fire for approval. This includes but not limited to medical trained staff, fire watch, crowd managers. This plan shall be re-evaluated at any time when requested in writing by the fire code official.
5. Owners and Operators shall provide evidence to Sonoma County Fire that there are enough parking spaces to support the proposed activity without compromising emergency access. A ratio of two persons per vehicle shall be used in making such calculations.
6. Owners and Operators shall provide evidence to Sonoma County Fire that demonstrates compliance with Chapter 49 of the California Fire Code as adopted and amended by Sonoma County Code. *This condition may be met by obtaining County Fire approval of a fire protection plan prepared by a qualified individual.*
7. Due to the scope of this project a Fire Services Pre-Construction meeting or occupancy fire inspection is required at the applicant's cost with the local fire authority included (this can be waived by written approval by the fire code official).

Significance Level: Less than Significant Impact

10. HYDROLOGY AND WATER QUALITY:

Would the project:

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

Comment:

The project proposes a rural lodge, recreation and event facility on a 22-acre site (which burned in the October 2017 Tubbs Fire). The project includes 12 cabins for visitor-serving lodging plus one employee cabin, a 9,861 square foot Event Barn, a 1,330 square foot reception office, 60 permanent parking spaces with 42 valet spaces, 1,500 yards of grading, 6 acres of vineyards, and a new septic system (the project is not connected to a municipal sewer system). The on-site proposed septic fields

will be located southeast of the proposed parking lot. According to the Initial Storm Water Low Impact Development Submittal (Urban Green Investments, the existing site had 1.25 acres of impervious surface while the proposed project would have approximately 3.14 impervious acres (over 100,000 square feet). This is an increase of 1.89 acres or roughly 82,300 square feet which could affect the quantity and/or quality of storm water run-off. The project incorporates pollution prevention measures and BMPs to minimize impacts to hydrologic and water resources.

The project site drains to the west toward Old Redwood Highway and northwest toward Piner Creek, a tributary of Santa Rosa Creek. Natural slopes on the site are relatively flat ranging from 5% to 30%. The site does not receive run-off from surrounding sites, as there is an existing pond which cuts off any run-on onto the site. The unnamed creek is located 320-ft to the north and is just below the dam associated with the project parcel. The project lies within the Santa Rosa Plain Groundwater Basin which is a groundwater availability Zone 1. There is an existing well located directly east of the proposed parking lot which has the capability to serve the property.

Violations of water quality standards or waste discharge requirements, or degradation of water quality can result in potentially significant impacts to water quality and result in environmental damage or sickness in people. The proposed project would result in a significant impact to water quality if it violated water quality standards and waste discharge requirements or resulted in the degradation of water quality. Point-source pollutants can be traced to their original source. Point-source pollutants are discharged directly from pipes or spills. Raw sewage draining from a pipe directly into a stream is an example of a point-source water pollutant. The proposed project does not include any uses that would generate point source pollutants.

Water quality of the on-site well are subject to the requirements of the Sonoma County Health Department and conditions of approval are included to insure compliance.

Non-point-source pollutants (NPS) cannot be traced to a specific original source. NPS pollution is caused by rainfall or snowmelt moving over and through surface areas. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even underground sources of drinking water. These pollutants include:

- Oil, grease, and toxic chemicals from urban runoff and energy production
- Sediment from improperly managed construction sites
- Atmospheric deposition and hydromodification

Impacts associated with urban water pollution include sickness or injury to people, and degradation or elimination of water bodies as recreational opportunities. Accidents, poor site management, or negligence by property owners and tenants can result in accumulation of pollutant substances on parking lots, loading, and storage areas, or result in contaminated discharges directly into the storm drain system.

The project has the potential to generate the following types of pollutants, including: (1) nutrients, pesticides, pathogens and trash or debris entering the storm water; (2) sediments, metals, petroleum hydrocarbons and trash from driveway areas; (3) loading docks; (4) trash enclosure; and (5) sediments from building roof structures or hardscapes.

The project includes the development of a septic system; according the project health report, the applicant will need to meet the following guidelines to minimize impacts on water quality and health:

- Obtain a permit to build and operate the facility.
- The septic systems may require design by a Registered Civil Engineer or Registered Environmental Health Specialist and both soils analysis, percolation and wet weather testing may be required.

- The sewage systems shall meet peak flow discharge of the wastewater from all sources granted in the Use Permit and any additional sources from the parcel plumbed to the disposal system, and shall include the required reserve area.
- The project septic systems shall be designed to accommodate 100 % percent of the wastewater flow from an event with 250 guests, in addition to peak wastewater flows from all other sources plumbed to the septic systems, and including the maximum employee staffing.
- Maintain the Annual Operating Permit for any alternative (mound or pressure distribution) or experimental sewage disposal system installed per Sonoma County Code 24-32, and all applicable Waste Discharge Requirements set by the Regional Water Quality Control Board.

As a construction project disturbing one or more acres of soil, the project would also be required to file a Notice of Intent (NOI) package for coverage under the State Water Resources Control Board (SWRCB) General Permit No. CAS000002 for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit). The General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which in addition to other requirements must list Best Management Practices (BMPs) to be used to protect storm water, and the placement of the BMPs.

The project site is located in an area subject to the North Coast RWQCB Municipal Separate Storm Sewer Systems (MS4) Permit. The proposed project would involve placement of more than 10,000 square feet of impervious surface area. Therefore, it must both meet the requirements of the Sonoma County Storm Water Quality Ordinance and incorporate Low Impact Development (LID) Best Management Practices (BMPs) contained in the City of Santa Rosa and County of Sonoma Storm Water Low Impact Development Technical Design Manual.

An Initial Storm Water Low Impact Development Submittal was prepared for the applicant by Adobe Associates and finalized in January 2019 indicates that retention techniques can be incorporated into project plans to meet County requirements for post-construction runoff. In fact, the study notes:

“Runoff from the proposed polluted areas will be collected onsite. There will be a storm drain network throughout the site to direct the surface runoff to the proposed bio-retention facilities” (p. 3).

It notes that rainfall will be all impervious surfaces will be directed towards the bio-retention areas. The report notes the following practices will be incorporated into the project to reduce the potential impacts due to runoff:

- Small cottages to minimize building footprint.
- Minimize irrigation overspray and runoff from site.
- Utilizing minimal amounts of pesticides.
- Proper maintenance and cleaning of landscaped areas.
- Minimal parking stall and driveway widths where practical.
- Sweeping parking lots and driveways on a regular basis.
- Locating trash enclosure away from buildings to discourage pest entry into buildings.
- Covering trash enclosures.
- Disconnection of roof downspouts and discharging with bubble up outlets into landscaped areas to encourage infiltration and treatment where practical.
- Clearly marking storm drain inlets with the words “No Dumping, Drains to Creek”.

- Direct stormwater to sheet flow over landscaped areas prior to entering storm drain system.

Sonoma County also requires the project applicant to prepare a grading and drainage plan (Erosion Prevention and Sediment Control Plan) in conformance with Chapter 11 Grading and Drainage Ordinance) and Chapter 11a (Storm Water Quality Ordinance) of the Sonoma County Code and the Sonoma County Storm Water Low Impact Development Guide, all of which include performance standards and Best Management Practices for pre-construction, construction, and post-construction to prevent and/or minimize the discharge of pollutants, including sediment, from the project site. Section 7.b (Geology and Soils) above describes the Erosion Prevention and Sediment Control Plan requirements.

Finally, based on new storm water requirements adopted by the North Coast Regional Water Quality Control Board (NCRWQCB), new development and redevelopment projects creating or replacing 10,000 square feet or more of impervious surface require post-construction BMPs. These post-construction BMPs must:

- Treat following pollutants of concern including particulate metals, pathogens, nutrients, hydrocarbons, trash, fine sediment, and other debris.
- Be sized to treat all of the runoff generated using the modified Rational Method with an intensity of 0.2 inches per hour and capture (infiltrate, evapotranspire, and/or reuse) the increase in storm water runoff volume generated by the site due to the increase in impervious surface for a one-inch rain event over a 24-hour period using the Curve Number Method.
- Filter or treat the flow rate of runoff produced by the 24-hour 85th percentile rain event hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two.
- Detention facilities which are integrated for hydraulic system design may be used to provide volume capture and/or treatment if the design meets the design criteria specified for LID.
- Have a recorded maintenance declaration stating that the property owner will maintain the BMPs and the have the appropriate funding and technical ability to inspect, maintain, and provide BMP maintenance records.

In addition, no grading of slopes greater than 10 percent (previously 20 percent) shall be allowed from October 1st to April 30th without an exception from Sonoma County. Exceptions require a review of a monitoring program and inspections showing no degradation of water quality.

Significance Level: Less than Significant Impact

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

Comment:

A Hydro-geologic Report and Water Availability Analysis was completed by OEI in 2018. Although studies like this are not typically required within Groundwater Zone 1, the parcel lies within the Santa Rosa Plain Groundwater Basin which is subject to the State's Sustainable Groundwater Management Act (SGMA) and where groundwater studies are now required per recent policy updates. The project proposes to use an existing on-site well with sufficient capacity to serve the project. The report concluded the aquifer recharge average was 3.3 inches per year (3.1 inches during a dry water year) or 49.8 ac-ft/yr (21.1 ac-ft/yr during a dry year) summed across the recharge area. The report notes that "...total proposed water demand for the project recharge area is 21.1 ac-ft/yr which represents 42% of long-term average recharge conditions and 45% of dry year conditions." According to the

report, the project is projected to use 10.16 ac-ft/yr. The report then concludes that there is substantial surplus groundwater recharge in the aquifer and that project demands are unlikely to result in reduced groundwater. As noted above in (a), the project includes bio-retention areas designed to capture storm water. These areas also increase the amount of water that can be absorbed into the aquifer.

The neighboring well (closest to the Project) is estimated, by the Hydro-geologic Report and Water Availability Analysis, to be about 980 feet to the northwest. The report concludes given the "significant horizontal distance" between the project well and the closest neighboring well and the nature of the aquifer materials, the potential for well interference is minimal.

Significance Level: Less than Significant

- 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**
- i. **would result in substantial erosion or siltation on- or off-site?**
 - ii. **substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
 - iii. **create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
 - iv. **impede or redirect flood flows?**

Comment:

The area currently drains to the west (towards Old Redwood Highway) and to the northwest toward Piner Creek (which has a fifty-foot riparian corridor setback). Piner Creek serves as a tributary to Santa Rosa Creek and is not a blue line creek. The site does not receive run-off from surrounding sites, as there is an existing pond which cuts off any run-on onto the site. As discussed in (a), the project incorporates bio-retention facilities on site designed to capture all of the additional storm water runoff attributable to the project.

While the project is in construction, temporary construction BMPs, as well as erosion control measures, would be put in place to reduce construction and post-construction siltation. See Mitigation Measure HYD-1 for details on project storm water control facilities, which would be incorporated into the project to provide for erosion prevention and sediment control and to ensure that erosion and siltation impacts are less than significant during and after construction.

The proposed project would create approximately 82,300 square feet of new impervious surface, which could potentially affect the quantity and/or quality of storm water run-off. However, the proposed project has been designed to prevent and/or minimize the discharge of pollutants and waste after the proposed project is constructed (post-construction), using County best management practices, Low Impact Development techniques, and storm water treatment devices based on filtering, settling or removing pollutants.

Any future grading, cuts, and fills would require the issuance of a grading permit (see section 10.a). The County Grading and Drainage Ordinance and adopted Best Management Practices require installation of adequate erosion prevention and sediment control features. Inspection by County inspectors would ensure that Best Management Practices are specifically designed to maintain potential water quality impacts of project construction at a less than significant level during and post construction.

The County would require any construction to be designed and conducted so as to prevent or minimize the discharge of pollutants or waste from the project site. Best Management Practices to be used to accomplish this goal could include measures such as silt fencing, straw wattles, and soils discharge controls at construction site entrance(s). Storm water Best Management Practices may

also include primary and secondary containment for petroleum products, paints, lime and other hazardous materials of concern. The type and approximate size of the selected storm water best management practices would need to comply with the adopted Sonoma County Storm Water Low Impact Development Guide, and would be subject to County review and approval. In addition, proper operation and maintenance of post-construction storm water best management practices would be needed to achieve the goal of preventing and/or minimizing the discharge of pollutants.

Significance Level: Less than Significant Impact

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

Comment: The County uses FEMA Flood Insurance Rate Maps to map flood hazard areas in General Plan 2020 in order to guide the placement of housing outside of flood and other natural hazard areas. According to the online FEMA Flood Mapping Service Center, the proposed project is outside of the 100-year Flood Hazard Area. The map notes that the project site is in an "area of minimal flood hazard." Therefore, the project is not considered to be within a flood hazard zone.

Also, according to Figure 8.7 of the Sonoma County Hazard Mitigation Zone, the project site is not located in an area that would be subject to flooding as a result of levee or dam failure. Additionally, the proposed project is not subject to seiche or tsunami. Seiche is a wave in a lake triggered by an earthquake.

Significance Level: No Impact

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

Comment: The project is located in the Santa Rosa Plain groundwater basin that is managed by the Santa Rosa Plain Groundwater Sustainability Agency in accordance with the Sustainable Groundwater Management Act. The Groundwater Sustainability Agencies are currently developing Groundwater Sustainability Plans that must be completed by 2022 and will provide a regulatory framework for managing groundwater use. The project shall comply with existing regulations and plans related to water quality and sustainable groundwater management.

