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Initial Study/Negative Declaration

COUNTY OF NAPA  
PLANNING, BUILDING AND ENVIRONMENTAL SERVICES DEPARTMENT  
1195 THIRD STREET SUITE 210  
NAPA, CA 94559  
(707) 253-4417

**Initial Study Checklist**  
(form updated October 2016)

1. **Project Title:** Caldwell Vineyards Major Modification #P17-00074
2. **Property Owner:** Caldwell Vineyards LLC, 1558 Silverado Trail, Napa, CA 94559
3. **Representative:** Susanne M. Heun, Consulting COO;1558 Silverado Trail, Napa, CA 94559, (707) 363-3424, [susanne@me.com](mailto:susanne@me.com)
- 4.
5. **County Contact Person, Phone Number and email:** Wyntress Balcher, (707) 299-1351, [wyntress.balcher@countyofnapa.org](mailto:wyntress.balcher@countyofnapa.org)
6. **Project Location and APN:** A ±42.96 acre parcel at the terminus of Kreuzer Lane; 270 Kreuzer Lane, Napa; APN: 045-310-056 and 045-310-055
7. **General Plan description:** Agriculture, Watershed and Open Space (AWOS)
8. **Zoning:** Agricultural Watershed (AW)
9. **Background/Project History:** The Planning Commission (Commission) approved Use Permit #03318-UP on December 15, 2004 to establish the 25,000 gallon/year winery. The approval included a requirement that a minimum of 50% of the total production capacity (12,500) gallons must be processed from grapes grown on the property or in the immediate vicinity of the winery parcel. Immediate vicinity was identified as vineyards accessed by driving along Kreuzer Lane and that would otherwise have their grapes removed from this area along the existing private roadway and Kreuzer Lane located in the vicinity of the winery parcel. Approval of custom crush activities were also approved for a maximum 10,000 gallons, but at least 5,000 gallons of the custom crush wine must be processed from grapes grown on vineyards in the immediate vicinity of the winery parcel. All winery activities were approved to occur within a 16,970 ft<sup>2</sup>. cave; no outdoor winery activities were included. No tasks were authorized outside the caves. By appointment retail sales and tours and tasting were approved, with a maximum visitor total of eight (8) persons per day, not to exceed 40 per week. A marketing plan was approved for 10 promotional tours, tastings and meal events per year with a maximum of 10 people at each event; two (2) release events per year with a maximum of 60 people at each event; and one (1) wine auction event with a maximum of 50 people. The conditions of approval included a notification requirement of 60 days prior notice to be provided to the owners of parcels 045-310-045 and -047 for the two (2) release events and one wine auction event, and prior notification within a reasonable time after the events are scheduled. The conditions limit reoccurring and scheduled vehicle trips to and from the site for employees, deliveries and visitors to occur during PM peak traffic hours (4:00 – 6:00 pm) to the maximum extent possible.  
  
Use Permit # P07-00039-VMM was approved by the Director on July 3, 2007 to expand the existing winery cave by 1,468 ft<sup>2</sup> to accommodate winery offices and bathrooms, for a total square feet of ±18,438 ft<sup>2</sup>. The offices are for use exclusively by winery staff and bathrooms for use used by both winery staff and visitors.
10. **Description of Project:**  
The project proposes to:
  - a. increase the winery production capacity from 25,000 gallons/year to 35,000 gallons per year;
  - b. increase the area of the cave **from** 16,970 ft<sup>2</sup> **to** 21,865 ft<sup>2</sup> to add barrel storage, a catering and food prep area, an additional tasting room, and a small auxiliary lab;
  - c. increase by-appointment visitation for daily retail sales, tours and tasting visitation **from** eight (8) **to** 60 per day;
  - d. modify the by-appointment tasting hours **from** 10:00 am - 4:00 pm **to** 10:00 am- 6:00 pm;
  - e. increase employees **from** two (2) full time/ one (1) part-time **to** six (6) full time/ six (6) part-time;

- f. construct a 580 ft<sup>2</sup> trellis shade structure east of cave entrance;
- g. modify the Marketing Plan to increase events **from** 13 annual events **to** a total of 19 events: 12 very small events/year, maximum 28 guests; 3 small events/year maximum 68 guests; 3 medium events per year, maximum 100 guests; and one (1) large event/year, maximum 200 guests, all to occur within the hours of 10:00 am and 10:00 pm, to occur inside the tasting rooms, in the paved area in front of the cave, the trellis shade area east of the cave, and in the gravel area below the cave;
- h. allow on premises consumption of wine within the tasting room, the paved areas in front of the cave, under the shade trellis east of the cave entrance; and on the gravel area below the cave in accordance with Business and Professions Code Sections 23358, 23390 and 2339.5;
- i. allow limited food for tastings prepared offsite and catering for marketing events, with limited prep/plating in the proposed prep kitchen;
- j. use portable toilets for medium and large events (greater than 100 guests);
- k. allow an exterior staging area for construction;
- l. disperse the cave spoils off-site;
- n. remove the condition of approval limiting the number of custom producers and activities;
- o. allow custom crush producers who have visitation privileges by appointment only and the total number shall not exceed the total daily visitation allowed; and,
- n. increase the width of portions of the existing roadway to comply with Napa County Road and Street standards with limited grading; and
- o. include a request for an exception to the Napa County Road and Street Standards (RSS), for a reduction to the width on a 680 foot portion of the existing roadway.

The caves spoils are proposed for removal from the property.

11. **Describe the environmental setting and surrounding land uses.**

The project property is located on the Mt. George USGS Quad at ±440 ft. MSL, about 1.5 miles east of the City of Napa, at the terminus of Kreuzer Lane. The land is moderately sloping, slopes ranging from 15% to over 30%. An intermittent blue-line stream (Kreuse Creek) flows within a deeply incised west flowing drainage canyon located below the project site and access road. The project winery site is located within existing caves on the southeastern face of a hillside. Native vegetation includes oak woodland and riparian woodland vegetation, Valley Oak, Cottonwood, Coast Live Oak, Madrone, California Bay, Blue Oak, Black Oak, and Big Leaf Maple. Adjacent land uses are agriculture, large lot residential, and unimproved open space.

The geology consists of Pre-Quaternary deposits and bedrock overlain by Pliocene-Miocene Sonoma volcanics. A soil creep zone flows southwesterly near the east side of the access driveway for the lower parking area. Soil types include Sobrante loam 30%-50% slopes; Hambright rock-outcrop complex, 30 to 75 % slopes, rock outcrop. There is a very low hazard for liquefaction.

The Napa County Environmental Sensitivity maps indicate this parcel not is located within an environmentally sensitive area for plants, fish, geology, or biology. The parcel is developed with ± 30.32 acres of vineyards and a winery located within existing caves, an access driveway, and improved parking lot. The surrounding land uses include: agriculture (vineyards) and large lot residential uses to the north and west; the land is predominantly vacant forested open space to the east; and forested open space and large lot residential use on the property to the south. The closest residences are located ±1000 feet to the southwest and ±1000 feet to the northwest of the existing winery cave. There is a gate at the terminus of Kreuzer Lane where the access road is shared by the winery and ±5 residences beyond the gate to the winery.

12. **Other agencies whose approval is required** (e.g., permits, financing approval, or participation agreement).

The project would also require various ministerial approvals by the County, including but not limited to building permits, grading permits, waste disposal permits, and an encroachment permit, in addition to CalFire. Permits may also be required by the Department of Alcoholic Beverage Control and Bureau of Alcohol, Tobacco, & Firearms.

Responsible (R) and Trustee (T) Agencies

Other Agencies Contacted

Federal Trade and Taxation Bureau

Department of Alcoholic Beverage Control

13. **Tribal Cultural Resources.** Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

Notifications of Proposed Project Pursuant to PRC Code Section 210803.2 were forwarded to the three tribes who have requested notification on October 17, 2017. The Middletown Rancheria responded on October 27, 2017 with no comments but requested they be contacted if any evidence of human habitation is found as the project progresses. The Yoche Dehe Wintun tribe responded on December 5, 2017 requesting a site visit to the project area to evaluate their cultural concerns. A reply was sent to the tribe regarding the close of the consultation period (November 16, 2017), a copy of the project application materials were included for their information. The tribe is on the public notification list and a copy of the draft negative declaration for the project will be sent when posted. The applicant has been notified of the request for the site visit.

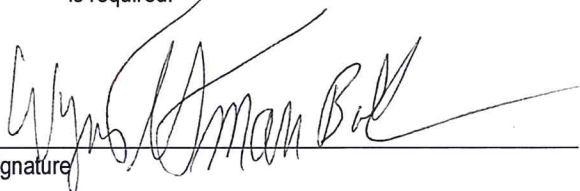
Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

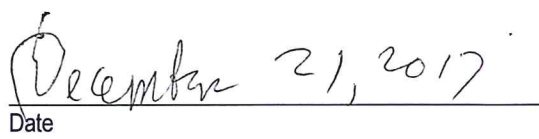
**ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS:**

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information listed in the file, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site. For further information, see the environmental background information contained in the permanent file on this project.

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
Signature

  
Date

Name: \_\_\_\_\_

Napa County Planning, Building and  
Environmental Services Department

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. <b>AESTHETICS.</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a-c The project site is not located within view of a scenic vista or designated Viewshed road listed in the Scenic Highway Element of the Napa County General Plan. The project sits below a minor ridgeline, and, as a cave, it cannot be seen from any "designated scenic highway" listed in the Scenic Highway Element of the Napa County General Plan. The project site is located approximately .7 miles from the nearest public road (Kreuzer Lane ). There are no new structures proposed as part of this project that could have the potential to significantly affect the aesthetics of the site. The existing water tank will supply water protection water storage; no new tanks are proposed.

d. The proposed project does not include outdoor improvements that would introduce additional source of lights that could significantly impact daytime or nighttime views of the area. The proposed expanded visiting hours are 10:00 am to 6:00 pm. The increase in visitors and events will not create substantial glare either during the day. But, the project proposes that events will occur outdoors using a 580 ft<sup>2</sup> trellis shade structure east of cave, the paved areas in front of the cave and the gravel area below the cave, where events will end at 10:00 pm, introducing additional light sources above what currently exists. The winery was permitted for only in-cave winery activities. The lighting for outdoor events would be minimal since the project is not proposing the installation of outdoor lighting and the potential for a significant light impact would be reduced with the standard Napa County conditions of approval for wineries, where outdoor lighting is required to be shielded and directed downwards, with only low-level lighting allowed in parking areas. As designed, and as subject to the standard condition of approval, below, the project will not have a significant impact resulting from new sources of outside lighting. In addition, the closest off-site residence is ±1,000 feet from the winery.

**4.16 GENERAL PROPERTY MAINTENANCE – LIGHTING, LANDSCAPING, PAINTING, OUTDOOR EQUIPMENT STORAGE, AND TRASH ENCLOSURE AREAS**

a. All lighting shall be permanently maintained in accordance with the lighting and building plans approved by the County. Lighting utilized during harvest activities is exempt from this requirement.

**6.3 LIGHTING – PLAN SUBMITTAL**

a. Two (2) copies of a detailed lighting plan showing the location and specifications for all lighting fixtures to be installed on the property shall be submitted for Planning Division review and approval. All lighting shall comply with the CBC.

b. All exterior lighting, including landscape lighting, shall be shielded and directed downward, shall be located as low to the ground as possible, shall be the minimum necessary for security, safety, or operations; on timers; and shall incorporate the use of motion detection sensors to the greatest extent practical. All lighting shall be shielded or placed such that it does not shine directly on adjacent properties or impact vehicles on adjacent streets. No flood-lighting or sodium lighting of the building is permitted, including architectural highlighting and spotting. Low-level lighting shall be utilized in parking areas as opposed to elevated high intensity light standards. Lighting utilized during harvest activities is exempt from this requirement.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FOREST RESOURCES.</b> <sup>1</sup> Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g), timberland as defined in Public Resources Code Section 4526, or timberland zoned Timberland Production as defined in Government Code Section 51104(g)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a/b/e. The project would not result in the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Important as shown on the Napa County Important Farmland Map 2002 prepared by the California Department of Conservation District, Division of Land Resource Protection, pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The proposed project would not conflict with existing zoning for agricultural uses. There is no Williamson Act contract associated with the parcel. There are no other changes included in this proposal that would result in the conversion of Farmland beyond the immediate project site.

c/d. The project site is zoned Agricultural Watershed (AW), which allows wineries upon grant of a use permit, and is not located within an area zoned for timberland production. According to the Napa County Environmental resource maps (based on the following layers – Sensitive Biotic Oak Woodlands, Sensitive Biotic Riparian Woodland Forest and Coniferous Forest) the southwestern portion of the project property contains a designated Sensitive Biotic Oak Woodland. The project site, winery caves, parking areas, and access driveway, are located to the north of this sensitive area and no land disturbing activities will occur within the areas designated Sensitive Biotic Oak Woodland. Therefore, the project would not result in the loss of forest land or conversion of forest land to no-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality or other public benefits. The proposed project will not have an impact on forest resources, have conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland.

**Mitigation Measures:** None required.

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<sup>1</sup> "Forest land" is defined by the State as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." (Public Resources Code Section 12220(g)) The Napa County General Plan anticipates and does not preclude conversion of some "forest land" to agricultural use, and the program-level EIR for the 2008 General Plan Update analyzed the impacts of up to 12,500 acres of vineyard development between 2005 and 2030, with the assumption that some of this development would occur on "forest land." In that analysis specifically, and in the County's view generally, the conversion of forest land to agricultural use would constitute a potentially significant impact only if there were resulting significant impacts to sensitive species, biodiversity, wildlife movement, sensitive biotic communities listed by the California Department of Fish and Wildlife, water quality, or other environmental resources addressed in this checklist.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

On June 2, 2010, the Bay Area Air Quality Management District's (BAAQMD) Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act. These Thresholds are designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAQMD's website and included in BAAQMD's updated CEQA Guidelines (updated May 2012). The Thresholds are advisory and may be followed by local agencies at their own discretion.

The Thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the Thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court's opinion, local agencies may rely on Thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making a decision about the project. However, the Thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project's impacts. These Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or BAAQMD to any specific course of regulatory action.

BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The May 2017 Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The Air District is currently working to revise any outdated information in the Guidelines as part of its update to the CEQA Guidelines and thresholds of significance.

a-c. The mountains bordering Napa Valley block much of the prevailing northwesterly winds throughout the year. Sunshine is plentiful in Napa County, and summertime can be very warm in the valley, particularly in the northern end. Winters are usually mild, with cool temperatures overnight and mild-to-moderate temperatures during the day. Wintertime temperatures tend to be slightly cooler in the northern end of the valley. Winds are generally calm throughout the county. Annual precipitation averages range from about 24 inches in low elevations to more than 40 inches in the mountains.

Ozone and fine particle pollution, or PM2.5, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter. In Napa County, ozone rarely exceeds

health standards, but PM2.5 occasionally does reach unhealthy concentrations. There are multiple reasons for PM2.5 exceedances in Napa County. First, much of the county is wind-sheltered, which tends to trap PM2.5 within the Napa Valley. Second, much of the area is well north of the moderating temperatures of San Pablo Bay and, as a result, Napa County experiences some of the coldest nights in the Bay Area. This leads to greater fireplace use and, in turn, higher PM2.5 levels. Finally, in the winter easterly winds often move fine-particle-laden air from the Central Valley to the Carquinez Strait and then into western Solano and southern Napa County (BAAQMD, *In Your Community: Napa County*, April 2016).

The impacts associated with implementation of the Project were evaluated consistent with guidance provided by BAAQMD. Ambient air quality standards have been established by state and federal environmental agencies for specific air pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation. The criteria air pollutants emitted by development, traffic and other activities anticipated under the proposed development include ozone, ozone precursors oxides of nitrogen and reactive organic gases (NO<sub>x</sub> and ROG), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and suspended particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Other criteria pollutants, such as lead and sulfur dioxide (SO<sub>2</sub>), would not be substantially emitted by the proposed development or traffic, and air quality standards for them are being met throughout the Bay Area.

BAAQMD has not officially recommended the use of its thresholds in CEQA analyses and CEQA ultimately allows lead agencies the discretion to determine whether a particular environmental impact would be considered significant, as evidenced by scientific or other factual data. BAAQMD also states that lead agencies need to determine appropriate air quality thresholds to use for each project they review based on substantial evidence that they include in the administrative record of the CEQA document. One resource BAAQMD provides as a reference for determining appropriate thresholds is the *California Environmental Quality Act Air Quality Guidelines* developed by its staff in 2010 and as updated through May 2017. These guidelines outline substantial evidence supporting a variety of thresholds of significance.

As mentioned above, in 2010, the BAAQMD adopted and later incorporated into its 2011 CEQA Guidelines project screening criteria (Table 3-1– Operational-Related Criteria Air Pollutant and Precursors Screening Level Sizes) and thresholds of significance for air pollutants, which have now been updated by BAAQMD through May 2017. The project is located within a cave and the proposed additions are an expansion within the winery cave. The 4,895 ft<sup>2</sup> proposed floor area addition to the caves (3,366 ft<sup>2</sup> production; 1,529 ft<sup>2</sup> hospitality), when compared to the BAAQMD's operational criteria pollutant screening size of 541,000 ft<sup>2</sup> for general light industrial, and compared to the BAAQMD's screening criterion of 47,000 ft<sup>2</sup> for a high quality restaurant, the project would not significantly impact air quality and does not require further study (BAAQMD CEQA Guidelines, May 2017 Pages 3-2 & 3-3.). Given the total size of the project, a total 21,865 ft<sup>2</sup> (16,970 ft<sup>2</sup> to 21,865 ft<sup>2</sup>) of enclosed winery cave floor area compared to the BAAQMD's screening criterion of 47ksf (high quality restaurant) and 541ksf (general light industry) for NO<sub>x</sub> (oxides of nitrogen), the project would contribute an insignificant amount of air pollution and would not result in a conflict or obstruction of an air quality plan. (Please note: a high quality restaurant is considered comparable to a winery tasting room for purposes of evaluating air pollutant emissions, but grossly overstates emissions associated with other portions of a winery, such as office, barrel storage and production, which generate fewer vehicle trips. Therefore, a general light industry comparison has also been used for other such uses.)

The project falls well below the screening criteria as noted above, and consequently will not significantly affect air quality individually or contribute considerably to any cumulative air quality impacts.

- d. In the short term, potential air quality impacts are most likely to result from earthmoving and construction activities required for project construction. Earthmoving and construction emissions would have a temporary effect; consisting mainly of dust generated during grading and other construction activities, exhaust emissions from construction related equipment and vehicles, and relatively minor emissions from paints and other architectural coatings. The Air District recommends incorporating feasible control measures as a means of addressing construction impacts. If the proposed project adhere to these relevant best management practices identified by the Air District and the County's standard conditions of project approval, construction-related impacts are considered less than significant:

#### 7.1 SITE IMPROVEMENTS

##### c. AIR QUALITY

*During all construction activities the permittee shall comply with the most current version of BAAQMD Basic Construction Best Management Practices including but not limited to the following, as applicable:*

1. *Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.*



2. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
3. Cover all haul trucks transporting soil, sand, or other loose material off-site.
4. Remove all visible mud or dirt traced onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
5. All vehicle speeds on unpaved roads shall be limited to 15 mph.
6. 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.
7. Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five (5) minutes (as required by State Regulations). Clear signage shall be provided for construction workers at all access points.
8. 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. Any portable engines greater than 50 horsepower or associated equipment operated within the BAAQMD's jurisdiction shall have either a California Air Resources Board (ARB) registration Portable Equipment Registration Program (PERP) or a BAAQMD permit. For general information regarding the certified visible emissions evaluator or the registration program, visit the ARB FAQ [http://www.arb.ca.gov/portable/perp/perpfact\\_04-16-15.pdf](http://www.arb.ca.gov/portable/perp/perpfact_04-16-15.pdf) or the PERP website <http://www.arb.ca.gov/portable/portable.htm>."

Furthermore, while earthmoving and construction on the site will generate dust particulates in the short-term, the impact would be less than significant with dust control measures as specified in Napa County's standard condition of approval relating to dust:

7.1 SITE IMPROVEMENTS

b. DUST CONTROL

Water and/or dust palliatives shall be applied in sufficient quantities during grading and other ground disturbing activities onsite to minimize the amount of dust produced. Outdoor construction activities shall not occur when average wind speeds exceed 20 mph.

- e. While the Air District defines public exposure to offensive odors as a potentially significant impact, wineries are not known operational producers of pollutants capable of causing substantial negative impacts to sensitive receptors. The closest residences are located ±1000 feet to the southwest and ±1,000 feet to the northwest of the existing winery cave. Construction-phase pollutants would be reduced to a less than significant level by the above-noted standard condition of approval. The project would not create pollutant concentrations or objectionable odors affecting a substantial number of people. Impacts would be less than significant.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. 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 the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a/b. According to the Napa County Environmental Resource Maps (based on the following layers - plants CNPS points & polygons, plant surveys, red legged frog core area and critical habitat, vernal pools & vernal pool species, Spotted Owl Habitat – 1.5 mile buffer and known fish presence) no known candidate, sensitive, or special status species have been identified as occurring within the project boundaries. The intermittent blue-line stream traversing the property has not been identified for a known fish presence as it is noted on the maps as artificially blocked. Therefore, the project would not have a substantial adverse effect on any special status species, or species of particular concern. As discussed in Section I above, the proposal and associated construction are minimal with no significant grading or tree removal required. Furthermore, there were no species or site conditions which would be considered essential for the support of a species with limited distribution or be considered to be a sensitive natural plant community. The potential for this project to have a significant impact on special status species is not very probable.

c/d. There are no wetlands on the property or on the neighboring properties that would be affected by this project; no construction of walls or fences are proposed and no activities are proposed in Kreuse Creek. Therefore, project activities will not interfere with the movement of any native resident or migratory fish or wildlife species or with their corridors or nursery sites, because no sensitive natural communities have been identified on the property. Therefore, the project as proposed would have no impact to biological resources.

f. There are no Habitat Conservation Plans or other similar plans in effect for this area that would be affected by this project.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a-c. According to the Napa County Environmental Resource Maps (based on the following layers – Historical sites points & lines, Archaeology surveys, sites, sensitive areas, and flags) no historical, archaeological, or paleontological resources, sites or unique geological features have been identified on the property. Based on the location of the winery activities within an existing cave and minimal road widening improvements proposed, there would be no impact to cultural resources. However, if resources are found during any earth disturbing activities associated with the project, construction of the project is required to cease, and a qualified archaeologist will be retained to investigate the site in accordance with the following standard condition of approval:

**"7.2 ARCHAEOLOGICAL FINDING**

*"In the event that archeological artifacts or human remains are discovered during construction, work shall cease in a 50-foot radius surrounding the area of discovery. The permittee shall contact the PBES Department for further guidance, which will likely include the requirement for the permittee to hire a qualified professional to analyze the artifacts encountered and to determine if additional measures are required. If human remains are encountered during project development, all work in the vicinity must be halted, and the Napa County Coroner informed, so that the Coroner can determine if an investigation of the cause of death is required, and if the remains are of Native American origin. If the remains are of Native American origin, the permittee shall comply with the requirements of Public Resources Code Section 5097.98."*

- d. No information has been encountered that would indicate that this project would encounter human remains. However, if resources are found during any grading of the project, construction of the project is required to cease, and a qualified archaeologist will be retained to investigate the site in accordance with standard condition of approval as noted above.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VI. GEOLOGY AND SOILS.</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil creating substantial risks to life or property? Expansive soil is defined as soil having an expansive index greater than 20, as determined in accordance with ASTM (American Society of Testing and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Materials) D 4829.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a. The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) Known faults: There are no known faults on the project site as shown on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As such, the proposed project would result in a less than significant impact with regards to rupturing a known fault.
  - ii) Strong seismic ground shaking: All areas of the Bay Area are subject to strong seismic ground shaking. Construction of the project will be required to comply with all the latest building standards and codes, including the California Building Code that would reduce any potential impacts to a less than significant level.
  - iii) Seismic-related ground failure including liquefaction: No subsurface conditions have been identified on the project site that indicated a susceptibility to seismic-related ground failure or liquefaction. Compliance with the latest editions of the California Building Code for seismic stability would result in less than significant impacts.
  - iv) Landslides: According to the Napa County Environmental Resource Maps (Landslides line, polygon, and geology layers) there is a landslide creep located on a slope southeast of the existing cave portal and parking lots, however no improvements are proposed near this slide area and the road improvement activities would not have any impact on existing unstable lands.
- b. The proposed development will involve minimal grading improvements to the existing roadbed to increase the width of the existing access roads in compliance with the Napa County Road and Street Standards (NCRSS). Winery improvements will occur within the caves. The proposed trellis requires very minimal improvements. Based upon the Napa County Environmental Resource Maps (soils) the project access road is located on Hambright rock-outcrop complex; Sobrante loam, and rock outcrop soils, which have medium to very rapid runoff and slight to high erosion hazard. The project will require incorporation of best management practices and will be subject to the Napa County Stormwater Ordinance which addresses sediment, erosion control measures and dust control, reducing potential soil loss concern to a level of insignificance.
- c. Based on the Napa County Environmental Sensitivity Maps (liquefaction layer) the project site has low risk for liquefaction. The area of the caves is relatively flat, although the access to the cave is down a gently sloping roadway. Besides the small trellis, there are no proposed structures with this project and all expansion of the winery will be located within the existing cave.
- d. The Hambright Rock outcrop complex and the Sobrante loam soils are not considered expansive and would not create substantial risks to life or property.
- e. No expansion of the waste disposal system is proposed and the Wastewater Analysis Study submitted with the project does not indicate any failure of the soils supporting the existing system. The existing system can accommodate the increase in visitation, employees and marketing activities.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VII. GREENHOUSE GAS EMISSIONS.</b> Would the project:				
a) Generate a net increase in greenhouse gas emissions in excess of applicable thresholds adopted by the Bay Area Air Quality Management District or the California Air Resources Board which may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with a county-adopted climate action plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

Napa County has been working to develop a Climate Action Plan (CAP) for several years. In 2012 a Draft CAP2 (March 2012) was recommended using the emissions checklist in the Draft CAP, on a trial basis, to determine potential greenhouse gas (GHG) emissions associated with project development and operation. At the December 11, 2012, Napa County Board of Supervisors (BOS) hearing, the BOS considered adoption of the proposed CAP. In addition to reducing Napa County's GHG emissions, the proposed plan was intended to address compliance with CEQA for projects reviewed by the County and to lay the foundation for development of a local offset program. While the BOS acknowledged the plan's objectives, the BOS requested that the CAP be revised to better address transportation-related greenhouse gas, to acknowledge and credit past accomplishments and voluntary efforts, and to allow more time for establishment of a cost-effective local offset program. The Board also requested that best management practices be applied and considered when reviewing projects until a revised CAP is adopted to ensure that projects address the County's policy goal related to reducing GHG emissions.

In July 2015, the County re-commenced preparation of the CAP to: i) account for present day conditions and modeling assumptions (such as but not limited to methods, emission factors, and data sources), ii) address the concerns with the previous CAP effort as outlined above, iii) meet applicable State requirements, and iv) result in a functional and legally defensible CAP. On April 13, 2016 the County, as the part of the first phase of development and preparation of the CAP, released Final Technical Memorandum #1: 2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016.<sup>3</sup> This initial phase included: i) updating the unincorporated County's community-wide GHG emissions inventory to 2014, and ii) preparing new GHG emissions forecasts for the 2020, 2030, and 2050 horizons. Additional information on the County CAP can be obtained at the Napa County Department of Planning, Building and Environmental Services or <http://www.countyofnapa.org/CAP/>. The final draft of CAP was released on June 5, 2017 for public review and Planning Commission consideration and recommendation to the Board of Supervisors.

a/b. Overall increases in Greenhouse Gas (GHG) emissions in Napa County were assessed in the Environmental Impact Report (EIR) prepared for the Napa County General Plan Update and certified in June 2008. GHG emissions were found to be significant and unavoidable in that document, despite the adoption of mitigation measures incorporating specific policies and action items into the General Plan.

Consistent with these General Plan action items, Napa County participated in the development of a community-wide GHG emission inventory and "emission reduction framework" for all local jurisdictions in the County in 2008-2009. This planning effort was completed by the Napa County Transportation and Planning Agency in December 2009, and served as the basis for development of a refined inventory and emission reduction plan for unincorporated Napa County.

In 2011, the Bay Area Air Quality Management District (BAAQMD) released California Environmental Quality Act (CEQA) Project Screening Criteria (Table 3-1 – Criteria Air Pollutants and Precursors & GHG Screening Level Sizes) and Significance of Thresholds [1,100 metric tons per year (MT) of carbon dioxide and carbon dioxide equivalents (CO2e)]. This threshold of significance is appropriate for evaluating projects in Napa County.

During our ongoing planning effort, the County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Plan Policy CON-65(e). (Note: Pursuant to State CEQA Guidelines Section 15183, because this initial study assesses a project that is consistent with an adopted General Plan for which an environmental impact report (EIR) was prepared, it appropriately focuses on impacts which are "peculiar to the project," rather than the cumulative impacts previously assessed.)

For the purposes of this analysis potential GHG emissions associated with winery 'construction' and 'development' and with 'ongoing winery operations have been discussed.

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including

carbon dioxide, methane, ozone, and the fluorocarbons, that contribute to climate change (a widely accepted theory/science explain human effects on the atmosphere). Carbon Dioxide (CO<sub>2</sub>) gas, the principal greenhouse gas (GHG) being emitted by human activities, and whose concentration in the atmosphere is most affected by human activity, also serves as the reference gas to compare other greenhouse gases. Agricultural sources of carbon emissions include forest clearing, land-use changes, biomass burning, and farm equipment and management activity emissions ([http://www.climatechange.ca.gov/glossary/letter\\_c.html](http://www.climatechange.ca.gov/glossary/letter_c.html)). Equivalent Carbon Dioxide (CO<sub>2</sub>e) is the most commonly reported type of GHG emission and a way to get one number that approximates total emissions from all the different gasses that contribute to GHG (BAAMD CEQA Air Quality Guidelines, May 2012). In this case, carbon dioxide (CO<sub>2</sub>) is used as the reference atom/compound to obtain atmospheric carbon CO<sub>2</sub> effects of GHG. Carbon stocks are converted to carbon dioxide equivalents (CO<sub>2</sub>e) by multiplying the carbon total by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom (<http://www.nciasi2.org/COLE/index.html>).

One time "Construction Emissions" associated with the winery development project includes: i) the carbon stocks that are lost (or released) when existing vegetation is removed and soil is ripped in preparation for the new winery structure and associated infrastructure; and ii) emissions associated with the energy used to develop and prepare the project area and construct the winery, including construction equipment and worker vehicle trips (hereinafter referred to as Equipment Emissions). These emissions also include underground carbon stocks (or Soil carbon) associated with the existing vegetation that is proposed to be removed.

In addition to the one time Construction Emissions, "Operational Emissions" of the winery are also considered and include: i) any reduction in the amount of carbon sequestered by existing vegetation that is removed as part of the project compared to a "no project" scenario (hereinafter referred to as Operational Sequestration Emissions); and ii) ongoing emissions from the energy used to maintain and operate the winery, including vehicle trips associated with employee and visitor trips (hereinafter referred to as Operational Emissions). Operational Emissions from the proposed winery would be the primary source of emissions over the long-term when compared to one time construction emissions. The proposed project has been evaluated against the BAAQMD thresholds Table 3-1 (Operational GHG Screening Level Sizes). A high quality restaurant is considered comparable to a winery tasting room for purposes of evaluating air pollutant emissions, but grossly overstates emissions associated with other portions of a winery, such as office, barrel storage and production, which generate fewer vehicle trips. Therefore, a general light industry comparison has also been used for other such uses. Given the total size of the project, an additional 4,895 ft<sup>2</sup> cave floor area for a total 21,865 ft<sup>2</sup> winery, compared to the BAAQMD's GHG screening criteria of 121,000 ft<sup>2</sup> for general industrial and 9,000 ft<sup>2</sup> for high quality restaurant, the project was determined not to exceed the 1,100 MT of CO<sub>2</sub>e/year GHG threshold of significance established by the District, and further analysis (and quantification) of GHG emissions is not warranted.

Furthermore, the applicant has indicated that the project incorporates the following voluntary best management practices: intend to use energy conserving lighting and connect to recycled water and already do: energy star roof/living roof/cool roof; connection to recycled water; install water efficient fixtures; low impact development; water efficient landscape; recycle 75% of all waste; compost 75% food and garden material; implement a sustainable purchasing and shipping programs; site design that is oriented and designed to optimize conditions for natural heating, cooling, and day lighting of interior spaces, and to maximize winter sun exposure, such as a cave; limit the amount of grading and tree removal during construction of the required access road improvements; local food production; education to staff and visitors on sustainable practices; use 70-80% cover crop; and retain biomass removed via pruning and thinning by chipping the material and reusing it rather than burning on-site. All winery activities are conducted within an existing cave which has been oriented to the south where the portal entry is shaded trees.

Greenhouse Gas Emission reductions from local programs and project level actions, such as application of the Cal Green Building Code, vehicle fuel efficiency standards, and the project-specific on-site programs identified above would combine to further reduce emissions below BAAQMD thresholds.

As indicated above the County is currently preparing a CAP and as the part of the first phase of development and preparation of the CAP has released Final Technical Memorandum #1 (2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016). Table 1 of the Technical Memorandum indicates that 2% of the County's GHG emissions in 2014 were a result of land use change.