Significance Level: No Impact

11. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Comment:

The project would not physically divide a community. It does not involve construction of a physical structure (such as a major transportation facility) or removal of a primary access route (such as a road or bridge) that would impair mobility within an established community or between a community and outlying areas.

Significance Level: No Impact

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

Comment:

The project would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect, including the Sonoma County General Plan and Zoning Ordinance.

The project is located in the Resource and Rural Development (RRD) Land Use Designation in the Land Use Element of the Sonoma County General Plan (Figure 6a).

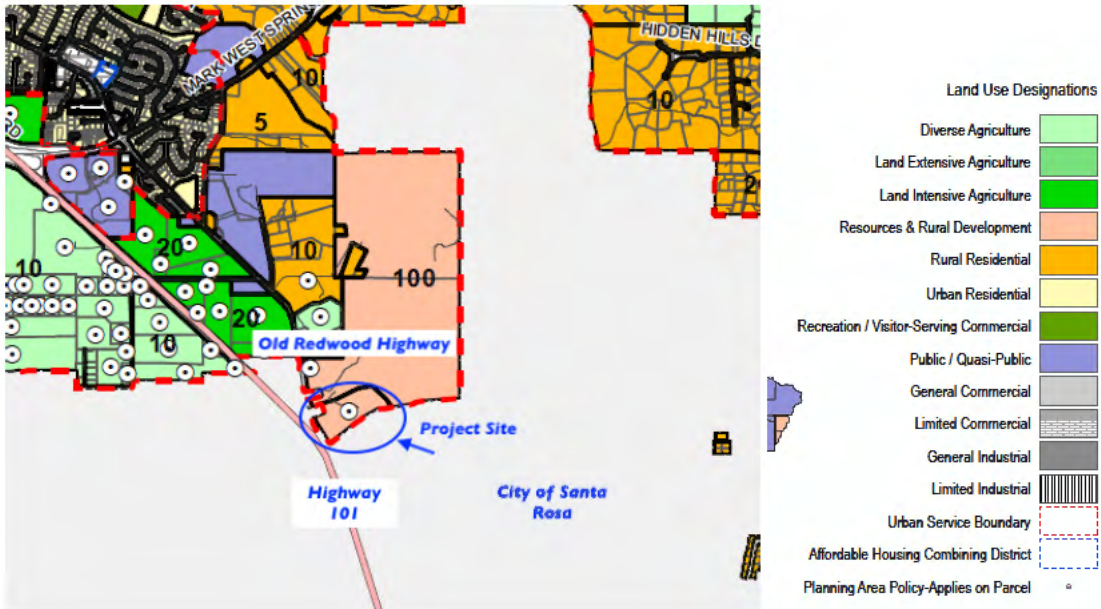


Figure 6a: Sonoma County Land Use Element Map

The project site is located in a Community Separator as shown on Figure OSRC-1 Scenic Resource Area map found in the Open Space and Resource Conservation Element of the Sonoma County General Plan (Figure 6b).

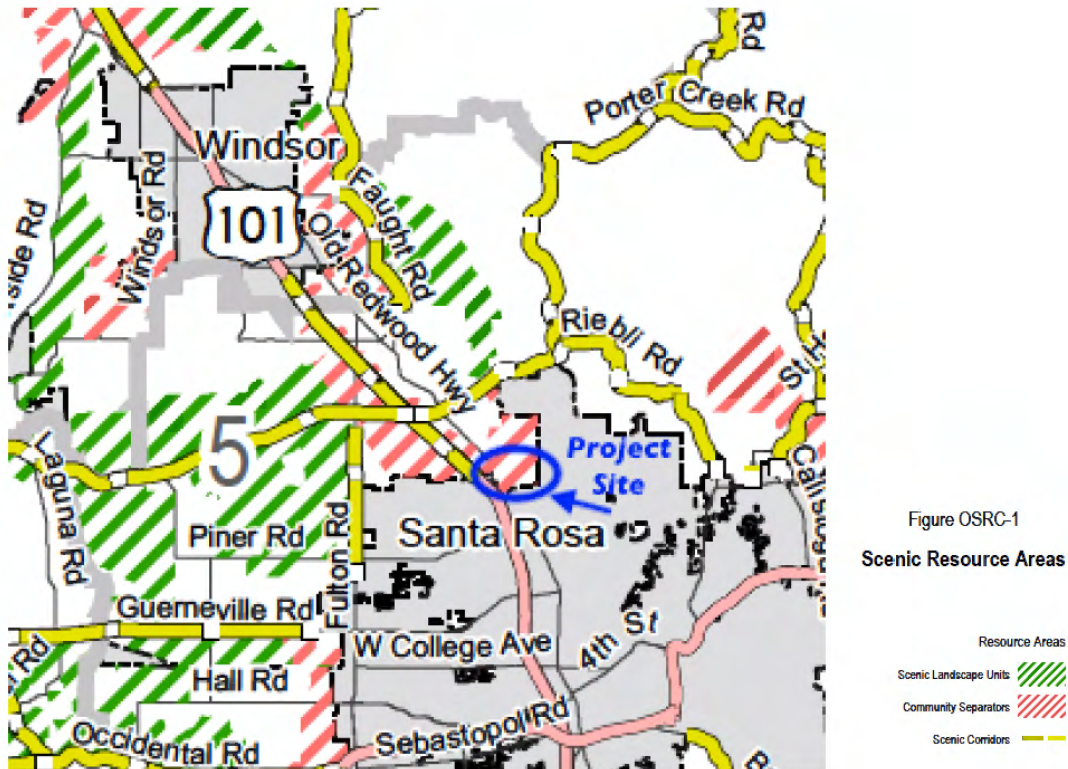


Figure 6b: Sonoma County Scenic Resources Areas

Relevant policies from the Land Use Element and Open Space and Resource Conservation Elements include:

Land Use Element:

Policies for Resources and Rural Development Areas

- 1) *Protect timberlands needed for commercial timber production under the California Timberland Productivity Act,*
- 2) *Protect lands needed for geothermal resource production,*
- 3) *Protect lands for aggregate resource production as identified in the Aggregate Resources Management Plan,*
- 4) *Protect natural resource lands including, but not limited to watershed, fish and wildlife habitat and biotic areas,*
- 5) *Protect against intensive development of lands constrained by geologic hazards, steep slopes, poor soils or water, fire and flood prone areas, biotic and scenic areas, and other constraints,*
- 6) *Accommodate agricultural production activities but limit such activities on timberland, or*
- 7) *Protection of county residents from proliferation of growth in areas where there are inadequate public services and infrastructure, including water supply and safe wastewater disposal.*

Permitted Uses: Single family dwellings, resource management and enhancement activities including but not limited to the management of timber, geothermal and aggregate resources, fish and wildlife habitat, and watershed. Livestock farming, crop production, firewood harvesting and public and private schools, hospitals, and places of religious worship are included. Lodging, campgrounds, and similar recreational and visitor serving uses provided that they shall not be inconsistent with the purpose and intent of this category. In addition to the permitted residential densities, existing campgrounds or recreational vehicle parks may be considered for long term residential occupancy of recreational vehicles when such parks have obtained appropriate State

HCD permits.

The extent of recreational and visitor serving uses may be further established in Land Use Policies for the Planning Areas.

Compact City and Community Boundaries

Policy LU-3e: Until December 31, 2036, the boundaries of Urban Service Areas of unincorporated communities as shown on the Land Use Maps shall not be amended to include lands within Community Separators as shown on the Open Space Maps unless such amendment is approved by the voters of Sonoma County.

For the purposes of this policy, approval by the voters of Sonoma County shall be accomplished when a general plan amendment is placed on the ballot through any procedure provided for in the Elections Code, and a majority of the voters vote in favor of it. The Board of Supervisors may adopt a general plan amendment prior to securing the approval of the voters of Sonoma County; provided, however, that whenever the Board of Supervisors adopts an amendment requiring approval of the voters of Sonoma County pursuant to the provisions of this policy, the Board action shall have no effect until after such a vote is held and a majority of the voters vote in favor of it. The Board of Supervisors shall follow the provisions of the Elections Code in all matters pertaining to such an election. AS AMENDED BY MEASURE K

Open Space Separation Between and Around Cities/Communities

Community identity is an important aspect of the quality of life for many of the county's residents. Large, continuous areas of urban development where one city or community merges with another without visual relief may detract from this identity. Containment of urban areas is also important in maintaining compact city and community boundaries. On the other hand, property owners often consider areas between and around cities and communities to be prime land for development. The Land Use Element designates these important lands and establishes policies consistent with the Open Space and Resource Conservation Element to reserve them between and around cities and communities. These designations and policies have been strongly supported by County and City decision makers and have been reinforced by the passage of two ballot measures that require voter approval prior to any significant change in their status.

GOAL LU-5: Identify important open space areas between and around the county's cities and communities. Maintain them in a largely open or natural character with low intensities of development.

Objective LU-5.1: Retain low intensities of use in Community Separators between and around cities and communities as designated in the Open Space and Resource Conservation Element.

Objective LU-5.2: Encourage formation of programs to preserve the visual and scenic character of Community Separators.

The following policies, in addition to those in the Open Space and Resource Conservation Element, shall be used to achieve these objectives:

Policy LU-5a: The County shall neither approve extension of sewer service into any Community Separator nor approve connection of any lot in a Community Separator to existing sewer service except as allowed by the policies of the Public Facilities and Services Element.

Policy LU-5b: Avoid commercial and industrial land uses in Community Separators. Allow the full range of uses allowed in the agricultural and resource categories.

Policy LU-5c: Consider amendments for outdoor recreational or other uses with a low intensity of structures only in those Community Separators along the 101 Corridor and only where the amendment conforms to the provisions of the voter-approved Community Separators Protection

Ordinance.

Policy LU-5d: Decisions regarding the extent of land area or the use of property designated as Community Separator shall conform to the voter-approved Community Separators Protection Ordinance.

Santa Rosa and Environs:

Policy LU-16n: The "Resources and Rural Development" designation is applied to Cloverleaf Ranch (APNs 058-020-008 and -009) to recognize the existing youth camp, riding academy and day care uses. Note, APN 058-020-009 is the project site.

Open Space and Resource Conservation Element:

GOAL OSRC-1: Preserve the visual identities of communities by maintaining open space areas between cities and communities.

Objective OSRC-1.1: Preserve important open space areas in the Community Separators shown on Figures OSRC-5a through OSRC-5i of the Open Space and Resource Conservation Element.

Objective OSRC-1.2: Retain a rural character and promote low intensities of development in Community Separators. Avoid their inclusion in City Urban Growth Boundaries or Spheres of Influence. Avoid their inclusion within Urbans Service Areas for unincorporated communities.

Objective OSRC-1.3: Preserve existing groundwater recharge and stormwater detention areas within Community Separators.

Objective OSRC-1.4: Preserve existing specimen trees and tree stands within Community Separators.

The following policies, in addition to those in the Land Use Element, shall be used to achieve these objectives:

Policy OSRC-1a: Avoid amendments to increase residential density in Community Separators, since these densities were established based upon the policies set forth in other elements of this plan as well as the open space, separation and visual considerations identified in this section. The integrity of Community Separators cannot be maintained at densities in excess of one unit per ten acres. However, under no circumstances shall this policy be used to justify an increase in density from that designated on the land use map.

*Policy OSRC-1b: Avoid commercial or industrial uses in Community Separators other than those that are permitted by the agricultural or resource land use categories.**

Policy OSRC-1c: Require development within Community Separators to be clustered and limited in scale and intensity.

*Policy OSRC-1d: Consider amendments for outdoor recreational uses with a low intensity of structures only in those Community Separators along the Highway 101 Corridor and only where the amendment conforms to the provisions of the voter-approved Community Separators Protection Ordinance.**

Policy OSRC-1e: Apply the Scenic Resources combining district consistent with this Element to all lands located within a Community Separator.

Policy OSRC-1f: Unless there are existing design guidelines that have been adopted for the affected area, require that new structures within Community Separators meet the following criteria:

- 1) *Site and design structures to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads.*
- 2) *Minimize cuts and fills on hills and ridges.*
- 3) *Minimize the removal of trees and other mature vegetation; avoid removal of specimen trees, tree groupings, and windbreaks.*
- 4) *Where existing topography and vegetation would not screen structures from view from public roads, install landscaping consisting of native vegetation in natural groupings that fits with the character of the area in order to substantially screen structures from view. Screening with native, fire retardant plants may be required.*
- 5) *Design structures to use building materials and color schemes that blend with the natural landscape and vegetation.*
- 6) *To the extent feasible, cluster structures on each parcel within existing built areas, and near existing natural features such as tree groupings.*
- 7) *Utilities are underground where economically practical.*
- 8) *On hills and ridges, avoid structures that project above the silhouette of the hill or ridge against the sky as viewed from public roads, and substantially screen driveways from view where practical.*
- 9) *Minimize impervious surfaces and encourage groundwater recharge with effective design features and materials that allow stormwater infiltration and detention.*

This policy does not apply to farmworker housing or agricultural accessory structures, such as barns, proposed on parcels in the Diverse Agriculture, Land Extensive Agriculture, Land Intensive Agriculture, and Resources and Rural Development land use categories, and on parcels in the Rural Residential land use category with Agriculture and Residential (AR) Zoning, if their use does not require a use permit in the Zoning Code. If compliance with these standards would make a parcel unbuildable, site structures where minimum visual impacts would result.

*Exempt telecommunication facilities if they meet the siting and design criteria of the Scenic Resources (SR) Zoning District.**

*Policy OSRC-1h: Place measures on the ballot as needed to extend funding of the Sonoma County Agricultural Preservation and Open Space District for the continuing purpose of acquiring and administering open space lands.**

*Policy OSRC-1i: Consider voluntary transfer of development rights (TDR) and purchase of development rights (PDR) programs and make Community Separators eligible with owner consent.**

Policy OSRC-1j: No lands within a Community Separator should be included in a City's Urban Growth Boundary or Sphere of Influence, in an Urban Service Area for an unincorporated community, or annexed to a city unless the lands are first removed from the Community Separator.

Policy OSRD-1k: Until December 31, 2036, the boundaries of Community Separators as shown on the Open Space Maps and the land use designations and densities of lands within Community Separators as shown on the Land Use Maps shall not be amended unless such amendment is approved by the voters of Sonoma County, except that the following types of amendments may be approved by the Board of Supervisors pursuant to its usual procedures and with-out the approval of the voters of Sonoma County:

- (1) *An amendment designating additional lands as Community Separator.*
- (2) *An amendment reducing the allowed density or intensity of development within a Community Separator.*
- (3) *An amendment both adding and removing lands from a Community Separator, where there is no net loss in land area within the Community Separator.*
- (4) *An amendment correcting a mapping error, where lands that do not meet the designation*

criteria for Community Separators have been inadvertently included within a Community Separator.

For the purposes of this policy, approval by the voters of Sonoma County shall be accomplished when a general plan amendment is placed on the ballot through any procedure provided for in the Elections Code, and a majority of the voters vote in favor of it. The Board of Supervisors may adopt a general plan amendment prior to securing the approval of the voters of Sonoma County; provided, however, that whenever the Board of Supervisors adopts an amendment requiring approval of the voters of Sonoma County pursuant to the provisions of this policy, the Board action shall have no effect until after such a vote is held and a majority of the voters vote in favor of it. The Board of Supervisors shall follow the provisions of the Elections Code in all matters pertaining to such an election. AS AMENDED BY MEASURE K

Measure K:

On November 8, 2016, the voters of Sonoma County passed Measure K known as the "Community Separators Protection Ordinance". This measure amended the Sonoma County General Plan to require voter approval of changes to the General Plan that increase the allowed density or intensity of development within the designated community separators. Land Use Policy LU-3e was added to the General Plan and OSRD-1k was amended by Measure K.

Zoning Ordinance:

RRD zoning district

Section 26-18-005 Purpose

Purpose: to implement the provisions of the resources and rural development land use category of the General Plan, namely to provide protection of lands needed for commercial timber production, geothermal production, aggregate resources production; lands needed for protection of watershed, fish and wildlife habitat, biotic resources, and for agricultural production activities that are not subject to all of the policies contained in the agricultural resources element of the General Plan. The resources and rural development district is also intended to allow very low density residential development and recreational and visitor-serving uses where compatible with resource use and available public services.

Section 26-18-020 Uses permitted with a use permit

(ee) Recreational vehicle parks, tent camps or campgrounds, lodging and other recreational or visitor serving uses which do not interfere or detract from the purposes of this district; except such uses are not permitted on land subject to a Williamson Act contract.

Section 26-10-030 Permitted residential density and development criteria

- (a) Density. Not applicable*
- (b) Minimum lot area: 20 acres*
- (c) Minimum lot width: 125 feet*
- (d) Maximum building height: 35 feet*
- (e) Maximum lot coverage: 85,000 square feet or five percent, whichever is greater*
- (f) Yards*
 - (1) Front or street side yard: 30 feet*
 - (2) Side yard: 10 feet*
 - (3) Rear yard: 20 feet*
- (g) Parking: see below*

SR Scenic Resources Combining District

Section 26-64-020 Community separators and scenic landscape units

(a) *All structures, except certain telecommunications facilities as provided for in Section 26-64-040, located within community separators and scenic landscape units illustrated on Figures OS-5a through OS-5i, inclusive, of the general plan open space element and included within the SR district shall be subject to the following criteria:*

- (1) *Structures shall be sited below exposed ridgelines;*
- (2) *Structures shall use natural landforms and existing vegetation to screen them from view from public roads. On exposed sites, screening with native, fire resistant plants may be required;*
- (3) *Cuts and fills are discouraged, and where practical, driveways are screened from public view;*
- (4) *Utilities are placed underground where economically practical*

(d) *Require development within community separators to be clustered and limited in scale and intensity.*

Section 26-64-050 Design review approval

(a) *All plans for land divisions or development projects shall be reviewed and approved, conditionally approved, or denied by the planning director on the basis of compliance with the provisions of this article. Where a use permit is required and following design review approval, development plans shall be reviewed and acted upon by the board of zoning adjustments/planning commission. Where a local citizen's committee has been recognized by the board of supervisors, development plans shall be submitted to such committee for review and advisory recommendation prior to action by the planning director.*

Comment

Permitted Uses. Permitted uses with a conditional use permit in the RRD General Plan land use designation includes "lodging, campgrounds, and similar recreational and visitor serving uses provided that they shall not be inconsistent with the purpose and intent of this category." In addition, the RRD zoning district allows "Recreational vehicle parks, tent camps or campgrounds, lodging and other recreational or visitor serving uses which do not interfere or detract from the purposes of this district; except such uses are not permitted on land subject to a Williamson Act contract". Thus, the proposed use is allowable with a conditional use permit if findings of consistency with community separator policies can be made (see below).

In addition, Policy LU-16N of the Sonoma County General Plan Land Use Element specifically addresses the intended land use designation and use of the project site. Policy LU-16n states: *The "Resources and Rural Development" designation is applied to Cloverleaf Ranch (APNs 58-020-08 and 09) to recognize the existing youth camp, riding academy, and day care uses.* This parcel is APN 58-020-009 and LU-16N recognizes the historic use as a youth camp. This policy is no longer relevant as the prior camp use was destroyed by the 2017 wildfire. The current project is being evaluated against the requirements of the RRD designation and community separator policies.

Community Separator Policies. Consistency with the community separator policies is critical to determining consistency with the purpose and intent of the RRD designation and SR Scenic Resource overlay. The final hearing authority will ultimately make the determination of consistency. The primary goal of the community separator is to *maintain them in a largely open or natural character with low intensities of development. Further, the objectives state: "Retain a rural character and promote low intensities of development in Community Separators."* Low intensity uses are not specifically defined in the General Plan.

The proposed project can be considered a low intensity of development in that it is designed to be minimally visible from public roads. Views from Old Redwood Highway and Highway 101 will be that of a natural environment with native plantings and vineyards (agricultural use) on the hillside. The proposed

buildings, though not visible from public view, would have a rural feel with natural wood siding, metal, and simple building forms to be used to integrate building into rural and agricultural landscape and natural materials and native landscaping would be used for outdoor areas.

The most noticeable use of the premises will be 50 special events including 20 special events of up to 250 guests and 30 special events up to 175 guests, primarily on weekends. These events would not be perceptible to the general public, and the traffic study did not conclude any significant impacts.

Voter approval of the project is not triggered pursuant to Measure K since the use is allowed with the issuance of a conditional use with appropriate findings and does not need a General Plan Amendment. The site is not in the Urban Growth Boundary of the City of Santa Rosa.

Other relevant policies of the community separator policies are summarized below:

- Sewer and water. The project would not connect to public water or sewer systems. A private septic system is planned. More information can be found in the Hydrology and Water Quality, and Utilities sections of this document.
- Tree protection. The project would minimize removal of trees and other mature vegetation. More information can be found in the Biological Resources section of this document.
- Stormwater. The project would minimize impervious surfaces and encourage groundwater recharge with effective design features and materials that allow stormwater infiltration and detention. See the Hydrology and Groundwater section of this document.
- Views and screening. See the Aesthetics section of this document.
- Acquisition and Transfer of Development Rights: There are no known funding opportunities for acquisition of the site by a public or non-profit organization, or any opportunities for transfer of development rights.

Zoning development standards. The 22-acre site complies with minimum lot size and width requirement of the RRD Zoning. The project meets the maximum structural height limit of thirty-five feet, which is defined as the vertical distance from the average level of the highest and lowest point of that portion of the lot covered by the building to the topmost point of the roof. The maximum lot coverage for parcels greater than 20 acres is 85,000 square feet or five percent. The proposed lot coverage is 23,025 or 2.5 percent.

Sixty permanent designated parking spaces (52-space guest parking lot and 8-space employee lot) are proposed, along with an area for 42 spaces using valet services. The main access driveway extending from Old Redwood Highway will be paved. The internal loop road will be a chipseal permeable paving and turfblock in order to create a more rural feel.

A deed restriction or other recorded restriction as determined by County Counsel would help ensure that the open space characteristics of the project site are preserved in perpetuity in order to solidify the community separator designation. Such a deed restriction would be dedicated by the project applicant and would cover 6.5 acres, or 29.5 percent of the property, including the vineyard area adjacent to Old Redwood Highway. With this proposed mitigation, the project would not cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Thus, land use and planning impacts are less than significant with mitigation incorporated.

Significance Level: Less than Significant Impact with mitigation incorporated.

Mitigation Measure LU-1: Prior to issuance of a grading or building permit, a deed restriction in a form acceptable to County Counsel and PMRD shall be recorded to protect those specific existing scenic and open space features of 3890 Old Redwood Hwy, as shown on the drawing identified as "Site Plan A1.0", Sonoma, CA, APN: 058-020-009, dated April 24, 2019 (the "Non-Buildable Area"), by precluding the location, installation or placement of any building ("building" being strictly defined herein as a structure used as a shelter for persons, animals, property or an activity and having walls and a roof) on said Non-

Buildable Area, other than those structures and facilities which are proposed with this application and shown on said map.

Mitigation Monitoring LU-1: PRMD staff shall ensure that the above condition is listed on all grading, building and improvement plans. PRMD shall ensure that documentation of recordation of the required deed restriction, including a legal description, is submitted to PRMD prior to the issuance of a grading or building permit.

12. MINERAL RESOURCES:

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?**

Comment:

The project site is not located within a known mineral resource deposit area (Sonoma County Aggregate Resources Management Plan, as amended 2010). Sonoma County has adopted the Aggregate Resources Management Plan that identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist). Additional detail on mineral resources may be found in the California Geologic Survey Special Report 205, Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-consumption region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California.²³

Significance Level: No Impact

- 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?**

Comment:

The project site is not located within an area of locally-important mineral resource recovery site and the site is not zoned MR (Mineral Resources) (Sonoma County Aggregate Resources Management Plan, as amended 2010 and Sonoma County Zoning Regulations).²⁴ The project site is located in an area classified as MRZ-4, which denotes areas where available information is inadequate for assignment to any other MRZ zone. The project consists of construction of a rural lodging and event center replacing a youth camp that was destroyed in the 2017 Tubbs fire. No locally-important mineral resources are known to occur at the site.

Significance Level: No Impact

13. NOISE:

Information on the potential operational noise levels that could be generated by the project was obtained from the technical report "Solstice Sonoma Recreation and Event Venue Environmental Noise Assessment" (Illingworth and Rodkin December 17, 2018), prepared for the Applicant by Illingworth and

²³ Update Of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin, And Southwestern Solano Counties, CA http://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_205/SR%20205%20North%20Bay%20Report_Final.pdf, accessed 2/13/19.

²⁴ Sonoma County Aggregate Resources Management Plan, http://www.sonoma-county.org/prmd/docs/misc/arm_plan.pdf, accessed 2/13/19.

Rodkin.

Noise may be defined as loud, unpleasant, or unwanted sound. The frequency (pitch), amplitude (intensity or loudness), and duration of noise all contribute to the effect on a listener, or receptor, and whether the receptor perceives the noise as objectionable, disturbing, or annoying. The decibel scale (dB) is a unit of measurement that indicates the relative amplitude of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a tenfold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 more intense, and so on. In general, there is a relationship between the subjective noisiness, or loudness of a sound, and its amplitude, or intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. There are several methods of characterizing sound. The most common method is the “A-weighted sound level,” or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is typically most sensitive. Thus, most environmental measurements are reported in dBA, meaning decibels on the A-scale. The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. Theoretically, the sound level of a point source attenuates, or decreases, by 6 dB with each doubling of distance from a point, or stationary, source of sound, and 3 dB for each doubling of distance from a mobile source of sound. Sound levels are also affected by certain environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and attenuation by barriers. When more than one point source contributes to the sound pressure level at a receiver point, the overall sound level is determined by combining the contributions of each source. Decibels, however, are logarithmic units and cannot be directly added or subtracted together. Under the dB scale, a doubling of sound energy corresponds to a 3 dB increase in noise levels. For example, if one noise source produces a sound power level of 70 dB, two of the same sources would not produce 140 dB – rather, they would combine to produce 73 dB.