The increase in emissions anticipated as a result of the project would be minor and the project is in compliance with the County's efforts to reduce emissions as described above. Accordingly, the project's impacts would be less than significant.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wild-land fires, including where wild-lands are adjacent to urbanized areas or where residences are intermixed with wild-lands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a. The proposed project will not involve the transport of hazardous materials other than those small amounts normally used in winery operations. A Business Plan will be filed with the Environmental Health Division should the amount of hazardous materials reach reportable levels. However, in the event that the proposed use or a future use involves the use, storage or transportation of greater than 55 gallons or 500 pounds of hazardous materials, a use permit and subsequent environmental assessment would be required in accordance with the Napa County Zoning Ordinance prior to the establishment of the use. During construction of the project some hazardous materials, such as building coatings/ adhesives/ etc., will be utilized. However, given the quantities of hazardous materials and the limited duration, they will result in a less-than-significant impact.
- b. As noted above, the project will not involve the transportation of hazardous materials in quantities that would not result in the release of hazardous materials into the environment.
- c. There are no schools located within one-quarter mile from the proposed project site.
- d. The proposed site is not on any known list of hazardous materials sites.
- e. The project site is not located within two miles of any public airport.
- f. The project site is not located within the vicinity of any private airports.
- g. The proposed project will not impair the implementation of or physically interfere with an adopted emergency response plan or evacuation plan. The project will include improvements to the sight distances on Kreuzer Lane which will improve road safety, improving emergency access and evacuation routes.

- h. According to the Napa County Environmental Resource Maps (Fire Hazard Severity), the project is located within the State Responsibility Area (Napa County SRA) and designated a moderate fire hazard area, and the project would possibly increase exposure of people and/or structures to a significant loss, injury or death involving wild land fires. The project has been reviewed by the Napa County Fire Marshall who recommended approval of the project subject to applicable conditions related to fire sprinklers; maximum occupancy limitations; water storage with sufficient fire flow, fire pumps, fire service mains, fire hydrants, adequate access and access road, and defensible space (10' along roads and 100' around structures). Application of the conditions of approval presented by the fire will serve to reduce potential significant adverse fire impacts to an insignificant level.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a. The project is not expected to violate any water quality standards or waste discharge requirements nor substantially deplete local groundwater supplies. The project's development plans indicate the existing system is adequate and able to accommodate the increase in waste disposal from the increase in production, employees and visitation. The applicant proposes the use of portable toilets during the four (4) events per year that will include 100 or more persons. The Napa County Division of Environmental Health has reviewed the proposed domestic and process wastewater systems and recommends approval as conditioned. If the system is found to be inadequate the system would be expanded into the existing reserve area and thus no significant adverse impact would result. Additionally, any earth disturbing activities would be subject to the County's Stormwater Ordinance which would include measures to prevent erosion, sediment, and waste materials from entering waterways both during and after any construction activities. Given the County's Best Management Practices, which comply with RWQCB requirements, the project does not have the potential to significantly impact water



quality and discharge standards.

- b. In 2009 Napa County began a comprehensive study of its groundwater resources to meet identified action items in the County's 2008 General Plan update. The study, by Luhdorff and Scalmanini Consulting Engineers (LSCE), emphasized developing a sound understanding of groundwater conditions and implementing an expanded groundwater monitoring and data management program as a foundation for integrated water resources planning and dissemination of water resources information. The 2011 baseline study by LSCE, which included over 600 wells and data going back over 50 years, concluded that "the groundwater levels in Napa County are stable, except for portions of the MST district".

To better understand groundwater resources, on June 28, 2011 the Board of Supervisors approved creation of a Groundwater Resources Advisory Committee (GRAC). The GRAC's purpose was to assist County staff and technical consultants with recommendations regarding groundwater, including data collection, monitoring, well pump test protocols, management objectives, and community support. The County retained Luhdorff and Scalmanini who completed a county-wide assessment of groundwater resources (Napa County Groundwater Conditions and Groundwater Monitoring Recommendations Report (Feb. 2011) and developed a groundwater monitoring program (Napa County Groundwater Monitoring Plan 2013 (Jan. 2013) and also completed a 2013 Updated Hydrogeologic Conceptualization and Characterization of Groundwater Conditions (Jan. 2013). The 2011 baseline study by LSCE, which included over 600 wells and data going back over 50 years, concluded that "the groundwater levels in Napa County are stable, except for portions of the MST district". Most wells elsewhere within the Napa Valley floor with a sufficient record indicate that groundwater levels are more affected by climatic conditions, are within historical levels, and seem to recover from dry periods during subsequent wet or normal periods. The LSCE Study also concluded that, on a regional scale, there appear to be no current groundwater quality issues except north of Calistoga (mostly naturally occurring boron and trace metals) and in the Carneros region (mostly salinity).

On January 14, 2014, Governor Jerry Brown declared a drought emergency in the state of California. That declaration was followed up on April 1, 2015, when the Governor directed the State Water Resources Control Board to implement mandatory water reductions in cities and town across California to reduce water usage by 25 percent. These water restrictions do not apply to agricultural users. However, on April 7, 2017, Governor Jerry Brown signed an executive order lifting California's drought emergency in all but four counties (Fresno, Kings, Tulare, and Tuolumne). The County of Napa had not adopted or implemented any additional mandatory water use restrictions. The County requires all Use Permit applicants to complete necessary water analyses in order to document that sufficient water supplies exist.

At the May 12, 2015 Board of Supervisors hearing, the Board heard and adopted an update to the Water Availability Analysis (WAA) policy. The WAA was first put in place in the early 1990's for any discretionary project that may utilize groundwater or will increase the intensity of groundwater use of any parcel through an existing, improved, or new water supply system (Napa County Groundwater Conservation Ordinance, Section 13.15.010). The WAA has been used since that time, with periodic revisions, as a tool for analyzing groundwater impacts resulting from discretionary projects such as wineries, new vineyards on slopes over 5%, restaurants, hotels and other discretionary uses located in the unincorporated area of the County that propose to use groundwater. Following the work of the Groundwater Advisory Committee (GRAC), policy direction from the Board of Supervisors, information provided by consultant reports and the County's experience over the last 20 plus years using the existing procedure, various changes to the WAA were adopted.

In general, recent studies have found that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with a shallow depth to water. Historical trends in the Milliken-Sarco-Tuluca (MST) area, however, have shown increasing depths to groundwater, but recent stabilization in many locations. Groundwater availability, recharge, storage and yield is not consistent across the County. More is known about the resource where historical data have been collected. Less is known in areas with limited data or unknown geology. In order to fill existing data gaps and to provide a better understand of groundwater resources in the County, the Napa County Groundwater Monitoring Plan recommended 18 Areas of Interest (AOIs) for additional groundwater level and water quality monitoring. Through the well owner and public outreach efforts of the (GRAC) approximately 40 new wells have been added to the monitoring program within these areas.

Minimum thresholds for water use have been established by the Department of Public Works using reports by the United States Geological Survey (USGS). These reports are the result of water resources investigations performed by the USGS in cooperation with the Napa County Flood Control and Water Conservation District. Any project which reduces water usage or any water usage which is at or below the established threshold is assumed not to have a significant effect on groundwater levels. The project is located within the MST in an area that has an established acceptable water use criteria of 0.3 acre foot per acre per year or no net increase, whichever is less.

The criterion of 0.3 acre feet per acre per year for the MST Groundwater Deficient Area was determined using data from

the 1977 USGS report on the Hydrology of the MST Subarea (Johnson, 1977). The value is calculated by dividing the "safe annual yield," as determined by the USGS (Johnson, 1977), by the total acreage of the affected area (10,000 acres). The addition of the "no net increase" standard reflects the County's obligation to assess potential cumulative impacts under CEQA. In a groundwater deficient area, any discretionary project that increases groundwater use may contribute to the declining groundwater levels in the aquifer.

A Water Availability Analysis was prepared for the project (CMP Civil Engineering & Land Surveying, January 20, 2017). The well serving the project is located on the winery parcel, APN: 045-310-056, a ±42.96 acre parcel. The well also serves parcel APN: 045-310-055, a ±40.11, planted in the grape source vineyards supplying the winery. The subject well is not located within the MST, but the winery and the vineyards are physically located in the mapped MST. Determining the total water demand based on multiple contiguous parcels is acceptable, however, to protect future property owners, certain safeguards must be in place to ensure that the water allotment and transfer between parcels is clearly documented and recorded. The Environmental Health Division has included a condition that any wells located on parcel APN: 045-310-055 cannot be used as a back-up source for the winery, since the construction standards do not meet the requirements for a well serving a small public water system required for the winery and since such well would be located within the MST deficient groundwater basin.

The analysis calculates that the Napa County Allowable Water Allotment for the 83.07 acres is **24.92 AF/YR**, determined by multiplying the total acreage of the two parcels utilizing the well by the 0.3 AF/YR fair share water use factor for land within the MST. *The analysis indicates that the existing total water demand is 17.14 AF/YR, specifically:*

EXISTING PARCEL WATER DEMAND	
	Acre feet per year
Winery Processing – 25,000 gallons approved	0.31
Employees (2 full-time/1 part-time )	0.04
Visitors (8 per day)	0.03
Marketing visitors (270/yr)	0.002
Vineyard (±30.32 ac) Irrigation	9.10
Vineyard (±30.32 ac) Heat protection	7.58
Domestic landscaping	0.08
<b>TOTAL</b>	<b>17.14</b>

*The analysis concluded that the projected water demand for the project is 17.47 AF/YR, specifically:*

PROPOSED PARCEL WATER DEMAND	
	Acre feet per year
Winery Processing – 35,000 gallons	0.54
Employees (6 full-time/6 Part-time)	0.17
Visitors (60 daily)	0.07
Marketing Visitors (1040/yr)	0.01
Vineyard (±30.32 ac) Irrigation	9.10
Vineyard (±30.32 ac) Heat protection	7.58
<b>TOTAL</b>	<b>17.47</b>

As a result of the foregoing, annual water demand for this parcel would increase 0.33 af/yr, from 17.14 af/yr. to 17.47 af/yr. Based on the figures shown in the engineer's report, the project would remain below the established fair share for groundwater use on the parcel of 24.92 af/yr, but does not meet the "no net increase" standard and may contribute to the declining groundwater levels in the aquifer. Based upon the County's Water Availability Guidelines, if the Tier 1 Criteria cannot be met, a Tier 2 Well and Spring Evaluation is required to determine whether a potential impact may occur. The Tier 2 well and spring interference criterion are presumptively met if there are no non-project wells within 500 feet of the existing well and no natural springs in use for domestic or agricultural use located within 1500 feet of the existing well. The WAA included the Tier 2 analysis and found that there are no wells located within 500 feet of the existing well utilized by the project winery and vineyards and no springs are located in within 1500 feet. Based on the Tier 2 well and spring interference criteria being satisfied, the project will have a less than significant effect on groundwater sources.

- c-e. The proposed project will not substantially alter the drainage pattern on the site nor cause a significant increase in erosion or siltation on or off site. There are no existing or planned stormwater systems that would be affected by this project. If the project disturbs more than one acre of land, the permittee will be required to comply with the requirements of the Regional

Water Quality Control Board addressing stormwater pollution during construction activities. The project site includes vineyards, landscaping and other pervious areas that have the capacity to absorb runoff.

- f. There is nothing included in this proposal that would otherwise substantially degrade water quality. As discussed in greater detail at, "a.," above, the Division of Environmental Health has reviewed the sanitary wastewater proposal and has found the proposed system adequate to meet the facility's septic needs as conditioned. No information has been encountered that would indicate a substantial impact to water quality.
- g.-i. The project does not include the placement of new housing on the property. According to Napa County environmental resource mapping (*Floodplain* and *DAM Levee Inundation* layers), the parcel is not located within a 100-year flood zone, nor within a dam or levee failure inundation zone. The project would therefore not impede or redirect flood flows, and the project does not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- j. In coming years, higher global temperatures are expected to raise sea level by expanding ocean water, melting mountain glaciers and small ice caps, and causing portions of Greenland and the Antarctic ice sheets to melt. The Intergovernmental Panel on Climate Change estimates that the global average sea level will rise between 0.6 and 2 feet over the next century (IPCC, 2007). However, the project area is located at ± 440-ft. above mean sea level and there is no known history of mud flow in the vicinity. The project will not subject people or structures to a significant risk of inundation from tsunami, seiche, or mudflow.

**Mitigation Measures:**

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
X.	<b>LAND USE AND PLANNING.</b> Would the project:				
	a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a. The proposed project is located in an area dominated by agricultural, open space and rural residences. The proposed use and the improvements proposed here are in support of the ongoing agricultural use on the property, and this project will not divide an established community.
- b. The subject parcel is located in the AW (Agricultural Watershed) zoning district, which allows wineries and uses accessory to wineries subject to use permit approval. The proposed project is compliant with the physical limitations of the Napa County Zoning Ordinance. The County has adopted the Winery Definition Ordinance (WDO) to protect agriculture and open space and to regulate winery development and expansion in a manner that avoids potential negative environmental effects.

The 2008 Napa County General Plan ensures that every important land use decision will be scrutinized and assessed for its potential to affect the quality of life, the environment we live in, the ability to farm, process agricultural products, and get those products to market. The Agricultural Land Use Goal AG/LU-1 is to preserve existing agricultural land uses and plan for agriculture and related activities as the primary land use; and Land Use Goal AG/LU-3 is to support the economic viability of agriculture, including grape growing, winemaking, other types of agriculture, and supporting industries to ensure the preservation of agricultural lands. The project would allow for the continuation of agriculture as a dominant land use within the county and is fully consistent with the Napa County General Plan.

Agricultural Preservation and Land Use Policy AG/LU 1 of the 2008 General Plan states "agriculture and related activities are the primary land uses in Napa County" and Land Use Policy AG-LU-2 states that: "'agriculture" is defined as the raising

of crops, trees, and livestock; the production and processing of agricultural products; and the related marketing, sales, and other accessory uses..." The property's General Plan land use designation is AWOS (Agriculture, Watershed and Open Space), which allows "agriculture, processing of agricultural products, and single-family dwellings." The proposed use of the property to expand an existing winery for the "fermenting and processing of grape juice into wine" (NCC §18.08.640) utilizing the existing grapes grown on the project parcel and other Napa County grapes owned by the applicant supports the continuation of agriculture as a dominant land use within the County. Further, the project supports the economic viability of agriculture consistent with the General Plan Economic Development Policy E-1, "The County's economic development will focus on ensuring the continued viability of agriculture in Napa County."

- c. There are no habitat conservation plans or natural community conservation plans that are applicable to the property.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XI.</b>	<b>MINERAL RESOURCES.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a/b. Historically, the two most valuable mineral commodities in Napa County in economic terms have been mercury and mineral water. More recently, building stone and aggregate have become economically valuable. Mines and Mineral Deposits mapping included in the Napa County Baseline Data Report (*Mines and Mineral Deposits*, BDR Figure 2-2) indicates that there are no known mineral resources nor any locally important mineral resource recovery sites located on or near the project site. The Conservation and Open Space Elements of the Napa County General Plan does not indicate the presence of valuable or locally important mineral resources on the project site. Therefore, the project would not result in a loss of a mineral resource of any value.

**Mitigation Measures:** None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XII.</b>	<b>NOISE.</b> Would the project result in:				
	a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a/b. The project will result in a temporary increase in noise levels during the grading activities associated with construction of the access driveway improvements and cave expansion activities. Noise generated during this time is not anticipated to be significant. Construction activities will be limited to daylight hours, occurring during the period of 7 am- 7 pm on weekdays, normal hours of human activity, and will use properly muffled vehicles. All construction activities shall be conducted in compliance with the Napa County Noise Ordinance (Napa County Code Chapter 8.16). All construction activities shall be conducted in compliance with the Napa County Noise Ordinance (Napa County Code Chapter 8.16), reducing the potential adverse impact to a less than significant level. The standard noise condition of approval applied to use permits to address the construction noise is as follows:

**"7.3 CONSTRUCTION NOISE**

*Construction noise shall be minimized to the greatest extent practical and feasible under State and local safety laws, consistent with construction noise levels permitted by the General Plan Community Character Element and the County Noise Ordinance. Construction equipment muffling and hours of operation shall be in compliance with the County Code. Equipment shall be shut down when not in use. Construction equipment shall normally be staged, loaded, and unloaded on the project site, if at all practicable. If project terrain or access road conditions require construction equipment to be staged, loaded, or unloaded off the project site (such as on a neighboring road or at the base of a hill), such activities shall only occur daily between the hours of 8 am to 5 pm."*

The standard condition also addresses noisy winery equipment which requires such machinery be enclosed or muffled and maintained so as not to create a noise disturbance and must comply with the County Code. The project does not propose any changes to the existing equipment. Since the project proposes that some visitation and marketing events will occur outside of the caves, potential noise from loud music is addressed by the condition which prohibits the use of amplified sound systems or amplified music outdoors. The closest residences are located ±1000 feet from the cave and outdoor areas. Any outdoor activities by tours and tasting visitors would be limited to the business hours and the larger marketing events (over 100 guests) which may generate an increase in the ambient noise levels from voices and unamplified music are limited in number (4) and will end by 10:00 pm.

**"4.10 AMPLIFIED MUSIC**

*There shall be no amplified sound system or amplified music utilized outside of approved, enclosed, winery buildings."*

The proposed construction grading should not result in the generation of excessive groundborne vibrations or ground born noise levels greater than those created by general farm plowing activities. By addressing the potential adverse impacts indicated above, the proposed project will not result in a significant adverse noise impact.

c/d. Although substantial amounts of temporary noise may be generated during project construction that noise will cease. A substantial permanent, temporary, or periodic increase in ambient noise levels would not be expected. The anticipated level of noise to occur following the completion of construction would be reduced with conditions addressing noisy equipment, limits to hours of operation where periodic loud activities such as bottling would occur during the day; and the proposed marketing events would be required to cease prior to 10:00 pm. Conditions of approval as described under Section a and b above would require construction activities to be limited to daylight hours, vehicles to be muffled, and backup alarms adjusted to the lowest allowable levels. Enforcement of Napa County's Exterior Noise Ordinance is and will be provided the Napa County Sheriff address noise related issues including, but not limited to, prohibiting outdoor-amplified sounds and that mechanical equipment would be required to be kept indoors or inside acoustical enclosures. The closest residence is ±1,000 feet with varied terrain. Noise levels for a dinner events with up to 200 people and unamplified music

was estimated by an event simulation in a recent noise study (Noise Analysis of Mobile Bottling Noise, Yountville Hill Winery, Yountville, CA by Illingworth & Rodkin, Inc, March 14, 2014, incorporated by reference), and at 25 feet the sound level was estimated at 68 dBA. Based on the inverse square law, at 1000 feet the predicted sound level would be 24 dBA, which would be well below the daytime and nighttime rural noise levels listed in the County Noise Standards: 7:00 AM to 10:00 PM = 60 dBA; 10:00 PM to 7:00 AM, 55 dBA ). Therefore, the noise impacts from the project would less than significant.

e/f. The project site is not located within an airport land use plan or within two miles of a public airport or within the vicinity of a private airstrip.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING.</b> Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a. There are modest increases in overall employment by the winery by four full time and five part time employees. The Association of Bay Area Governments' *Projections 2003* figures indicate that the total population of Napa County is projected to increase some 23% by the year 2030 (*Napa County Baseline Data Report*, November 30, 2005). Additionally, the County's *Baseline Data Report* indicates that total housing units currently programmed in county and municipal housing elements exceed ABAG growth projections by approximately 15%. The additional two and a half (2.5) employee positions which are part of this project will most likely lead to some population growth in Napa County. However, relative to the County's projected low to moderate growth rate and overall adequate programmed housing supply, that population growth does not rise to a level of environmental significance. In addition, the project will be subject to the County's housing impact mitigation fee, which provides funding to meet local housing needs.

Cumulative impacts related to population and housing balance were identified in the 2008 General Plan EIR. As set forth in Government Code §65580, the County of Napa must facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community. Similarly, CEQA recognizes the importance of balancing the prevention of environment damage with the provision of a "decent home and satisfying living environment for every Californian." (See Public Resources Code §21000(g).) The 2008 General Plan sets forth the County's long-range plan for meeting regional housing needs, during the present and future housing cycles, while balancing environmental, economic, and fiscal factors and community goals. The policies and programs identified in the General Plan Housing Element function, in combination with the County's housing impact mitigation fee, to ensure adequate cumulative volume and diversity of housing. Cumulative impacts on the local and regional population and housing balance will be less than significant.

b/c. This application will not displace a volume of existing housing or a number of people and will not necessitate the construction of replacement housing elsewhere.

**Mitigation Measures:** None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XIV.</b>	<b>PUBLIC SERVICES.</b> Would the project result in:				
	a) Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a. Public services are currently provided to the project area, and as the winery has been in full operation, the additional demand placed on existing services would be marginal. Fire protection measures are required as part of the development pursuant to Napa County Fire Marshall conditions and there will be no foreseeable impact to emergency response times with the adoption of standard conditions of approval. The Fire Department and the Engineering Services Division have reviewed the application and recommend approval as conditioned. School impact mitigation fees, which assist local school districts with capacity building measures, will be levied pursuant to building permit submittal. The proposed project will have little to no impact on public parks. County revenue resulting from any building permit fees, property tax increases, and taxes from the sale of wine will help meet the costs of providing public services to the property. The proposed project will have a less than significant impact on public services.

**Mitigation Measures:** None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XV.</b>	<b>RECREATION.</b> Would the project:				
	a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a/b. The project would not significantly increase the use of recreational facilities, nor does the project include recreational facilities that may have a significant adverse effect on the environment.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVI. TRANSPORTATION/TRAFFIC.</b> Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system and/or conflict with General Plan Policy CIR-16, which seeks to maintain an adequate Level of Service (LOS) at signalized and unsignalized intersections, or reduce the effectiveness of existing transit services or pedestrian/bicycle facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the Napa County Transportation and Planning Agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with General Plan Policy CIR-23, which requires new uses to meet their anticipated parking demand, but to avoid providing excess parking which could stimulate unnecessary vehicle trips or activity exceeding the site's capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a/b. The traffic generated by the project is expected to be moderate. Access to the winery is from Kreuzer Lane, located off Fourth Avenue, a collector county road. There is a gate at the terminus of Kreuzer Lane where the road is shared by the winery and ±5 residences located beyond the gate to the terminus at the winery. The applicant has submitted traffic data which identifies a change in the proposed new winery hours (10:00 am to 6:00 pm, Sunday through Saturday for visitation); no changes to the current 7:00 am – 5:00 pm, 4 days/week non-harvest production hours; an increase in the number of employees (from two (2) full time/ one (1) part time to six (6) full time/ six (6) part time); a proposed increase in the number of tours and tasting by appointment only visitors from eight (8) daily (average 40 per week) to 60/day; and a change to the Marketing Plan from 13 events to 19 events, all to occur within the hours of 10:00 am and 10:00 pm. The winery will be closed during days when events are to occur and the conditions of approval for the use permit requires that prior written notification of the marketing events must be provided to two of the adjacent neighbors.