Regulatory Framework

The project site lies north of the Santa Rosa City limits and is contained entirely within Sonoma County and as a result, the County regulations apply. The Sonoma County Noise Element of the 2020 General Plan identifies a goal to:

Sonoma County General Plan

The Solstice Sonoma site lies north of the Santa Rosa city limits, thus Sonoma County regulations apply. The Sonoma County Noise Element of the 2020 General Plan lists the following relevant goals and policies :

“Protect people from the adverse effects of exposure to excessive noise and to achieve an environment in which people and land uses function without impairment from noise.”

- NE-1a:** Designate areas within Sonoma County as Noise Impacted if they are exposed to existing or projected exterior noise levels exceeding 60 dBA Ldn, 60 dBA CNEL, or the performance standards of Table NE-2.
- NE-1b:** Avoid noise sensitive land use development in noise impacted areas unless effective measures are included to reduce noise levels. For noise due to traffic on public roadways, railroads, and airports, reduce exterior noise to 60 dB Ldn or less in outdoor activity areas and interior noise levels to 45 dB Ldn or less with windows and doors closed. Where it is not possible to meet this 60 dB Ldn standard using a practical application of the best available noise reduction technology, a maximum level of up to 65 dB Ldn may be allowed provided that the interior noise level shall be maintained so as not to exceed 45 dB Ldn.
- NE-1c:** Control non-transportation related noise from new projects. The total noise level resulting from new sources shall not exceed the standards in Table NE-2 of the recommended revised policies as measured at the exterior property line of any adjacent noise sensitive land use. Limit exceptions to the following:

- (1) If the ambient noise level exceeds the standard in Table NE-2, adjust the standard to equal the ambient level, up to a maximum of 5 dBA above the standard, provided that no measurable increase (i.e. +/- 1.5 dBA) shall be allowed.
- (2) Reduce the applicable standards in Table NE-2 by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises, such as pile drivers and dog barking at kennels.
- (3) Reduce the applicable standards in Table NE-2 by 5 decibels if the proposed use exceeds the ambient level by 10 or more decibels.
- (4) For short-term noise sources, which are permitted to operate no more than six days per year, such as concerts or race events, the allowable noise exposures shown in Table NE-2 may be increased by 5 dB. These events shall be subject to a noise management plan including provisions for maximum noise level limits, noise monitoring, complaint response and allowable hours of operation. The plan shall address potential cumulative noise impacts from all events in the area.
- (5) Noise levels may be measured at the location of the outdoor activity area of the noise sensitive land use, instead of at the exterior property line of the adjacent noise sensitive use where:
 - (a) The property on which the noise sensitive use is located has already been substantially developed pursuant to its existing zoning, and
 - (b) There is available open land on these noise sensitive lands for noise attenuation.
This exception may not be used for vacant properties, which are zoned to allow noise sensitive uses

The County's General Plan, Table NE-2, establishes maximum allowable exterior noise exposures for non-transportation noise sources, which are presented below in Table 8.

Table 8: Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources^(A)

Hourly Noise Metric, dBA ^(B)	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
L50 (30 minutes in any hour)	50	45
L25 (15 minutes in any hour)	55	50
L08 (4 minutes 48 seconds in any hour)	60	55
L02 (72 seconds in any hour)	65	60
Source: Sonoma County General Plan Noise Element Table NE-2		
(A) Pursuant to General Plan Policy NE-1C, the noise standards apply at the exterior property line of any adjacent noise sensitive land use.		
(B) The sound level exceeded n% of the time in any hour. For example, L50 is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level.		

Existing Noise Environment

The applicant's technical report includes information on existing ambient noise levels at the proposed project. Noise levels at the project boundary were monitored and included one long-term (LT-1) noise measurement and three short-term (ST-1, ST-2, and ST-3) noise measurements (Figure 5). The long-term sound level measurement (LT-1, Figure 2) was conducted on the southeastern property line shared with the Vineyard Commons Assisted Living facility on a tree branch approximately 10 feet above grade at a distance of approximately 90 feet from the centerline of Fountain Grove Office Park access drive and 960 feet the centerline of Old Redwood Highway. This measurement represents the existing noise environment at the Vineyard Commons property line with a distant, but clear, view of Old Redwood Highway and Highway 101 traffic. This measurement was not influenced by noise produced by mechanical equipment operations at the Vineyard Commons or nearby office uses. Thus, noise levels measured at this site were primarily produced by traffic on Old Redwood Highway and Highway 101.

The average weekday noise levels at this location ranged from 51 to 58 dBA Leq during the day, and 46

to 57 dBA Leq at night, the average weekend noise levels ranged from 50 to 57 dBA Leq during the day and 46 to 55 dBA Leq at night. The calculated average day/night noise level (Ldn) at this location ranged from 58 and 59 dBA, with an overall Ldn of 59 dBA. The short-term noise measurements were made simultaneously with the long-term measurements on a 10-minute basis at three locations to determine the change in noise levels over the breadth of the site and at the project property lines. The measurement locations are described as follows:

- Measurement location ST-1 was located on the western property line shared with the Cloverleaf Equestrian Center approximately 230 feet from the centerline of Old Redwood Highway and 500 feet from the centerline of the Highway 101 between 12:50 and 1:00 pm on June 21st 2016.
- Measurement location ST-2 was located on the northern property line shared with the Cloverleaf Equestrian Center in the vicinity of the existing tennis court approximately 815 feet from the centerline of Old Redwood Highway and 1050 feet from the centerline of the Highway 101 between 1:10 and 1:20 pm on June 21st 2016.
- Measurement location ST-3 was located above the existing pool area in the vicinity of the south eastern property line share with the Vineyard Commons facility approximately 1200 feet from the centerline of Old Redwood Highway and 1350 feet from the centerline of the Highway 101 between 1:30 and 1:40 pm on June 21st 2016.

The measurement results at each of the short term measurement positions along the simultaneous levels measured at the long term position (LT-1) are shown in Table 9, following average day-night noise level (Ldn) at each short-term measurement location was estimated at this site by correlating the short-term measurement data to the data gathered during the corresponding time period at the long-term site.

Table 9: Summary of Short-Term Noise Measurement Data, dBA						
Noise Measurement Location	L₍₀₂₎	L₍₀₈₎	L_(eq)	L₍₂₅₎	L₍₅₀₎	L_{dn}¹
ST-1: Western property line shared with the Cloverleaf Equestrian center ~230 ft. from the centerline of ORH and ~500 ft. from the centerline of Hwy 101.	57	56	54	54	53	60
LT-1: Vineyard Commons property line ~960 ft. from the centerline of ORH and ~1,100 ft. from the centerline of Hwy 101.	57	55	53	54	52	59
ST-2: Northern property line shared with the Cloverleaf Equestrian Center ~815 ft. from the centerline of ORH and ~1,050 ft. from the centerline of Hwy 101.	49	46	45	45	44	51
LT-1: Vineyard Commons property line ~960 ft. from the centerline of ORH and ~1,100 ft. from the centerline of Hwy 101.	57	55	53	54	52	59
ST-3: Above the existing pool area in the vicinity of the property line shared with the Vineyard Commons facility ~1,200 ft. from the centerline of ORH and ~1,350 ft. from the centerline of Hwy 101.	62	57	48	48	46	53
LT-1: Vineyard Commons property line ~960 ft. from the centerline of ORH and ~1,100 ft. from the centerline of Hwy 101.	59	57	54	54	53	59
¹ The L _{dn} at the short term positions is approximated by correlation to the corresponding measurement period at the long-term sites.						

Based on the long term and short-term noise measurement results, the existing ambient daytime and nighttime noise levels in terms of the descriptors used to interpret the County's Noise Performance Standards have been determined at the project property lines shared with the Vineyard Commons facility and the Cloverleaf Equestrian Center. These ambient noise levels are shown in Table 10, below;

Table 10: Ambient Noise Levels at the Property Lines of Adjacent Noise Sensitive Uses		
Hourly	Exterior Ambient Noise Levels	
	Cloverleaf Equestrian Center Prop. Line	Vineyard Commons Facility Prop. Line

Noise Metric (County Noise Standards)	Western portion (ST-1: with views of roadway traffic)		Eastern portion (ST-2: without views of roadway traffic)		Western portion (LT-1: with views of roadway traffic)		Eastern portion (ST-3: without views of roadway traffic)	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
L ₅₀ (30 Min.)	54	49	44	40	53	48	45	41
L ₂₅ (15 Min.)	55	50	45	41	54	50	46	42
L ₀₈ (5 Min.)	56	52	47	42	56	52	47	43
L ₀₂ (1 Min.)	58	54	50	46	58	54	56	51

Source: Illingworth and Rodkin, Inc. 2018.



Figure 5: Noise Measurement Locations

Based on the CEQA Guidelines, Appendix G: Items XIII (a) through (c), implementation of the proposed Project would have a significant impact related to noise and vibration if it would:

- a) Generate 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?

Comment:

The technical noise report prepared for the proposed project by Illingworth and Rodkin evaluated the ambient noise levels at the site against the County's General Plan land use compatibility standards for the proposed recreation and events land use, which are 60 dBA Ldn exterior and 45 dBA Ldn interior.

The technical noise report also evaluated and compared the proposed Project's noise sources against the County's standards listed in Table 9. The findings of this report are summarized below. Please refer to the Noise Study for full detailed information on the project's potential to expose people to or generate noise levels in excess of applicable standards.

General Plan Land Use Compatibility

The applicant's technical report evaluated the project's consistency with the General Plan land use compatibility standards based on the predicted future noise environment that would exist when the project begins operations. The General Plan noise standards require evaluation of new noise impacts on sensitive receptors. The closest noise sensitive receptors to the project site are the recreational uses at the Cloverleaf Equestrian Center to the north and west, and the Vineyard Commons senior assisted living facility to the south and east.

Both the Cloverleaf Ranch Equestrian Center and Vineyard Commons properties immediately adjacent to the shared project property line are largely composed of sloping brushy wooded areas, with the outdoor activity areas of the noise sensitive land uses located further inside the property lines. Considering this it is expected that outdoor use and activities at the common property lines would be difficult or impossible. However, as directed by County Staff and to conduct a very conservative analysis of project noise impacts, this analysis evaluates project generated noise at the common property lines shared with the Cloverleaf Ranch Equestrian Center and the Vineyard Commons senior living facility.

Estimating the expected noise produced by, and impacts from, the proposed project at the adjacent noise sensitive uses requires three elements; the first is an assessment of what noise producing operations are likely to occur, the second is typical noise source levels for those operations, and the third is to determine the temporal nature of the operations.

Project Noise Generation

The proposed project would generate noise from the following sources: project traffic and parking lot noise, recreational use of the lake and swimming pool, cabin guest related activities, indoor and outdoor special events and dining events, building mechanical equipment, and trash collection. The estimated noise levels generated by these sources are discussed as follows:

- Project traffic would include automobile and light vehicle traffic and delivery trucks. Automobile and light vehicle traffic accessing the site facilities would occur during the daytime hours and noise produced is expected to include the sounds of vehicles accessing parking areas, engine starts, door slams. These noises typically range from a maximum of 53 dBA to 63 dBA at 50 feet. Delivery trucks accessing the project site would use paved site areas. Noise levels generated by truck traffic are dependent on the size and speed of trucks. Heavy duty (semi-tractor trailer type) trucks are not expected to be needed for the proposed facility. Instead medium duty (box type and delivery) trucks are expected at the project site. Typical maximum noise levels generated by medium trucks typically range from 60 dBA when traveling at constant speeds to 65 dBA when stopping/starting and maneuvering at a distance of 50 feet.
- The area around the lake and the swimming pool will be used for daytime recreation. Swimming and water play will not be permitted in the lake, and water play will only occur in the swimming pool. It is difficult to quantify the noise generated by recreational facilities such as lakes and swimming pools because the associated activities vary from non-use (and no associated noise), to light recreational use such as lounging and small-group gatherings (within minimal associated noise), to large gatherings with multiple noise generators such as children playing. Noise surveys at other outdoor recreational facilities such as water slides and community pools recorded maximum (peak) noise levels of up to 80 dBA at 50 feet. However, the loudest noise levels were more typically about 10 decibels lower than this peak volume (approximately 70 dBA at 50 feet), with average (L_{eq}) levels of about 60 dBA occurring at 50 feet during hours with typical periods of boisterous recreational use and water play. Considering this, I&R characterized the source sound levels at 50 feet from active

daytime recreation versus the County noise standards at L_{50} 55 dBA. The County L_{50} standard is defined as the level exceeded 30 minutes or more per hour, and thus represents an hourly median level, which I&R reports is typically lower than average (L_{eq}) levels for activities like the recreation that has periods of loud, boisterous, activities and other periods of relative quietude. These activities would only occur during daytime hours.

- The use of the Residential Cabins are generally not expected to generate significant noise, since the use would be similar to common residential sources with occupant voices being the primary source of daytime, evening and occasional nighttime sounds. Based on the consideration that raised voices of groups outside of cabins may occur during the daylight hours, and that after dark (i.e. nighttime hours) guest activities would occur within cabins, I&R characterized the source sound levels at 50 feet associated with hourly daytime residential cabin noise versus County Noise standards at an L_{50} of 48 dBA, while nighttime hourly nighttime residential cabin noise would be characterized by an L_{50} of 33 dBA at 50 feet.
- The use permit for the rural lodging and event center requests up to a total of 100 events per year, including 20 events for up to 250 guests, 30 events for up to 175 guests, and 50 special dining events for up to 80 guests. The hours of special events and dining events would be limited to 10 a.m. to 10 p.m. and outdoor music at any event would be restricted to acoustic music only and would cease at 9 p.m. Table 11 below lists typical noise levels generated by small to larger sized events, including the non-amplified music proposed at the project, at a distance of 50 feet from the source.

Table 11: Typical Noise Source Levels for Events (A-Weighted L_{50} Levels)	
Event or Activity	Typical Noise Level @ 50 ft.
Non-amplified (acoustic) music	67 dBA
250 Guests in Raised Conversation with Background Music	68 dBA
175 Guests in Raised Conversation with Background Music	66 dBA
80 Guests in Raised Conversation with Background Music	58 dBA
¹ Amplified concert type music events are not proposed, such events would increase outdoor L_{50} sound levels to 80 dBA @ 50 feet.	

- The proposed project is expected to include kitchen and laundry exhaust fans, and heating and cooling (HVAC) equipment for the residential cabins. Based on noise measurements made at comparable facilities, the kitchen and laundry exhaust equipment is expected to produce constant noise levels between 70 to 75 dBA at 3 feet, and the outdoor condensing units of air conditioning systems for small residential cabins produce constant sound levels of 55 to 60 dBA at 3 feet. Since this type of equipment typically runs continuously for periods of 30 minutes or more and may be used during both daytime and nighttime hours, the L_{50} NE-2 category would be the most appropriate regulatory threshold to ensure a conservative analysis.
- Noise producing activities at the trash collection site are expected to include the noise from garbage trucks traveling on the site access road, maneuvering around the trash bin enclosure, and lifting and resetting the bins. Considering that a single trash collection truck is expected to be sufficient to pick-up site generated trash, heightened noise produced by produced by trucks on the access road, maneuvering near the trash bins, and lifting and resetting the bins would be expected to occur for 1 to 5 minutes out of an hour. Thus, truck movements would fall in the 1-minute per hour (L_{02}) NE-2 daytime category of 65 dBA limit for daytime pickups (after 7am) and the 60 dBA L_{02} limit for nighttime pickups (before 7am). Typical maximum noise levels generated by trash collection trucks are expected to range from 60 dBA when traveling at constant speeds to 65 dBA when stopping/starting and maneuvering at a distance of 50 feet. During the trash pick-up discrete maximum noise events, such as setting or inadvertent dropping of empty bins, could reach maximum levels of 80 dBA and produce an L_{02} of up to 75 dBA at 50 feet. However, the walls of the bin

enclosure are expected to provide some attenuation of this instantaneous noise, such that noise from the setting or inadvertent dropping of empty bins is expected to be limited to an L02 of 70 dBA (or less) at 50 feet.

Noise Propagation

The final step in estimating the project noise levels is assessing the propagation of sound to the sensitive receptors. To do this, it is necessary to assume some rate of sound attenuation between the operations and receiver locations. The most dominant physical effect is due to the spreading out of sound waves with distance. Depending on ground absorption conditions noise from traffic noise sources can be considered to attenuate at 3 to 4.5 dB per doubling of distance from the source while noise from fixed project source can be considered to attenuate at a rate of 6 to 7.5 dB per doubling of distance from the source. Considering the vegetative cover near the project property line and over much of the site, distance attenuation rates of 4.5 dB per distance doubling are used for traffic noise sources and distance attenuation rates of 7.5 dB per distance doubling are used for fixed noise sources in this analysis. Other effects can modify these fall-off rates such as partial shielding from buildings or topography, atmospheric attenuation of sound, and meteorological effects. These effects almost always reduce the noise in addition to that due to sound divergence. As most of these effects will vary with time due to changing environmental conditions, it is most conservative to assume only attenuation due to divergence for outdoor activities, minimum terrain or building shielding factors (6 dBA) where intervening terrain or structures break the line of sight from source to receiver, and conservative (minimal) rate of structural attenuation (12 dBA) when operations are conducted within buildings, realizing that the actual noise level will be at or, most likely, below those predicted using these assumptions at any one time.

To evaluate noise impacts on sensitive uses, noise levels were propagated to the near common property lines of the Vineyard Commons Assisted Living facility to the east, and the Cloverleaf Ranch Equestrian Center to the north. Ambient noise levels at the Vineyard Commons Assisted Living facility are represented by measurements at monitoring positions LT-1 and ST-3, while ambient noise levels at the Cloverleaf Ranch Equestrian Center are represented by measurements at monitoring positions ST-1 and ST-2 as shown in Table 11.

Impact Assessment

Impact 1: Project Traffic and Parking Lot Noise

Automobile Parking and Traffic. Based on a review of the project site development plan and distance information obtained via Goggle Earth, the main visitor parking area would be situated as close as 125 feet from the Vineyard Commons property line and as close as 350 feet from the Cloverleaf Ranch Equestrian Center property line.

Considering these distances, noise generated by automobile and light vehicle visitor traffic in the main parking lot would be between 43 and 53 dBA at Vineyard Commons property line and between 32 to 42 dBA at Cloverleaf Ranch Equestrian Center property line.

Given the expected visitor and employee use vehicular noise in the main parking, particularly during events or on busy weekends, may occur more frequently producing maximum noise level for 15 to 30 minutes per hour and fall in the L25 NE-2 daytime categories of 55 dBA. Table 4 of the Project noise report presents and summarizes the assessment of automobile noise in parking areas at the identified noise sensitive uses versus County Noise Standards. Considering this finding, noise levels associated with automobiles and light vehicles using the project parking lots would not exceed the daytime NE-2 noise standards at the property lines of any adjacent noise sensitive residential uses. No mitigation is needed for this impact.

Truck Traffic. Based on a review of the project site development plan and distance information obtained via Goggle Earth, trucks delivering supplies to the project facilities and traveling on the project access roads would be as close as 130 feet from the Vineyard Commons property line and as close as 100 feet from the Cloverleaf Ranch Equestrian Center property line. Using these distances,

and a 7.5 dB sound reduction for each doubling of the distance, noise generated by slowly moving delivery trucks at the Vineyard Commons and Cloverleaf Ranch Equestrian Center outdoor use areas would, respectively, be 55 and 57 dBA. Based on the time it takes for trucks to maneuver on the site, even on a busy day before an event, such truck pass-bys are expected to produce maximum noise on a typical basis for between 5 and 15 minute per hour in any given hour. Thus, maximal truck operations are judged to fall in the L08 NE-2 category at the adjacent residential uses. Table 5 of the Project noise report presents and summarizes the assessment of truck traffic noise. Considering these findings, noise associated with daytime truck traffic at the project would not exceed the daytime NE-2 noise standards at the Vineyard Commons or the Cloverleaf Ranch Equestrian Center property lines. No mitigation is needed for this impact.

Impact 2: Recreational Use of the Lake and Swimming Pool

Based on a review of the project site development plan and distance information obtained via Goggle Earth, the shore near the event barn and the sandy beach between the lake dock and pool area would be 280 feet from the Cloverleaf Ranch Equestrian Center property line and 250 feet from the Vineyard Commons property line. The center of the swimming pool is 480 feet from the Cloverleaf Ranch Equestrian Center property line and 110 feet from the Vineyard Commons property line. The Vineyard Commons property line is partially shielded from the lake and pool area by intervening terrain that is expected to attenuate noise by 6 decibels).

Considering distance and terrain attenuation factors, the L₅₀ levels from project related daytime recreation and water play are expected to reach 35 dBA at the Cloverleaf Ranch Equestrian Center property line, and 45 dBA at the outdoor activity areas of the Vineyard Commons property line. Sounds from daytime recreation and water play noise are expected to consist primarily of speech or music (including shouting and raised voices) and occur only during daytime hours. Table 6 of the Project noise report presents and summarizes the assessment of daytime recreation and water play noise at the identified noise sensitive uses versus County Noise Standards. Table 6 of the noise report has been updated and is shown as Table 12 below. A review of this table indicates that recreation and water play noise would not exceed daytime NE-2 noise standards at the property line of the Cloverleaf Ranch Equestrian Center or the closest outdoor use areas of the Vineyard Commons senior living center. No mitigation is needed for this impact.

Table 12: Recreation and Water Play Daytime L₅₀ Noise Levels, dBA		
	Vineyard Commons	Cloverleaf Equestrian Ctr.
Unadjusted Table NE-2 Daytime Limit	50	50
Daytime Ambient Noise Levels	45	44
NE-2 Adjustment for speech and/or music	-5	-5
Water play Noise at Receiver	45	35
Operations Exceed Ambient by 10 dBA?	No	No
NE-2 Adjustment	0	0
Adjusted Table NE-2 Daytime Limit	45	45
Water play Noise Exceeds NE-2?	No	No

Impact 3: Cabin Guest Related Activities

Based on a review of the project site development plan and distance information obtained via Goggle Earth, the center of the closest cabins would be situated approximately 90 feet from the property lines shared with the Cloverleaf Ranch Equestrian Center and approximately 120 feet from the property lines shared with the Vineyard Commons. Considering the above distances, the L₅₀ levels from cabin guest related activities could reach respective daytime L₅₀ levels of 42 and 38 dBA and nighttime L₅₀ levels of 27 and 23 dBA at the property lines shared with the Cloverleaf Ranch Equestrian Center and Vineyard Commons. Table 7 of the Project noise report presents and summarizes the assessment of daytime and nighttime cabin guest related activities at the identified noise sensitive uses versus County Noise Standards. A review of Table 7 indicates that cabin guest related activities would meet the daytime and nighttime NE-2 noise standards at property lines shared with the Cloverleaf Ranch Equestrian Center or the Vineyard Commons senior living center. No mitigation is necessary for this

impact.

Impact 4: Indoor and Outdoor Special Events and Dining Events

The use permit for the rural lodging and event center requests up to a total of 100 events per year. These events would consist of 20 special events of up to 250 guests, 30 special events up to 175 guests, and 50 special dining events for up to 80 people. Events are expected to take place indoors within the Event Barn, or outdoors under and in the area around the Event Trellis. Figure 3 of the Project noise report shows the project site plan with these areas identified. Events occurring within the Event Barn would receive noise shielding from building structure estimated at a minimum of 12 dBA (assuming open windows and/or doors), while events held outdoors under and in the area around the Event Trellis would not receive any significant structural noise shielding. The hours of special events and dining events will be limited to 10 a.m. to 10 p.m. and outdoor music at any event will be restricted to acoustic music only and will cease at 9 p.m.

Based on a review of the project site plan and distance information obtained via Goggle Earth the main event areas on the site would be situated relative to the adjacent noise outdoor use areas as follows:

- The center of the event trellis would be 325 feet from the Cloverleaf Ranch Equestrian Center property line and as close as 230 feet from Vineyard Commons property line. Intervening terrain and foliage are expected to attenuate noise by 6 decibels.
- Events in the Event Barn would be 200 feet from the Cloverleaf Ranch Equestrian Center property line and 260 feet from the Vineyard Commons property line.

Using the source levels discussed above, a 7.5 dB sound reduction for each doubling of the distance, and 12 dB of sound attenuation for events held within the Event Barn (assuming open windows and/or doors) the L50 noise levels from event related activities at each of these identified locations at the outdoor use areas of the Cloverleaf Ranch Equestrian Center and the Vineyard Commons would be as shown in Table 8 of the Project noise report. Table 8 also assesses the noise against County Noise Standards. Based on the findings shown in Table 8 all proposed events would meet the daytime NE-2 noise standards at property lines shared with the Cloverleaf Ranch Equestrian Center or the Vineyard Commons senior living center. No mitigation is needed for this impact.

Impact 5: Building Mechanical Equipment Noise

Based on a review of the project site development plan and distance information obtained via Goggle Earth, cabin perimeters would be situated as close as 60 feet from the property lines of the Cloverleaf Ranch Equestrian Center and as close as 100 feet from the property lines of the Vineyard Commons. This review also shows that the commercial kitchen in the Event Barn may be situated as close as 200 feet from the property line of the Cloverleaf Ranch Equestrian Center and as close as 265 feet from the property line of the Vineyard Commons.

Considering these distances, and the mechanical equipment noise levels discussed previously, noise from the kitchen and laundry exhaust equipment could reach 26 dBA at the Cloverleaf Ranch Equestrian Center property line and 29 dBA at the Vineyard Commons property line, while mechanical noise from Guest Cabin HVAC equipment could reach 27 dBA at the Cloverleaf Ranch Equestrian Center property line and 22 dBA at the Vineyard Commons property line. Table 9 of the Project noise report presents and summarizes the assessment of daytime recreation and water play noise at the identified noise sensitive uses versus County Noise Standards. A review of Table 9 indicates that project mechanical equipment noise would not exceed daytime NE-2 noise standards at the property line of the Cloverleaf Ranch Equestrian Center or the closest outdoor use areas of the Vineyard Commons senior living center. No mitigation is needed for this impact.

Impact 6: Trash Collection Noise

A review of the project site plan indicates that the trash bin enclosure location on the site would be approximately 200 feet from the Vineyard Common property line and 420 feet from the Cloverleaf Ranch property line. Additionally, trucks traveling on the project access road before and after trash collection will pass as close as 150 feet from the Vineyard Commons property line and as close as 400 feet from the Cloverleaf Ranch property line. Considering these distances, and the trash collection noise levels discussed previously, noise resulting from trash pick-up activity may be between an L02 of 48 and 60 dBA at the Vineyard Common property line and an L02 of 37 and 52 dBA at the Cloverleaf Ranch property line. Table 10, of the Project noise report, summarizes the assessment of trash collection noise. A review of Table 10 indicates that noise associated with daytime or nighttime trash collection activities would not result in noise levels which exceed the Sonoma County NE-2 standards at the Vineyard Commons or the Cloverleaf Ranch property lines. No mitigation is necessary for this impact.