The traffic flow calculations presented in the application state that the project is expected to produce up to 76 new daily trips on weekdays, 27 trips during peak hour; and 73 daily trips on weekends, with 33 weekend peak hour trips. The proposed increase is 40% more trips and the 60 new trips would be the equivalent of trips resulting from six (6) residences (two (2) residences during peak hour). The project includes an increase in production capacity and an increase in on-haul delivery which is projected to result in one (1) additional trip during harvest. The winery utilizes on-site and adjacent grapes; off-site grapes are used by the custom crush producers approved in the original use permit (up to 10,000 gallons). The cave expansion will result in ± 1,120 compact yards<sup>3</sup> and 1,570 loose yards which will be hauled off site. There is an estimated 98 truck loads during the construction period. This potential construction impact would be temporary in nature and subject to standard conditions of approval from the Engineering and Conservation Division as part of the grading permit process. Impacts would be less than significant.

Traffic conditions on roads and at intersections are generally characterized by their "level of service" or LOS. LOS is a convenient way to express the ratio between volume and capacity on a given link or at a given intersection, and is expressed as a letter grade ranging from LOS A through LOS F. Each level of service is generally described as follows:



LOS A- Free-flowing travel with an excellent level of comfort and convenience and freedom to maneuver.

LOS B- Stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.

LOS C- Stable operating conditions, but the operation of individual users is substantially affected by the interaction with others in the traffic stream.

LOS D- High-density, but stable flow. Users experience severe restrictions in speed and freedom to maneuver, with poor levels of comfort and convenience.

LOS E- Operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.

LOS F- Forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion. (2000 Highway Capacity Manual, Transportation Research Board)

The Department of Public Works has reviewed the Traffic Flow Calculations prepared by the project engineer (CMP Civil Engineering and Lands Surveying, May 31, 2017 (Revised)), who noted that based on the most recent roadway segment counts taken for the Traffic Study prepared for the Paul Hobbs-Nathan Coombs Winery Project (W-Trans, August 24, 2017), Imola Avenue is currently operating at LOS A and is expected to continue to operate at acceptable arterial LOS A with that project's generated trips (34 weekday, 13 PM Peak hour; 43 weekend, 25 weekend Mid-day Peak hour). Under Future Conditions (a growth rate of two percent per year for 20 years, or 1.49 applied to the 2016 volumes (EB – 431 PM Peak hour / 291 Weekend PM Peak Hour; WB-406/ 3:00 PM Weekend PM Peak Hour), Imola is expected to operate at LOS C during the PM peak hour, but continue operating at LOS A during the weekend midday peak hour. The Paul Hobbs-Nathan Coombs Winery is located on a 77.96 acre parcel on the corner of Imola Avenue and Fourth Avenue. The driveway for that winery is located on Fourth Ave, approximately 2,000 feet westerly from the intersection of Kreuzer Lane and Fourth Avenue. The additional trips from the project would not be expected to significantly impact the LOS A of Imola Avenue. In that study, it was assumed that 90% of trips will be to/from west from that project site on Imola, with the remaining 10% of trips to/from the east of the project site on Fourth Avenue. This distribution can be applied to the project site from Kreuzer Lane.

Based on the most current five year period available for collision history (2010-2015) on Imola Ave. and Fourth Ave., collision rates are similar to or lower than statewide averages for similar facilities. Further, there are no collision trends or patterns that may indicate a safety issue. The project will be accessed from a private driveway off Kreuzer Lane just west of a private gate. Since there will not be any left turn movements from a public road, a left turn lane is not necessary.

Visitation to the winery is by appointment only, which allows the applicant to precisely control visitation arrivals and departures and schedule appointments to occur at regular intervals during the day and to avoid the peak travel hours (4:00 PM – 6:00 PM weekdays; 2:00 PM 4:00 PM). The standard Condition of Approval (COA) #4.2, addresses tours and tasting, stating that to the maximum extent feasible, scheduling of visitors shall not occur during peak travel times (4:00 PM - 6:00 PM weekdays, 2:00 PM to 4:00 PM weekend), which serves to reduce the traffic impacts during peak travel times. The proposed marketing events will mostly occur during the evening hours; however, the project proposes that if an event is scheduled, the winery will be closed for tours and tasting, reducing potential traffic impacts.

- c. This project will not result in the construction of structures or facilities tall enough or bright enough which would interfere with air traffic, therefore, the project would not result in any change to air traffic patterns.
- d/e. Access to the site is by way of a public road, Kreuzer Lane which turns into a private road beyond a gate, serving several other residences and agricultural activities. The required increases to the width of the existing road will serve to ensure that the road does not include any design features that will impact traffic and traffic safety. The Engineering Services and the Napa County Fire Marshall have reviewed this application and identified no significant impacts related to emergency vehicle access. An exception to the County Road and Street Standards (RSS) for a 680 foot portion of the access driveway was requested. The Engineering Services Division and Fire Marshall were able to make the findings to support the Exception Request and that the improvements proposed achieve the same overall practical effect of the RSS by providing defensible space and consideration toward life, safety and public welfare. Project impacts related to traffic hazards and emergency access are expected to be less than significant.
- f. There is currently sufficient parking for the existing winery provided on site. There are 38 delineated parking spaces available for visitors and employees. During events, the use of valets would be necessary to organize the guest parking in the lower gravel area parking area, which could accommodate more parking than the designated parking spaces. No parking will be permitted within the right-of-way of Kreuzer Lane due topographical constraints. The project will not conflict with General Plan Policy CIR-23 so as to cause potentially significant environmental impacts.

- g. There is no aspect of this project that would conflict with any adopted policies, plans or programs supporting alternative transportation.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVII. TRIBAL CULTURAL RESOURCES.</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a/b According to the Napa County Environmental Resource Maps (based on the following layers – Historical sites points & lines, Archaeology surveys, sites, sensitive areas, and flags) no historic sites or tribal resources have been identified on the property. Invitation for tribal consultation was completed pursuant to AB 52.

As discussed in Section V of this initial study, there are no existing structures on the parcel that are listed in a local, state or federal register of historic resources. Consultation with representatives of local Native American tribes who have a cultural interest in the area in accordance with Public Resources Code Section 21080.3.1 was not requested. After the 30 day consultation invitation ended, a request for a site visit was made by the Yoche Dehe Wintun tribe. The request was forwarded to the applicant and advised to contact the tribe. Copies of the application package was forwarded to the Tribe and they were advised that when the environmental document is release for public review, the document can be sent to them for their review. As discussed in Section V of this initial study, if any resources not previously uncovered during this prior disturbance are found during any earth disturbing activities associated with the proposed project, construction of the project is required to cease, and a qualified archaeologist must be retained to investigate the site in accordance with the standard county conditions of approval.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVIII. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of a new water or wastewater treatment facility or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of a new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a. The wastewater disposal can be accommodated on-site in compliance with State and County regulations and since there is sufficient water on the site to support the system, the proposed project would not be expected to result in a significant impact to the environment. The project will not exceed wastewater treatment requirements of the Regional Water Quality Control Board and will not result in a significant impact on the environment relative to wastewater discharge.
- b. The project will not require construction of any new water or wastewater treatment facilities that will result in a significant impact to the environment. Water on the site is currently provided by a well, located outside of the identified MST water deficit area on the south side of the property, currently serving an existing winery and vineyards.
- c. The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, which will cause a significant impact to the environment.
- d. The project has sufficient water supplies to serve projected needs. The projected water use for the project is 17.14 AF/YR, which is a .33 AF/year increase. Napa County has established a threshold 24.92 AF/YR for the two parcels being served by the project well. Since the project does not meet the no net increase Tier 1 criteria, a Tier 2 Well and Spring Evaluation was performed. The WAA included the Tier 2 analysis and found that there are no wells located within 500 feet of the existing well utilized by the project winery and vineyards and no springs are located in within 1,500 feet. With the Tier 2 well and spring interference criteria satisfied, the determination that the project will have a less than significant effect on groundwater sources.
- e. Wastewater will be treated on-site and will not require a wastewater treatment provider.
- f. The project will be served by a landfill with sufficient capacity to meet the projects demands. No significant impact will occur from the disposal of solid waste generated by the project.
- g. The project will comply with federal, state, and local statutes and regulations related to solid waste.

**Mitigation Measures:** None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XIX. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a. The project as proposed will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. According to the Napa County Environmental Resource Maps project is not located within any identified environmentally sensitive environmental resource areas.
- b. The project would increase the demands for public services to a limited extent, increase traffic and air pollution, all of which contribute to cumulative effects when future development in Napa Valley is considered. Cumulative impacts of these issues are discussed in previous sections of this Initial Study, wherein the impact from an increase in air pollution is being addressed as discussed in the project's Greenhouse Gas Voluntary Best Management Practices including but not limited to the use energy conserving lighting and to connect to recycled water and has an existing energy star roof/living roof/cool roof; install water efficient fixtures; low impact development; water efficient landscape; recycle 75% of all waste; compost 75% food and garden material; implement a sustainable purchasing and shipping programs; site design that is oriented and designed to optimize conditions for natural heating, cooling, and day lighting of interior spaces, and to maximize winter sun exposure, such as a cave; limit the amount of grading and tree removal during construction of the required access road improvements; local food production; education to staff and visitors on sustainable practices; use 70-80% cover crop; and retain biomass removed via pruning and thinning by chipping the material and reusing it rather than burning on-site, and the existing cave is oriented to the south where the portal entry is shaded by trees. The proposed project's near-term and cumulative contribution to those unacceptable levels of service would be less than one percent and would fall below County thresholds of significance.
- c. This project would not have any environmental effects that would cause substantial adverse effects on human beings. All environmental effects from this project have been mitigated to a level of insignificance. No other environmental effects have been identified that would cause, either directly or indirectly, adverse effects on human beings.