Significance Level: Less than Significant Impact

b) Generate excessive ground borne vibration or ground borne noise levels?

Comment:

Vibration is the movement of particles within a medium or object such as the ground or a building. As is the case with airborne sound, ground borne vibration may be described by amplitude and frequency. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared, in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Human response to ground borne vibration is subjective and varies from person to person. The California Department of Transportation's (Caltrans) Transportation and Construction Vibration Guidance Manual provides a summary of vibration criteria that have been reported by researches, organizations, and governmental agencies (Caltrans, 2013). Chapters six and seven of this manual summarize vibration detection and annoyance criteria from various agencies and provide Caltrans' recommended guidelines and thresholds for evaluation potential vibration impacts on buildings and humans from transportation and construction projects. These thresholds are summarized in Tables 13 and 14, below.

Table 13: Caltrans' Vibration Threshold Criteria for Building Damage		
Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Extremely fragile buildings, ruins, monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
Source: Caltrans, 2013		

Table 14: Vibration Threshold Criteria for Human Response		
Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035

Table 14: Vibration Threshold Criteria for Human Response

Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
Source: Caltrans, 2013a		

The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. Table 15 lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during project construction (at a distance of 50 feet), as well as the estimated vibration levels at the closest sensitive receptor east of the site (340 feet from the project).

Table 15: Estimated Ground-Borne Vibration Levels from Construction Equipment

Equipment	Peak Particle Velocity (in/sec) ^(A)				Velocity Decibels (vdB) ^(B)			
	50	100	200	340	50	100	200	340
Large bulldozer	0.042	0.019	0.009	0.005	78.0	68.9	59.9	53.0
Small bulldozer	0.014	0.007	0.003	0.002	49.0	39.9	30.9	24.0
Loaded truck	0.035	0.017	0.008	0.004	77.0	67.9	58.9	52.0
Jackhammer	0.016	0.008	0.004	0.002	70.0	60.9	51.9	45.0
Auger Drill Rig	0.042	0.019	0.009	0.005	78.0	68.9	59.9	53.0

SOURCES: Caltrans, 2013 and FTA 2006.

(A) Estimated PPV calculated as: $PPV(D) = PPV(ref) * (25/D)^{1.3}$ where $PPV(D)$ = Estimated PPV at distance; $PPV(ref)$ = Reference PPV at 25 ft; D = Distance from equipment to receiver; and n = ground attenuation rate (1.1 for dense compacted hard soils).

(B) Estimated L_v calculated as: $L_v(D) = L_v(25 \text{ feet}) - 30 \log(D/25)$ where $L_v(D)$ = estimated velocity level in decibels at distance, $L_v(25 \text{ feet})$ = RMS velocity amplitude at 25 f, and D = distance from equipment to receiver.

As shown in Table 14, at their closest, presuming work occurs on the property line, construction activities could occur within approximately 340 feet of the closest residential buildings. At this distance, a large bulldozer would generate a ground vibration level of 0.005 PPV, which is below Caltrans' vibration threshold criteria for older residential structures damage of 0.50 and, therefore, would not result in building damage. In addition, levels of vibration produced by construction equipment are evaluated against Caltrans' vibration threshold criteria for human response. The ground vibration level of 0.005 PPV generated by a large bulldozer at 340 feet would be below Caltrans' vibration detection thresholds for "barely perceptible." For these reasons, potential groundborne vibration levels generated project construction activities are not considered excessive. Once operational, the proposed project would not involve the operation of equipment or machinery that would generate groundborne vibration.

Significance Level: Less than Significant Impact

- 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?

Comment:

The Charles M. Schulz-Sonoma County Airport is a small municipal airfield located approximately 4.5 miles northwest of the project site. The project site is located outside the 55 dBA CNEL contour line of the 2030 Noise Exposure for the airport. Noise from aircraft would not substantially increase ambient noise levels at the project site, and interior noise levels resulting from aircraft would be compatible with the proposed project.

Significance Level: Less than Significant Impact

14. POPULATION AND HOUSING:

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)?**

Comment:

The project includes a rural lodging and event center replacing a youth camp destroyed in the 2017 Tubbs fire. The project would not include construction of a substantial amount of homes, businesses or infrastructure and therefore would not induce substantial population growth.

Significance Level: No Impact

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

Comment:

No housing would be displaced by the project and no replacement housing is proposed to be constructed.

Significance Level: No Impact

15. PUBLIC SERVICES:

Would the project:

- a) **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

Comment:

Construction of the project would not involve substantial adverse physical impacts associated with provision of public facilities or services and the impact would be less than significant. No new housing is included within the project proposal. The project will include 12 cabins for visitor lodging and one for employees, and will host special events ranging in size from 80 people to 250 people. Two (2) full-time employees and one (1) part-time employee will be staffed on-site to handle general operations and marketing. Up to 12 employees or contracted workers will be staffed at any one time to staff for the visitor lodging. Up to 20 employees or contracted workers will be staffed at any one time for the largest special events. The project would not necessitate or facilitate construction of new public facilities because existing public facilities are adequate to accommodate this use.

Significance Level: Less than Significant Impact

i. Fire protection?Comment:

The project would be located in the Rincon Valley Fire Protection District (FPD) Local Response Area. The project was sent on referral to the Rincon Valley FPD, and Rincon Valley FPD responded on January 17, 2019. Their responses request that the proposed project comply with the County's Fire Code and that prior to occupancy, written approval that the required improvements have been installed shall be provided to PRMD from the County Fire Marshal/Local Fire Protection District.

Sonoma County Code requires that all new development meet Fire Safe Standards (Chapter 13). The County Fire Marshal reviewed the project description and plans on January 17, 2019 and requires that the project comply with Fire Safe Standards, including fire protection methods such as sprinklers in buildings, alarm systems, extinguishers, vegetation management, hazardous materials management and management of flammable or combustible liquids and gases. These are standard conditions of approval required by County Code. Because none of the conditions and/or requirements requires construction of new or expanded fire protection/EMS facilities, and with the fire mitigation measures in the Hazards Section of this document, project impacts on fire protection/EMS would be considered less-than-significant.

Significance Level: Less than Significant Impact

ii. Police?Comment:

The Sonoma County Sheriff would continue to serve this area. There would be no increased need for police protection resulting from the project.

The proposed project would generate between 3-20 jobs, and it would not include construction of a substantial amount of homes, businesses or infrastructure and therefore would not induce substantial population growth. Existing police protection facilities would be adequate to serve the project and additional facilities would not be needed.

Significance Level: Less than Significant Impact

iii. Schools, parks, or other public facilities?Comment:

Development fees to offset potential impacts to public services, including school impact mitigation fees, are required by Sonoma County Code and state law for new subdivisions and residential developments. No new schools are reasonably foreseeable as a result of this development.

Significance Level: Less than Significant Impact

iv. Parks?Comment:

The proposed project would not add residents to the County, and therefore would not result in the need for any new park facilities.

Significance Level: No Impact

v. Other public facilities?Comment:

The project would be served by the Airport Larkfield/Wikiup/Sanitation Zone facilities. Expanded facilities are not currently reasonably foreseeable. Expansion or construction of additional types of public facilities is not anticipated as a result of the development of this project.

Significance Level: Less than Significant Impact

16. RECREATION:**Would the project:**

- 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?**

Comment:

The proposed project involves a rural lodging and event center replacing a youth camp destroyed by the 2017 Tubbs Fire and would not add substantial numbers of new residents to the County. It would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. The project would have no impact on the use of existing neighborhood and regional parks or other recreational facilities.

Significance Level: No Impact

- 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?**

Comment:

The proposed project involves construction of a rural lodging and event center replacing the former youth camp destroyed in the 2017 Tubbs fire. The camp would be limited to guests and staff and includes on-site recreational uses such as a swimming pool. It would not have adverse physical effects on the environment as noted in sections 3,4,5,6,7, 9, and 10 of this MND.

Significance Level: Less than Significant Impact

17. TRANSPORTATION / TRAFFIC:

The traffic analysis is based on results of the Traffic Impact Study (TIS) prepared by W-Trans, dated June 14, 2019.

Old Redwood Highway adjacent to this site is located in the City of Santa Rosa jurisdiction. The project was referred to the City's Transportation Division for comments. The applicant's traffic engineer provided responses to the comments and clarified a number of items. The City's comments did not alter the conclusions of the TIS or the mitigation measures.

Would the project:

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

Comment:

Level of Service

The Sonoma County level of service standard for County intersection operations is to maintain a Level of Service D or better pursuant to General Plan Policy CT-4.2. The project would have a significant traffic impact if the project's traffic would cause an intersection currently operating at an acceptable level of service (LOS D or better) to operate at an unacceptable level (LOS E or worse).

If an intersection currently operates or is projected to operate below the County standard, the project's impact is considered significant and cumulatively considerable if it causes the average delay to increase by five seconds or more. Delay is determined by comparing intersection operations with and without the project's traffic for both the existing baseline and projected future conditions. Furthermore, California Department of Transportation (Caltrans) specifies that a project would have a significant impact if the project traffic would cause the operation of a State highway to operate below LOS C.

It should be noted that the originally proposed project proposed to develop 25 small cabins as well as a year-round event space that would host up to twenty (20) 300-person events per year, up to thirty (30) 200-person events per year, and up to fifty (50) 80-person special dining events per year. The proposed project includes a reduction in the number of small cabins from 25 to 12 plus one cabin for employees. Additionally, the currently proposed project includes a reduction in the special events sized from 20 events per year with up to 250 person (down from 300 persons) and 30 events per year with up to 175 persons (down from 200 persons). No change, however, was made to the proposal for 80-person events up to 50 times per year. The Final TIS evaluates traffic impacts based on the revised project.

Existing Conditions LOS Analysis

As shown in Table 16 (Table 7 from the Final TIS), under Existing Conditions the study intersections are currently operating at an acceptable LOS C or better as defined by the County of Sonoma and Caltrans standards. The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the weekday a.m. and p.m. peak hours, and weekend midday peak periods. This condition does not include project-generated traffic volumes. Volume data was collected while local schools were in session.

Table 16 (TIS Table 7): Existing Conditions: Peak Hour Intersection Level of Service Results						
Intersection	Weekday AM Peak		Weekday PM Peak		Weekend Midday Peak	
	Delay	LOS	Delay	LOS	Delay	LOS
1. US 101 SB Ramps/ River Road	20.8	C	19.3	B	7.4	A
2. US 101 NB Ramps/ Mark West Springs Road	38.1	D	17.5	B	25.5	C
3. Old Redwood Highway/ Mark West Springs Road	35.5	D	42.5	D	19.0	B
4. US 101 SB Ramps/Mendocino Avenue-Hopper Avenue	11.7	B	10.8	B	9.7	A
5. Industrial Drive-Mendocino Overcrossing/Cleveland Avenue	29.7	C	47.7	D	27.9	C
6. US 101 NB Ramps/Mendocino Avenue-Old Redwood Highway	37.0	D	28.5	C	21.7	C

Future Conditions LOS Analysis

As shown in Table 17 (Table 9 from the Final TIS) , under the anticipated Future without Project volumes and with optimized signal timing, four of the seven study intersections are expected to operate acceptably at LOS D or better. The three exceptions are:

- With regard to intersections under Caltrans jurisdiction, Caltrans indicates that they endeavor to maintain operation at the transition from LOS C to LOS D. Based on previous discussions with Caltrans staff, it is understood that the standard is to be applied to the overall average intersection delay, and not that associated with any single movement or approach. Under this approach, if one movement experiences very high delay and also has moderate to high traffic volumes, the overall delay and level of service should reflect the critical nature of the condition. However, if one movement is expected to experience high delay, but has very low traffic volumes, the overall intersection operation will still meet the Caltrans standard.

Intersection	Weekday AM Peak		Weekday PM Peak		Weekend Midday Peak	
	Delay	LOS	Delay	LOS	Delay	LOS
1. US 101 SB Ramps/ River Road	21.7	C	39.8	D	10.9	A
2. US 101 NB Ramps/ Mark West Springs Road	72.0	E	81.2	F	95.5	F
3. Old Redwood Highway/ Mark West Springs Road	56.5	E	63.1	E	46.5	D
4. US 101 SB Ramps/Mendocino Avenue-Hopper Avenue	13.4	B	10.5	B	11.0	B
5. Industrial Drive-Mendocino Overcrossing/Cleveland Avenue	39.6	D	44.4	D	37.7	D
6. US 101 NB Ramps/Mendocino Avenue-Old Redwood Highway	32.3	C	38.3	D	23.0	C
7. Mendocino Avenue/ Fountaingrove Parkway- Mendocino Overcrossing	65.1	E	93.6	F	41.0	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; **Bold** text = deficient operation

Future plus Project Conditions LOS Analysis

Trip Generation

The Final TIS provides trip generation information for the proposed lodging use and special events. Project trips generated during a 250-person event were used to assess the worst-case peak hour conditions. Trips generated by the 175-person events and 80-person special dining events are shown for informational purposes only.