**Mitigation Measures:** None Required.



**CMP Civil Engineering & Land Surveying**

**1607 Capell Valley Road**

**Napa, CA 94558**

**(707) 815-0988**

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Traffic Flow Calculations  
for the  
Caldwell Vineyard Winery

Located at:  
270 Kreuzer Lane  
Napa, CA 94558

Date: 1/20/2017

Rev: 5/31/2017

Project # 00193

RECEIVED

JUL 25 2017

Napa County Planning, Building  
& Environmental Services

<b>Legend</b>
Requires Input
Automatically Calculates
Important Value Automatically Calculates
Important Value Requires Input

Hit ctrl+alt+shift+F9 when finished to recalc all formulas

## Existing Winery Traffic Information/ Trip Generation Sheet

### Traffic During a Typical Weekday

		FACTOR	DAILY TRIPS	
NUMBER OF FT EMPLOYEES =	2	3.05	6.10	
NUMBER OF PT EMPLOYEES=	1	1.9	1.90	
AVE. # WEEK DAY VISITORS=	8	1.3	6.15	
GALLONS OF PRODUCTION=	25000	55555.6	0.45	
<b>TOTAL=</b>			<b>14.60</b>	
(# OF FT EMP)+(# OF PT EMP/2)+(VIS+TRK TRIPS X.38)=			<b>5.01</b>	<b>PM PEAK TRIPS</b>

### Traffic During a Typical Saturday

	# PEOPLE	FACTOR	DAILY TRIPS	
# OF FT EMPL (ON SAT) =	2	3.05	6.10	
# OF PT EMPL (ON SAT)=	1	1.9	1.90	
AVE. # SATURDAY VISITORS=	8	1.4	5.71	
<b>TOTAL=</b>			<b>13.71</b>	
(# OF FT EMP)+(# OF PT EMP/2)+(VISTOR TRIPS X.57)=			<b>5.76</b>	<b>PM PEAK TRIPS</b>

### Traffic During a Crush Saturday

		FACTOR	DAILY TRIPS	
# OF FT EMPL (ON SAT) =	2	3.05	6.10	
# OF PT EMPL (ON SAT)=	1	1.9	1.90	
AVE. # SATURDAY VISITORS=	8	1.4	5.71	
GALLONS OF PRODUCTION=	25000	55555.6	0.45	
AVE ANNUAL TON GRPE ON HAUL=	175	72	2.43	
<b>TOTAL=</b>			<b>16.59</b>	

### Largest Marketing Event- Additional Traffic

		FACTOR	TRIPS	
# OF EVENT STAFF (LRG EV)=	4	2	8.00	
# OF VISITORS (LRG EV)=	56	1.4	40.00	
# SPCL EVNT TRCK TRPS (LRG EV)	6	2	12.00	
<b>TOTAL=</b>			<b>60.00</b>	

## Proposed Winery Traffic Information/ Trip Generation Sheet

### Max Traffic During a Weekday

		FACTOR	DAILY TRIPS	
NUMBER OF FT EMPLOYEES =	6	3.05	18.30	
NUMBER OF PT EMPLOYEES=	6	1.9	11.40	
AVE. # WEEK DAY VISITORS=	60	1.3	46.15	
GALLONS OF PRODUCTION=	35000	55555.6	0.63	
<b>TOTAL=</b>			<b>76.48</b>	
$(\# \text{ OF FT EMP})+(\# \text{ OF PT EMP}/2)+(\text{VIS}+\text{TRK TRIPS} \times .38)=$				<b>26.78</b> <b>PM PEAK TRIPS</b>

### Max Traffic During a Saturday

	# PEOPLE	FACTOR	DAILY TRIPS	
# OF FT EMPL (ON SAT) =	6	3.05	18.30	
# OF PT EMPL (ON SAT)=	6	1.9	11.40	
AVE. # SATURDAY VISITORS=	60	1.4	42.86	
<b>TOTAL=</b>			<b>72.56</b>	
$(\# \text{ OF FT EMP})+(\# \text{ OF PT EMP}/2)+(\text{VISTOR TRIPS} \times .57)=$				<b>33.43</b> <b>PM PEAK TRIPS</b>

### Max Traffic During a Crush Saturday

		FACTOR	DAILY TRIPS	
# OF FT EMPL (ON SAT) =	6	3.05	18.30	
# OF PT EMPL (ON SAT)=	6	1.9	11.40	
AVE. # SATURDAY VISITORS=	60	1.4	42.86	
GALLONS OF PRODUCTION=	35000	55555.6	0.63	
AVE ANNUAL TON GRPE ON HAUL=	245	72	3.40	
<b>TOTAL=</b>			<b>76.59</b>	

### Largest Marketing Event- Additional Traffic

		FACTOR	TRIPS	
# OF EVENT STAFF (LRG EV)=	8	2	16.00	
# OF VISITORS (LRG EV)=	100	1.4	71.43	
# SPCL EVNT TRCK TRPS (LRG EV)	8	2	16.00	
<b>TOTAL=</b>			<b>103.43</b>	



August 24, 2017

Mr. Paul Hobbs  
c/o Steve Martin Associates, Inc.  
130 South Main Street, Suite 201  
Sebastopol, CA 95472

## **Traffic Study for the Paul Hobbs-Nathan Coombs Winery Project**

Dear Mr. Hobbs,

As requested, W-Trans has prepared a traffic analysis relative to the proposed winemaking facility to be located at 2184 Imola Avenue in the County of Napa. The purpose of this letter is to address potential traffic impacts associated with the proposed winery.

### **Setting**

The study area consists of Imola Avenue east of Soscol Avenue, which runs along the southern edge of the project site, and Fourth Avenue, which runs along the eastern side of the site. The project site will be accessed via a new private driveway on Fourth Avenue. Imola Avenue is a two-lane undivided roadway that runs east-west in the study area with 12-foot travel lanes in each direction and a posted speed limit of 35 miles per hour (mph) from Soscol Avenue to Penny Lane and 40 mph from Penny Lane to Fourth Avenue. Drivers are required to reduce their speed to 25 mph when children are present near Napa Preschool and Napa County Community School between Navarre Street and Penny Lane.

### **Project Description**

The Paul Hobbs-Nathan Coombs Winery project would result in a new winery facility. As proposed, the winery would produce up to 60,000 gallons of wine and be built in two phases. The first phase includes winery production of 12,000 gallons per year while the second phase would increase production to the full 60,000 gallons. At ultimate Phase 2 production, the Paul Hobbs-Nathan Coombs Winery is proposed to have seven full-time employees during non-harvest operations and nine full-time employees during the harvest and bottling season as well as an average of 15 visitors on a typical weekday and 30 visitors on a weekend day. All winery visitations will be by appointment only. The proposed project includes four agricultural promotion events per year with two events for up to 50 guests and two events for up to 100 guests.

### **Collision History**

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current five-year period available is July 1, 2010 through June 30, 2015.

The calculated collision rate for the study segment was compared to the average collision rate for similar facilities statewide, as indicated in *2012 Collision Data on California State Highways*, California Department of Transportation. The segment of Imola Avenue between Soscol Avenue and Fourth Avenue experienced collisions at a rate of 0.29 collisions per million vehicle miles (c/mvm) which is less than the statewide average of 0.86 c/mvm for similar facilities. Fourth Avenue experienced one collision during this time period which resulted in a collision rate of 1.19 c/mvm which is slightly higher than the statewide average of 1.02 c/mvm for similar facilities. This collision occurred at southern portion of the segment where the road curves, which is approximately 1,700 feet from the proposed project driveway. No collisions occurred near the project driveway at the northern portion of the roadway. The collision rate calculations are enclosed.



## Trip Generation

The County of Napa's Winery Traffic Information/Trip Generation Sheet was used to determine the anticipated traffic generated with the proposed staff, visitors, and events. A copy of this worksheet is attached.

As the County of Napa's Winery Traffic Information/Trip Generation Sheet does not include guidance on inbound versus outbound trips during the peak hours, it was assumed that two-thirds of trip ends at the winery would be outbound during the weekday p.m. peak hour since most of the trips would be associated with employees and customers leaving at closure of the winery. For the Saturday midday peak hour it was assumed that inbound and outbound trip ends would be evenly split. The trip generation estimates for the proposed project are shown in Table 1.

Land Use	Daily		Weekday PM Peak Hour			Weekend MD Peak Hour		
	Weekday	Weekend	Trips	In	Out	Trips	In	Out
Winery	34	43	13	4	9	25	13	12

Note: Trip generation as estimated above does not include special events

Based on application of these assumptions, the proposed project is expected to generate 34 trip ends per day including 13 trips during the weekday p.m. peak hour and 43 daily trip ends on weekend days with 25 trips during the Saturday p.m. peak hour. It is noted that the majority of these trips are associated with visitors, and since data has shown that wine-tasting visitors make an average of four stops during a day of wine tasting, the number of new trips to the road network would actually be considerably lower. The trip generation therefore reflects new trips at the driveway and not necessarily new trips to the network, though for analysis purposes all of the trips will conservatively be used.

## Special Events

The winery's largest event will be a 100-person event with nine employees and one delivery truck. Using an occupancy of 2.8 persons per vehicle for guests and solo occupancy for staff, a maximum-sized 100-person event would be expected to generate 91 trip ends at the driveway, including 45 inbound trips and 46 outbound trips. Given that this event is infrequent, not part of typical daily operation, and often occurs outside the peak period for traffic, special event traffic was not included in the daily trip generation and resulting segment operation analysis.

## Trip Distribution

With the City of Napa just to the west of the proposed winery, it is assumed that 90 percent of trips will be to/from west the project site on Imola Avenue, with the remaining 10 percent of trips to/from the east of the project site to account for visitors that may be touring multiple wineries in Napa County.

The applied distribution assumptions and resulting trips are shown in Table 2.

Route	Percent	Daily Trips	AM Trips	Weekend Trips
To/from City of Napa (west)	90%	31	12	23
To/from the east	10%	3	1	2
<b>TOTAL</b>	<b>100%</b>	<b>34</b>	<b>13</b>	<b>25</b>

## Segment Level of Service

The County of Napa's adopted LOS Standard is contained in *Napa County General Plan Update 2008*. Policy CIR-16 states that the County shall seek to maintain an arterial Level of Service D or better on all county roadways. Because the only standard methodologies for evaluating two-lane roadways such as Imola Avenue are really more applicable to highways and are not applicable where speeds are lower than 45 mph, a volume-to-capacity method was applied. Level of Service is assigned based on volume-to-capacity ratios, where a v/c ratio of 0.60 or less is LOS A and a v/c ratio of 1.00 or more is LOS F.

The County of Napa identifies Imola Avenue as an arterial road. According to the *Napa County General Plan Environmental Impact Report*, February 16, 2007, the model used to evaluate future operating conditions used volume thresholds of 800 vehicles per hour per lane for arterials; this threshold was applied to Imola Avenue.

## Existing Conditions Level of Service

Under Existing conditions, Imola is operating acceptably at LOS A and is anticipated to continue operating at LOS A with the addition of project generated trips. The segment levels of service calculations are enclosed. These results are summarized in Table 3.

**Table 3 – Existing and Existing plus Project PM Peak Hour Roadway Segment Levels of Service**

Study Segment	Existing						Existing plus Project					
	PM Peak Hour			Weekend PM Peak Hour			PM Peak Hour			Weekend PM Peak Hour		
	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Imola Ave												
EB	428	0.54	A	279	0.35	A	431	0.54	A	291	0.36	A
WB	389	0.49	A	289	0.36	A	406	0.51	A	300	0.38	A

Notes: EB = eastbound, WB = westbound; v/c = volume to capacity ratio; LOS = Level of Service

## Future plus Project Conditions

In order to determine future volumes on Imola Avenue, a growth rate of two percent per year for 20 years, or 1.49, was applied to the 2016 volumes.

Under Future conditions, Imola Avenue is expected to operate at LOS C during the p.m. peak hour and continue operating at LOS A during the weekend midday peak hour. Imola Avenue is expected to continue operating at the same level of service with the addition of project added trips as without. The results are summarized in Table 4.