Based on application of these assumptions, the proposed project, including both typical daily trips and a 250-person event on the same day, would be expected to generate an average of 6 weekday a.m. peak hour trips, 126 weekday p.m. peak hour trips, and 128 weekend peak hour trips. These results are summarized in Table 18 (Table 14 from the Final TIS),

Table 18 (Table 14 from TIS) Total Trip Generation									
Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekend PM Peak Hour		
	Trips	In	Out	Trips	In	Out	Trips	In	Out
Hotel (LU #310)/home	6	3	3	6	4	2	8	5	3
250-Person Event	--	--	--	120	120	0	120	120	0
Total Project Trips	6	3	3	126	124	2	128	125	3

The Future plus Project LOS numbers are provided in Table 19 (Table 19 from the Final TIS). Upon the addition of project-generated traffic to the anticipated Future without Project volumes, the study intersections are expected to operate acceptably at LOS D or better, except:

- US 101 Northbound Ramps/Mark West Springs Road would continue to operate at LOS E during the weekday a.m. peak hour, and LOS F during the weekday p.m. peak hour and Saturday midday peak hour, though delay would either remain the same or increase less than five seconds with project-added volumes;
- Old Redwood Highway/Mark West Springs Road would continue to operate at LOS E during both the weekday peak hours, though delay would either remain the same or increase less than five seconds with project traffic added; and
- Mendocino Avenue/Fountaingrove Parkway-Mendocino Overcrossing would continue operating at LOS E during the weekday a.m. peak hour and LOS F during the weekday p.m. peak hour, with less than a five-second increase in delay for either of these scenarios.

Table 19 (Table 19 from TIS): Future and Future plus Project Peak Hour Intersection LOS									
Intersection	Future Conditions			Future plus Lodging Use			Future plus Lodging and Event		
	AM	PM	MD	AM	PM	MD	AM	PM	MD
1. US 101 SB Ramps/ River Road	21.7/C	39.8/D	10.9/B	21.7/C	39.8/D	10.9/B	21.7/C	39.8/D	10.9/B
2. US 101 NB Ramps/ Mark West Springs Road	72.0/E	81.2/F	95.5/F	72.2/E	81.4/F	95.9/F	72.2/E	82.1/F	96.8/F
3. Old Redwood Highway/ Mark West Springs Road	55.5/E	61.3/E	45.6/D	55.7/E	61.5/E	46.3/D	55.7/E	62.0/E	46.3/D
4. US 101 SB Ramps/Mendocino Avenue-Hopper Avenue	13.1/B	10.6/B	10.8/B	13.1/B	10.6/B	10.9/B	31.1/B	10.8/B	11.1/B

5. Industrial Drive-Mendocino Overcrossing/Cleveland Avenue	38.8/D	44.4/D	37.7/E	39.0/D	44.7/D	38.1/D	39.0/D	47.6/D	40.9/D
6. US 101 NB Ramps/Mendocino Avenue-Old Redwood Highway	32.3/C	38.3/D	23.0/C	32.3/C	38.4/D	23.0/C	32.3/C	49.4/D	27.5/C
7. Mendocino Avenue/ Fountaingrove Parkway-Mendocino Overcrossing	65.1/E	93.6/F	41.5/D	65.2/E	93.0/F	41.6/D	65.2/E	97.5/F	41.9/D
Notes: Results are reported as Delay/LOS above; Delay is measured in average seconds per vehicle; LOS = Level of Service; AM = Weekday a.m. peak hour; PM = Weekday p.m. peak hour; MD = Weekend peak hour; Results for minor approaches to two-way stop-controlled intersections are indicated in <i>italics</i> ; Deficient operation indicated in bold									

Under future traffic conditions, LOS would remain the same at all study intersections with or without the project. Also, the project would not add five or more seconds of delay to any study intersection that would already be operating deficiently under Future without Project Conditions. Therefore, the project's traffic LOS impact is less than significant.

Queuing

Existing plus Project Queuing Analysis

Under each existing and future traffic scenario, the projected maximum queues in turn pockets at the intersection of Old Redwood Highway/Mark West Springs Road, which is the only study location subject to the County's queuing criterion, were determined using the SIMTRAFFIC application of Synchro, then averaging the maximum projected queue for each of ten runs. Summarized in Tables 19 and 20 (Tables 20 and 22 from TIS) are the predicted queue lengths for approaches to the intersection where queues are expected to exceed the existing available storage capacity. Copies of the SIMTRAFFIC queuing projections are contained in Appendix C of the Final TIS.

Upon adding project-generated traffic to existing volumes, the queue in the southbound right-turn and left-turn lanes as well as the westbound left-turn lane would increase. Because the project would not cause any queues to extend beyond the available stacking length, the project's impact is less-than-significant. These results are summarized in Table 20.

Table 20 (Table 20 from TIS) – Existing and Existing plus Project Maximum Queues at Study Intersections										
Study Intersection Approach	Maximum Queues									
	Storage	AM			PM			MD		
		E	E+P	E+P+S	E	E+P	E+P+S	E	E+P	E+P+S
3. ORH/Mark West Springs Rd	250	173	158	213	206	197	181	135	148	141
Eastbound Left-Turn										
Eastbound Right-Turn	190	168	151	192	84	124	86	64	59	96
Westbound Left-Turn	145	232	218	253	92	100	116	58	116	70
Northbound Left-Turn	175	125	122	139	139	137	142	87	92	97
Northbound Right-Turn	160	71	62	78	126	104	99	76	79	81
Southbound Left-Turn	210	326	330	322	285	295	300	136	136	130
Southbound Right-Turn	140	197	186	210	98	100	119	0	0	0

Notes: Maximum Queue based on the average of the 95th percentile queue from ten SIMTRAFFIC runs; all distances are measured in feet; E = existing conditions; E+P = existing plus lodging use conditions; E+P+S = existing plus lodging use and 300-person special event conditions; ORH = Old Redwood Highway; *Italic text* = queue length exceeds available storage

Future Conditions Queuing Analysis

Future Conditions queuing for the Old Redwood Highway/Mark West Springs Road intersection is summarized in Table 21. Based on the modelled queue analysis, the traffic consultant concluded that the project would result in a slight increase in estimated queue length of less than one vehicle length under Future conditions. . All queues would remain within the available stacking space unless they already exceed the turn pocket length. Therefore, the project impact on queue length is less-than-significant at Old Redwood Highway/ Mark West Springs Road.

Table 21 (Table 22 from TIS) – Future and Future plus Project Maximum Queues at Study Intersections										
Study Intersection Approach	Maximum Queues									
	Storage	AM			PM			MD		
		F	F+P	F+P+S	F	F+P	F+P+S	F	F+P	F+P+S
3. ORH/Mark West Springs Rd										
Eastbound Left-Turn	250	387	327	356	353	361	353	103	9	94
Eastbound Right-Turn	190	281	279	284	324	298	307	202	222	177
Westbound Left-Turn	145	283	294	290	292	294	292	265	268	279
Northbound Left-Turn	175	148	141	152	175	171	177	100	98	99
Northbound Right-Turn	160	83	82	87	148	101	144	87	83	88
Southbound Left-Turn	210	315	302	300	269	271	276	257	251	269
Southbound Right-Turn	140	230	232	229	217	230	225	184	176	184

Notes: Maximum Queue based on the average of the 95th percentile queue from ten SIMTRAFFIC runs; all distances are measured in feet; F = future conditions; F+P = future plus lodging use conditions; F+P+S = future plus lodging use and 300-person special event conditions; ORH = Old Redwood Highway; *Italic* text = queue length exceeds available storage

Sight Distance

Sight distances along Old Redwood Highway at the proposed project driveway were evaluated based on sight distance criteria contained in *A Policy on Geometric Design on Highways and Streets* published by American Association of State Highway and Transportation Officials (AASHTO). These guidelines include recommended sight distances for drivers traveling along the major approaches and for drivers of stopped vehicles at the minor street approaches and driveways. These recommendations are based upon approach travel speeds. Sight distance was field-measured from a 3.5-foot height at the location of the driver set back 14.5 feet on the driveway to a 4.25-foot object height in the center of the approaching lane of the major road. Based on a design speed of 45 mph, the minimum stopping sight distance needed is 360 feet. Sight lines along Old Redwood Highway for a following driver exceed this amount, with the distance for drivers approaching from the north and south exceeding 600 feet.

Stopping sight distances at the project driveway would satisfy the applicable criteria with implementation of right-turn only restrictions, as proposed.

Turn Lane Warrants Analysis

Left-Turn Lane Warrant

Because the project as proposed would be limited to right turns in and out only, the need for a left-turn lane was not evaluated.

Right-Turn Lane Warrant

The need for a right-turn lane or taper was evaluated based on criteria contained in the *Intersection*

Channelization Design Guide, National Cooperative Highway Research Program (NCHRP) Report No. 279, Transportation Research Board, 1985. A right-turn lane would consist of a lane installed to the right of the travel lane and would be a minimum of ten feet wide, plus a shoulder where not adjacent to a curb. A right-turn taper is a shoulder area that gets progressively wider as the motorist drives toward the intersection. Both improvements are meant to provide an area for motorists turning right to move out of the traffic lane without impeding through traffic. The warrants were evaluated using Existing, Existing plus Approved Development and Future volumes for both Project scenarios. A right-turn taper would be warranted only for scenarios concerning Special Event use, and a right-turn taper currently exists. An existing right-turn taper already serves the project driveway and would accommodate project traffic.

Public Transit

The project site is served by Sonoma County Transit service. There are three bus routes, Route 60, Route 62, and Route 20X within a quarter-mile vicinity of the project site. Route 60 provides regional service to the project site and surrounding communities. Route 60 has two stops on Old Redwood Highway within the vicinity of the project site, including northbound and southbound stops located approximately 250 feet south of the project site and also approximately 0.25 miles north of the project site. Route 60 operates on weekdays with headways of thirty minutes to an hour between 6:00 a.m. and 10:00 p.m., and on weekends with headways of one and a half hours between 7:30 a.m. and 10:00 p.m. Route 62 provides regional service between Windsor and Santa Rosa with two stops near the project site at Mark West Springs Road/Old Redwood Highway, one located approximately 0.25 miles from the project site and the other 250 feet south. Route 62 operates only on weekdays with headways of one to two hours between 7:00 a.m. and 6:00 p.m. Route 20X provides regional service to the project site and surrounding communities of Santa Rosa, Sebastopol, and the Russian River area. Route 20X has two stops on Old Redwood Highway within the vicinity of the project site, including northbound and southbound stops located approximately 250 feet south of the project site and also approximately 0.25 miles north of the project site. The existing transit routes and stops are shown in Figure 3 of the TIS. As shown in the Final TIS, existing transit routes are adequate to accommodate project-generated trips, existing stops are within walking distance of the site, and increased traffic associated with the proposed project would not conflict with use of public transit resources.

Pedestrian Facilities

While adjacent land uses are unlikely to attract patrons and employees of the proposed project, patrons and employees may want connections to transit that allow for access to the site. Sidewalks currently exist along the project frontage. Sidewalks are also provided along the buildings within the site, with marked crossings connecting the parking lots, event space, and lodging use. As such, pedestrian facilities serving the project site are expected to be adequate.

Bicycle Facilities

Existing bicycle facilities, including bike lanes on Old Redwood Highway, provide adequate access for bicyclists. Bicycle facilities serving the project site are expected to be adequate.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-1: The applicant shall restrict access and egress to right-turn only. Provide a splitter barrier at the project entrance to prevent left-turn movements.

Mitigation Monitoring:

Mitigation Monitoring TRANS-1: Prior to issuances of an occupancy permit County DTPW shall verify that the measure has been implemented and appropriate permits from the City of Santa Rosa have been secured. .

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

Comment:

CEQA Guidelines Section 15064.3 (Determining the Significance of Transportation Impacts), which identifies “vehicle miles traveled” (VMT) as the appropriate measure for evaluating transportation impacts, becomes mandatory on July 1, 2020. At this time, Sonoma County has not adopted a VMT standard and methodology; therefore, LOS standards established by the Sonoma County General Plan Circulation and Transit Element are used to determine the significance of traffic impacts. See section 17.a for a discussion of increased traffic resulting from the project.

Significance Level: Less than Significant Impact

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

Comment:

The project would not increase hazards because it would not change the existing alignment of Old Redwood Road. However, hazards to drivers, bicyclists, and pedestrians could occur during construction activities. Mitigation Measure TRANS-2 would mitigate this impact to a less than significant level, and this temporary construction-related impact would cease upon project completion.

Significance Level: Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-2: The project shall submit a Construction Period Traffic Control Plan to the County for review and approval. The plan shall include traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications (“Construction Area Traffic Control Devices”) to be followed during construction. The plan shall also specify provision of adequate signing and other precautions for public safety to be provided during project construction. In particular, the plan shall include a discussion of bicycle and pedestrian safety needs due to project construction and, later, project operation. In addition, the plan shall address emergency vehicle access during construction and provide for passage of emergency vehicles through the project site at all times. The applicant/contractor shall notify local emergency services prior to construction to inform them that traffic delays may occur, and also of the proposed construction schedule.

Mitigation Monitoring:

Mitigation Monitoring TRANS-2: Prior to approval of a grading permit, the County shall review the project Construction Period Traffic Control Plan. During construction, the County shall periodically verify that traffic control plan provisions are being implemented.

d) Result in inadequate emergency access?

Comment:

Development on the site must comply with all emergency access requirements of the Sonoma County Fire Safety Code (Sonoma County Code Chapter 13), including emergency vehicle access requirements. Project development plans would require review by a Department of Fire and Emergency Services Fire Inspector during the building permit process to ensure compliance with emergency access issues.

Significance Level: Less than Significant Impact

18. Tribal Cultural Resources

- a) **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, sacred place, or object with cultural value to a California Native American tribe, and that is:**
- i. **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**
 - ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Comment:

A cultural resources records search results from the Northwest Information Center (CHRIS-NWIC), an archaeological field survey, and a Native American Sacred Lands File Search through the Native American Heritage Commission indicates that there are no known Tribal Cultural Resources (TCR) or unique archaeological resources associated with TCR's located within the Project Boundaries.²⁵

There is one (1) previously recorded prehistoric site (CA-SON-515) located on the opposite bank of Piner Creek that divides the project site from the Cloverleaf Ranch to the north. There are two (2) known but unrecorded prehistoric Native American sites located within a one-mile radius of the project site.²⁶ Sonoma County has notified all the relevant tribes about the proposed project, and none requested AB 52 consultation. Therefore, the proposed project would result in no substantial adverse change in the significance of Traditional Cultural Resources (TCR's) or unique archaeological resource as defined in CEQA Guidelines Section 15064.5 and in Public Resources Code Section 5024.1. Despite the heavy disturbances of the project site,, due to the 2017 Tubbs Fire, and unrelated modern human activities prior to the fire that may have displaced TRC's or unique archaeological resources on the surface, it is possible that intact TCR's and unique archaeological resources exist at depth.

Section 11.14.050 of the Sonoma Grading Ordinance establishes uniformly applied development standards to reduce the potential for impacts on cultural resources to a less than significant level by requiring that all work be halted in the vicinity where human remains or archaeological resources are discovered during construction grading and drainage, and that the Director of Permit Sonoma and the County Coroner be notified to ensure compliance with State law regarding the proper disposition of human remains, including those identified to be Native American. Similarly, if archaeological resources or suspected archaeological resources are discovered, the Director of Permit Sonoma shall notify the State Historic Preservation Office and the Northwest Information Center at Sonoma State University, and the permittee shall retain a qualified archaeologist to evaluate the find to ensure proper disposition of the archaeological resources or suspected archaeological resources. The

²⁵ Archaeological Resources Service. 8, August 2016. A Cultural Resources Evaluation of the Proposed Solstice Development at 3890 Old Redwood Highway, Santa Rosa, Sonoma County, California. Prepared by Archaeological Resources Services, Rohnert Park, California; prepared for Kevin Skiles, Developer. The Evaluation is on file at the Northwest Information Center at Sonoma State University

²⁶ Archaeological Resources Service. 8, August 2016. A Cultural Resources Evaluation of the Proposed Solstice Development at 3890 Old Redwood Highway, Santa Rosa, Sonoma County, California. Prepared by Archaeological Resources Services, Rohnert Park, California; prepared for Kevin Skiles, Developer. The Evaluation is on file at the Northwest Information Center at Sonoma State University.

director shall provide notice of the find to any tribes that have been identified as having cultural ties and affiliation with the geographic area in which the archaeological resources or suspected archaeological resources were discovered, if the tribe or tribes have requested notice and provided a contact person and current address to which the notice is to be sent. The director may consult with and solicit comments from notified tribes to aid in the evaluation, protection, and proper disposition of the archaeological resources or suspected archaeological resources. Sonoma County has notified all the relevant tribes about the proposed project, and none requested AB 52 consultation.

Significance Level: Less than Significant Impact

19. UTILITIES AND SERVICE SYSTEMS:

Would the project:

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

Comment:

The proposed project consists of the construction of a rural lodging and event center replacing the prior youth camp that was destroyed in the 2017 Tubbs fire. The proposed project would use a new septic system and on-site water well. Construction of the facility would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Significance Level: No Impact

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

Comment:

As discussed in section 10.b, the site would be served by an on-site well that has been determined sufficient to serve the proposed project.

Significance Level: Less than Significant Impact

- 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?**

Comment:

The project represents construction a new facility replacing the previous youth camp. The project would construct a septic system to serve the project's wastewater needs. Therefore, the project would not result in substantially higher demand for wastewater treatment.

Significance Level: Less than Significant Impact

- 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?**

Comment:

Sonoma County has an existing solid waste management program that provides solid waste

collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that would result from the proposed project.

Significance Level: Less than Significant Impact

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

Comment:

Sonoma County has access to adequate permitted landfill capacity to serve the proposed project.

Significance Level: No Impact

20. Wildfire

According to Cal Fire, the proposed project site is located in a "Moderate" Fire Hazard Severity Zone (FHSZ) (CalFire, 2007). Moderate FHSZs include a) wildland areas of low fire frequency supporting modest fire behavior; and b) developed/urbanized areas with a very high density of non-burnable surfaces and low vegetation cover that is highly fragmented and low in flammability. The nearest high and very high FHSZs are located in the hills east of Santa Rosa.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Comment:

Implementation of the project would not adversely impact the implementation of an emergency response or emergency evacuation plan. The proposed project would be required to comply with the standards identified in Sonoma County Code Chapter 13, which includes requirements for emergency access, minimum emergency water supply, fuel modification and defensible space, sprinklers, and road naming and addressing, as well as the State Fire Code, whichever is in effect and most restrictive. . These requirements were adopted to ensure safe ingress for emergency vehicles needing to access the site in the event of an emergency, and safe egress for vehicles needing to exit the site. The proposed project would not conflict with or impair an adopted emergency response plan or emergency evacuation plan.

Significance Level: Less than Significant Impact

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?

Comment:

The proposed project consists of developing a rural lodging and event center that would temporarily situate receptors at the site while activities are operational. Figure 3 in the project description depicts three cabins that would be located south of the creek, under existing trees, and cabins clustered together in the middle of the project site. As indicated in the project's Design/ Style Book indoor and outdoor spaces are envisioned to be integrated together.

The County implements the fire safety standards of the Uniform Fire Code, National Fire Code, and Uniform Building Code through the Sonoma County Fire Safety Ordinance (Chapter 13 of the County Code), often referred to as the "Fire Safe Standards." It establishes minimum fire safe standards to ensure that all new development within the unincorporated area of the county will provide a basic

level of fire protection around itself making it easier and safer for fire fighters to fight wildland and structure fires. The Fire Safe Standards include requirements for emergency access, minimum emergency water supply, fuel modification and defensible space, sprinklers, and road naming and addressing. The County's Fire Safe standards are generally more stringent than those required by the California Fire Code.

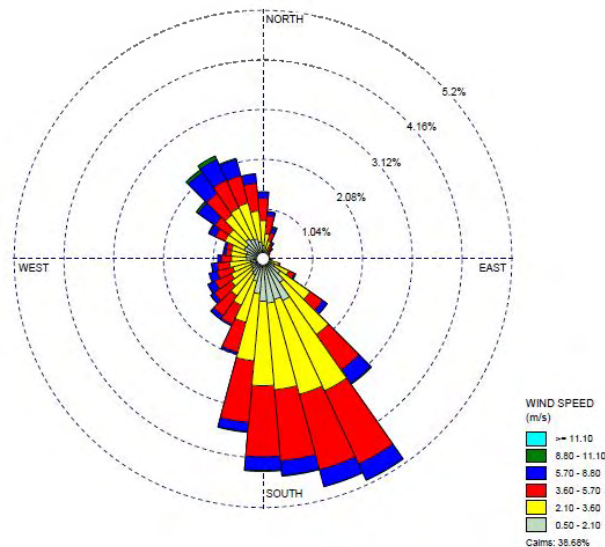
Prior to project approval, the County would ensure the project design meets all requirements of the Fire Safe Standards and/or State Fire Code, including the minimum building fire separation distances detailed in Tables 4905.4 (A) and 4905.4 (B) based on building structure materials, or compliance with State standards, whichever is applicable. .

In addition to its Fire Safe Standards, the County also implements Chapter 13A of the Sonoma County Code of Ordinances, Abatement of Hazardous Vegetation and Combustible Material. Chapter 13A provides requirements for maintaining parcels in a manner that reduces wildfire risks. The portions of Section 13A-4 that may be applicable to the proposed project include, but are not limited to:

- 1) Maintain a thirty-foot defensible space around all buildings/structures.
 - a. The grass needs to be cut six (6") inches or less.
 - b. The tree branches need to limbed up six (6') feet from the ground.
- 2) Additional defensible space outward to one hundred feet (100') from all buildings and surroundings, neighboring structures may be required depending on the property slope, fuel load and/or fuel type.
 - a. Fuel load – Amount of vegetation.
 - b. Fuel type – Type of vegetation.
- 3) Remove all portions of trees within ten feet (10') of chimney and/or stove pipe outlets.
 - a. Property owners are responsible for maintaining trees year round.
 - b. Trees need to be cut ten feet (10') away from chimney in any direction.
- 4) Maintain trees adjacent to or overhanging a structure free of dead/dying wood.
 - c. Cut the trees back and remove any dead or dying wood.
- 5) Maintain the roof of any structure free of leaves, needles, or other dead/dying wood.
 - d. Remove any leaves, needles, branches, or debris from the roof and/or gutters.
- 6) Remove all tree limbs within six feet (6') of the ground.
 - a. Remove lower hanging tree branches from the ground up to six feet (6').
- 7) Remove dead/dying vegetation from the property.
 - b. Remove any and all dead/dying vegetation from the property.

Given the proposed project's desire to integrate indoor and outdoor spaces (e.g., cabin placement in relation to tree cover), the clustering of buildings in relation to one another, and the landscaping plan calling for the planting of approximately 130 additional trees, the proposed project could potentially exacerbate wildfire risk at the project site and surrounding land uses. Accordingly, the project will be required to comply with the strict state and local fire safety requirements outlined in this section and in Section 9.g, including approval of a fire protection plan prepared by a qualified individual. With project's location in a Moderate Fire Hazard Severity Zone and compliance with these requirements, future risk will be minimized. .

In addition, the proposed project could locate receptors where it would expose them to pollutant concentrations from a wildfire. The prevailing winds at the Sonoma County Airport (approximately 4.5 miles west-northwest of the proposed project site) are from the southeast.

Figure 6: Sonoma County Airport Wind Speed and Direction

Source: CARB 2015

Areas of moderate, high, and very high FHSZs are located all around the project site, with the nearest very high FHSZ area being located in the hills east of Santa Rosa. Although the prevailing wind direction at the Sonoma County Airport is from the south-southeast, conditions during fire events are variable, as demonstrated by the Tubbs Fire in 2017. Tubbs Fire burnt in a south-southwestern direction and destroyed structures previously located at the site.

With the project's location in a Moderate Fire Hazard Severity Zone 1, and compliance with fire safety requirements, the proposed project would result in a less-than-significant impact with regard to wildfires.

Significance Level: Less than Significant Impact

- 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?**

The proposed project is located on a site previously developed with a youth camp. In accordance with Chapters 13 and 13A of the County Code of Ordinances, the project would be required to comply with County standards for emergency access, minimum emergency water supply (on-site), fuel modification and defensible space, and sprinkler installation. Operation of the proposed project would require maintenance of associated infrastructure; however, it would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. As required through the implementation of Mitigation Measure WF-1, the County would consult with the Sonoma County Fire and Emergency Services Department to determine what additional defensible space may be required to reduce the

potential for wildfire risk at and near the project site. Ongoing maintenance of the property to reduce wildfire risk would occur throughout the year and could include tree pruning and/or tree removal, which could affect nesting birds. Accordingly, the County would implement Mitigation Measure BIO-2, to ensure nesting birds would be protected during tree pruning/removal activities and ongoing vegetation management.

Significance Level: Less than Significant Impact with Implementation of Mitigation Measure BIO-2.

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?

The proposed project site is located at the base of the hillside, west of the Fountaingrove neighborhood. The slope of the hills north of the project site is gentle, and drainage patterns suggest stormwater is directed northeast of the project site, toward the pond adjacent to the project site's eastern boundary. The pond drains out to a stream that runs along the project site's northern boundary. Based on the gentle slopes and drainage patterns present at the site, the project would not 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.

Significance Level: Less than Significant.

21. MANDATORY FINDINGS OF SIGNIFICANCE

- 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?**

Comment:

Potential project impacts on special status plant and fish/wildlife species and habitat are addressed in section 3. Implementation of the required mitigation measures (Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5) would reduce these potential impacts to a less-than-significant level.

Potential adverse project impacts to cultural resources are addressed in section 5. .

Significance Level: Less than Significant Impact

- 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)?**

Comment:

No project impacts have been identified in this Initial Study that are individually limited but cumulatively considerable. The project would contribute to impacts related to air quality, biological resources, geology and soils, hazardous materials, and traffic which may be cumulative off-site, but mitigations would reduce project impacts to less-than-significant levels.

Significance Level: Less than Significant Impact

- c) **Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

Comment:

Proposed project operations have the potential to cause substantial adverse impacts on human beings, both directly and indirectly. However, all potential impact and adverse effects on human beings (resulting from air quality/odors, noise, traffic) were analyzed, and would be less than significant with the mitigations identified in the Initial Study incorporated into the project.

Significance Level: Less than Significant Impact

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