**Table 4 – Future and Future plus Project PM Peak Hour Roadway Segment Levels of Service**

Study Segment	Future						Future plus Project					
	PM Peak Hour			Weekend PM Peak Hour			PM Peak Hour			Weekend PM Peak Hour		
	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS	Volume	V/C	LOS
Imola Ave												
EB	638	0.80	C	416	0.52	A	641	0.80	C	428	0.54	A
WB	579	0.72	C	431	0.54	A	587	0.73	C	442	0.55	A

Notes: EB = eastbound, WB = westbound; v/c = volume to capacity ratio; LOS = Level of Service

## Proportional Share

The City of Napa has established the need to collect funding for future improvements needed at the intersection of Soscol Avenue/Imola Avenue, though it is unknown if such a funding mechanism has been established. Should there be such a fund and the County elect to do so, they may require that this project submit a proportional share of the cost of these future improvements, so this value was calculated. During the p.m. peak hour, the proposed project is expected to generate 13 trips, of which 12 would be expected to travel through this intersection. The proportional share formula used by Caltrans takes into account total intersection volumes under existing and future conditions. Turning movement counts from September 2015 were used for the proportional share calculation. Applying the Caltrans formula, the project's proportional share for improvements to the intersection would be 0.6 percent of the total cost. A copy of the proportional share calculation is enclosed.

## Access Analysis

### Sight Distance

At driveways a substantially clear line of sight should be maintained between the driver of a vehicle waiting on the driveway and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross, turn left, or turn right, without requiring the through traffic to radically alter their speed.

Sight distance along Fourth Avenue at the project driveway was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distance for minor street approaches that are a driveway is based on stopping sight distance with the approach travel speed used as the basis for determining the recommended sight distance. Additionally, the stopping sight distance needed for a following driver to stop if there is a vehicle waiting to turn into a side street or driveway is evaluated based on stopping sight distance criterion and the approach speed on the major street.

There is no posted speed limit on Fourth Avenue, although there are advisory speeds of 15 mph at the curves. Speeds were measured at the project site at the approximate location of the new driveway. On average, vehicles traveling southbound, exiting the curve at the northern end of Fourth Avenue, are traveling at a speed of 35 mph. In the northbound direction, vehicles are traveling at an average of 30 mph. For a more conservative analysis, the sight distance criterion for 35 mph was used. For 35 mph, the minimum stopping sight distance required is 250 feet. Sight distances were measured using the site plan and conditions in the field were assessed. Sight distance at the approximate location of the proposed project driveway on Fourth Avenue is adequate with sight lines that exceed the minimum required sight distances. However, any plans for new landscaping should ensure that plantings at the project driveway do not exceed three feet in height to maximize sight lines.

### Left-Turn Lane Warrants

The need for a left-turn lane on Fourth Avenue at the project driveway was evaluated based on criteria contained in the *Napa County Road and Street Standards*, 2011. Daily traffic volumes for the roadway segment and driveway are required to determine the need for a left-turn lane. Traffic counts were collected on Imola Avenue between Soscol Avenue and Parrish Road, which is over a mile west of the project driveway located on Fourth Avenue. In order to determine volumes on Fourth Avenue, a 30-minute vehicle count was conducted during a field visit from 4:30 p.m. to 5:00 p.m. on May 9, 2016. At this time, there were approximately 25 vehicles that passed the proposed driveway location. This was compared to the segment volumes on Imola Avenue at this same time period. This segment of Imola Avenue experienced an average of 309 vehicles during this time period. Therefore, approximately eight percent of vehicles traveling on Imola Avenue continue on to or come from Fourth Avenue. For a more conservative analysis, it was assumed that that 10 percent of average daily trips (ADT) experienced on Imola Avenue would pass by the project driveway on Fourth Avenue. Based on these assumptions, Fourth Avenue experiences an ADT of 824 vehicles. The ADT at the project driveway is expected to be 34 daily trips on a weekday and 43 daily trips on the weekend. Based on these traffic counts, a left-turn lane is not warranted at the project driveway during weekdays or weekends under Existing plus Project Conditions.

A growth rate was applied to 824 ADT to determine the future volumes on Fourth Avenue. With the future volumes applied with project-generated trips, a left turn lane is not warranted during weekdays or weekends. Left-turn lane warrant results are enclosed.

### Conclusions and Recommendations

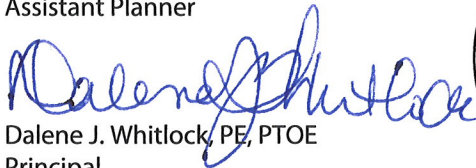
- The proposed winery is expected to produce 34 daily trips during the weekdays and 43 new trips on Saturday, including 13 p.m. peak hour trips on weekdays and 25 midday peak hour trips on Saturday.
- Under Existing conditions, Imola Avenue operates at LOS A during both peak periods and is expected to continue operating at this level of service with the addition of project-generated trips.
- Under Future Conditions, Imola Avenue is expected to operate at LOS C during the weekday p.m. peak hour and LOS A during the Saturday midday peak hour. The Level of service is anticipated to remain the same with the addition of project generated trips.
- The project is expected to contribute 0.6 percent of the anticipated increase in traffic volumes at Soscol Avenue/Imola Avenue; this represents their proportional share of the costs of future improvements should a fund be established to collect monies for the project.
- Sight distance is adequate at the project driveway on Fourth Avenue.
- A left-turn lane is not warranted on Fourth Avenue at the project driveway under either Existing or Future plus Project conditions.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,



Shannon Baker  
Assistant Planner



Dalene J. Whitlock, PE, PTOE  
Principal



DJW/scb/NAX112.L1

- Enclosures: Collision Rate Calculation  
Winery Traffic Information/Trip Generation Sheet  
Proportional Share Calculation  
Left-turn Lane Warrant

**SEGMENT COLLISION RATE CALCULATIONS**

**Paul Hobbs-Nathan Coombs Winery**

**Location:** Imola Ave between Soscol Ave & 4th Ave

**Date of Count:** Friday, April 08, 2016  
**ADT:** 8,200

**Number of Collisions:** 6  
**Number of Injuries:** 2  
**Number of Fatalities:** 0  
**Start Date:** July 1, 2010  
**End Date:** June 30, 2015  
**Number of Years:** 5

**Highway Type:** Conventional 2 lanes or less  
**Area:** Rural  
**Design Speed:** ≤55  
**Terrain:** Flat

**Segment Length:** 1.4 miles  
**Direction:** East/West

Number of Collisions x 1 Million					
ADT x 365 Days per Year x Segment Length x Number of Years					
	6	x	1,000,000		
8,200	x	365	x	1.37	x 5

	Collision Rate	Fatality Rate	Injury Rate
<b>Study Segment</b>	<b>0.29 c/mvm</b>	<b>0.0%</b>	<b>33.3%</b>
<b>Statewide Average*</b>	<b>0.86 c/mvm</b>	<b>2.4%</b>	<b>40.1%</b>

ADT = average daily traffic volume  
c/mvm = collisions per million vehicle miles  
\* 2012 Collision Data on California State Highways, Caltrans

**Location:** Fourth Avenue

**Date of Count:** Friday, April 08, 2016  
**ADT:** 820

**Number of Collisions:** 1  
**Number of Injuries:** 0  
**Number of Fatalities:** 0  
**Start Date:** July 1, 2010  
**End Date:** June 30, 2015  
**Number of Years:** 5

**Highway Type:** Conventional 2 lanes or less  
**Area:** Rural  
**Design Speed:** >55  
**Terrain:** Flat

**Segment Length:** 0.6 miles  
**Direction:** North/South

Number of Collisions x 1 Million					
ADT x 365 Days per Year x Segment Length x Number of Years					
	1	x	1,000,000		
820	x	365	x	0.56	x 5

	Collision Rate	Fatality Rate	Injury Rate
<b>Study Segment</b>	<b>1.19 c/mvm</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Statewide Average*</b>	<b>1.07 c/mvm</b>	<b>2.5%</b>	<b>40.0%</b>

ADT = average daily traffic volume  
c/mvm = collisions per million vehicle miles  
\* 2012 Collision Data on California State Highways, Caltrans

## Winery Traffic Information / Trip Generation Sheet

Project Name: Paul Hobbs - Nathan Coombs Winery Project Scenario: Proposed

### Traffic during a Typical Weekday

Number of FT employees: <u>7</u> x 3.05 one-way trips per employee	=	<u>21</u> daily trips.
Number of PT employees: <u>0</u> x 1.90 one-way trips per employee	=	<u>0</u> daily trips.
Average number of weekday visitors: <u>15</u> / 2.6 visitors per vehicle x 2 one-way trips	=	<u>12</u> daily trips.
Gallons of production: <u>60000</u> / 1,000 x .009 truck trips daily <sup>3</sup> x 2 one-way trips	=	<u>1</u> daily trips.
<b>Total</b>	<b>=</b>	<b><u>34</u> daily trips.</b>
Number of total weekday trips x .38	=	<u>13</u> <b>PM peak trips.</b>

### Traffic during a Typical Saturday

Number of FT employees (on Saturdays): <u>7</u> x 3.05 one-way trips per employee	=	<u>21</u> daily trips.
Number of PT employees (on Saturdays): <u>0</u> x 1.90 one-way trips per employee	=	<u>0</u> daily trips.
Average number of weekend visitors: <u>30</u> / 2.8 visitors per vehicle x 2 one-way trips	=	<u>21</u> daily trips.
<b>Total</b>	<b>=</b>	<b><u>43</u> daily trips.</b>
Number of total Saturday trips x .57	=	<u>25</u> <b>PM peak trips.</b>

### Traffic during a Crush Saturday

Number of FT employees (during crush): <u>9</u> x 3.05 one-way trips per employee	=	<u>27</u> daily trips.
Number of PT employees (during crush): <u>0</u> x 1.90 one-way trips per employee	=	<u>0</u> daily trips.
Average number of weekend visitors: <u>30</u> / 2.8 visitors per vehicle x 2 one-way trips	=	<u>21</u> daily trips.
Gallons of production: <u>60000</u> / 1,000 x .009 truck trips daily x 2 one-way trips	=	<u>1</u> daily trips.
Avg. annual tons of grape on-haul: <u>97</u> x .11 truck trips daily <sup>4</sup> x 2 one-way trips	=	<u>1</u> daily trips.
<b>Total</b>	<b>=</b>	<b><u>51</u> daily trips.</b>
Number of total Saturday trips x .57	=	<u>29</u> <b>PM peak trips.</b>

### Largest Marketing Event- Additional Traffic

Number of event staff (largest event): <u>9</u> x 2 one-way trips per staff person	=	<u>18</u> trips.
Number of visitors (largest event): <u>100</u> / 2.8 visitors per vehicle x 2 one-way trips	=	<u>71</u> trips.
Number of special event truck trips (largest event): <u>1</u> x 2 one-way trips	=	<u>2</u> trips.

<sup>3</sup> Assumes 1.47 materials & supplies trips + 0.8 case goods trips per 1,000 gallons of production / 250 days per year (see *Traffic Information Sheet Addendum* for reference).

<sup>4</sup> Assumes 4 tons per trip / 36 crush days per year (see *Traffic Information Sheet Addendum* for reference).

**Proportional Share Calculations  
Soscol Ave/Imola Ave**

		<b>Total Volume Entering the Soscol Ave/Imola Ave</b>	
	<b>PM</b>		<b>PM</b>
<b>Project Trips (T)</b>	13	Existing	4291
		Future Year	6411

***Destription of Project Improvement:***

Unknown

***Calculation of Project Share***

$$P = T / (TB - TE)$$

where:

P = Equitable Share

T = Project trips during the affected peak hour

TB = Build-out volumes

TE = Existing volumes

T	13
TB	6411
TE	4291
<b>P</b>	<b>0.6%</b>

# Napa County Left Turn Lane Warrant Graph

