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Updated Initial Study/Mitigated Negative Declaration & Mitigation Monitoring Program

Truchard Family Winery P14-00330-UP & P14-00331-VAR
Planning Commission Hearing Date September 20, 2017

COUNTY OF NAPA
PLANNING, BUILDING & ENVIRONMENTAL SERVICES DEPARTMENT
1195 THIRD ST., SUITE 210, NAPA, CA 94559
(707) 253-4416

Initial Study Checklist

(form updated October 2016)
Revised per State CEQA Guidelines Section 15073.5[c][4]

Revised August 17, 2017

This Initial Study has been updated to respond to the comments received during the initial public comment period and Planning Commission hearing which occurred on May 3, 2017, and includes new technical information (biological resources and air quality/greenhouse gas emissions).

As a result of new information received the environmental determination has changed from a Negative Declaration to a Mitigated Negative Declaration (biological resources and hydrology / water quality mitigation measures added). Consequently, and pursuant to State California Environmental Quality (CEQA) Statute (Section 15088.5(a)), this Initial Study is being recirculated for comment prior to subsequent hearing by the Planning Commission.

Updated information is this Initial Study is shown in underlined and strikethrough text.

1. **Project Title:** Truchard Family Winery, Use Permit #P14-00330-UP and Variance #P14-00331-VAR

2. **Property Owner:** Anthony M. and Jo Ann Truchard; 3234 Old Sonoma Road, Napa CA 94559; (707) 253-7153

3. **Project Sponsor's Name and Address**: Anthony Truchard II; 3234 Old Sonoma Road, Napa CA 94559; (707) 253-7153; Anthony@truchardvineyards.com

4. **Representative**: Katherine Philippakis, esq. and Kirsty Shelton Gerosa; Farella, Braun + Martel; 899 Adams Street, St. Helena, Napa, CA 94574; (707) 967-4000; kgerosa@fbm.com & kp@fbm.com

5. **County Contact Person, Phone Number and email:** Charlene Gallina, Supervising Planner; (707) 299-1355; charlene.gallina@countyofnapa.org

6. **Project Location and APN:** The project is located on an approximately 11.52 acre parcel, within the AW: Agricultural Watershed zoning district approximately 1,320 feet south of Congress Valley Road and Old Sonoma Road intersection approximately 225 feet on the east side of the Old Sonoma Road located at 4062 Old Sonoma Road, Napa CA.; APN: 043-040-001. The project will rely on the adjacent 26 acre vineyard parcel (APN: 043-040-003) to dispose of the treated wastewater and on-site water storage tanks and utilizing the existing connection to the Congress Valley Water Department and/or well on the adjacent parcel (APN 043-061-022).

7. **General Plan Description:** Agriculture, Watershed, and Open Space (AWOS)

8. **Zoning:** Agricultural Watershed (AW) District

9. **Background/Project History:** Truchard Family Winery has been a local grape grower since 1970, and currently farms 270 acres of grapevines out of the 400 acres on 15 parcels. They have produced world-class estate wines since their first vintage in 1989 in the Carneros region.

   The subject parcel (APN: 043-040-001) is the first parcel they bought and it had a house and a barn. The house was demolished and the barn continued to be used for used on site for agricultural operations. A total of 4.58 acres of vineyards currently exist on the property. With this application request, a member of the Truchard Family is requesting the establishment of new winery on this property.

10. **Project Description:** Approval of a Use Permit to allow the construction of a new 100,000 gallon winery with the following characteristics:
    a. Construction of a 33,702 sf winery building and a 1,200 sf attached covered crush pad;
    b. Tours and tastings by appointment with a maximum of 40 visitors per weekday and 60 visitors on weekends/holidays for a maximum weekly total of 320 visitors;
    c. A marketing program, which consists of two (2) events per month for up to 30 people and four (4) annual events for up to 150 people. Portable restrooms to be provided for events over 90 people;
    d. Establishment of commercial catering kitchen for food and wine pairing activities;

e. Provision of food and wine pairings for the tours and tastings;
f. Employment of four (4) full time and three (3) part time employees;
g. Establishment of hours of operation: visitation 10:00 a.m. – 6:00 p.m., and non-harvest production 8:30 a.m.- 5:30 p.m.;
h. On premise consumption of wines produced on site within the winery building and adjacent patio areas in accordance with Business and Professions Code Sections 23358, 23390 and 23396.5 (AB2004-Evans Bill);
i. Construction of 13 parking spaces, and valet parking for large marketing events located on crush pad/outdoor work area;
j. Improvement of the southern existing driveway dedicated to winery visitors in conformance with the Napa County Road and Street Standards. The northern driveway to be dedicated for agricultural purposes, employees and production activities of the winery;
k. Construction of a new entry gate and winery signage for the southern driveway;
l. Replacement of the existing wooden bridge with a clear span bridge in compliance with California Department of Fish and Wildlife and Napa County Conservation Regulations;
m. Construction of an on-site wastewater system with disposal of treated wastewater on vineyards on the adjacent 26 acre parcel (APN: 043-040-003);
n. On-site water storage tanks and utilizing the existing connection to the Congress Valley Water Department and/or well on the adjacent parcel (APN 043-061-022).

A Variance application (P14-000331-VAR) is also requested to allow construction of the winery 178 feet within the 600 foot winery setback of Old Sonoma Road.

11. Environmental setting and surrounding land uses:

The project is located at 4062 Old Sonoma Road on an 11.52 acre parcel, within the AW: Agricultural Watershed zoning district and approximately 1,320 feet south of the Congress Valley Road and Old Sonoma Road intersection. The project area to be disturbed is greater than 1 acre, and the proposed new winery building will be located near the existing agricultural barn in the northwest corner of the property. The site topography is relatively flat with gentle slopes to the west toward an unnamed seasonal creek on the property. The project site is located approximately 2.20 miles to the east of the Napa River and outside the boundaries of the 100 and 500-year flood hazard zones. Native vegetation of the site includes grassland; however the entire site is disturbed and primarily planted with vineyards and developed with one existing barn structure and an irrigation reservoir. The predominant soil type on the project site is Bressa-Dibble complex, which is the Hydraulic Soil Group C. As a result of the 2014 South Napa Earthquake that occurred on August 24, 2014, it was discovered that an earthquake fault traverses the northeast corner of the property, which required redesign of the project to ensure no buildings would be constructed on this fault.

The neighboring parcels include rural residential and agricultural development and are mostly used as vineyards agricultural land. The winery in close proximity to the project site is Truchard Vineyards. The closest residence is approximately 640 feet to the southwest from the proposed winery.

The parcel is within the service area of the Congress Valley Water District, which will continue to provide water to the project site within the capacity of the existing meter. However, it should be noted that the Water District does not have complete control over water service within its boundaries and Water District is set to terminate on July 1, 2017, and until the Contract terminates, the Water District is bounded by its terms and Contract does not provide terms of water service after the Contracts terminates. After the contract is terminated, City of Napa Water District will maintain the existing water services.

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
Department of Fish and Wildlife

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 Assembly Bill 52 (AB 52) Public Resources Code section 21080.3.1? If so, has consultation begun?**

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.

Invitation for tribal consultation was completed pursuant to AB 52 and two responses were received. The first response was from the Yocha Dehe Wintun Nation dated January 6, 2017 stating that they had cultural interest on the project site, but were not aware of any known cultural resources near the project site and, therefore, cultural monitoring was not needed. The second response dated January 26, 2017 came from Middletown Rancheria Tribal Historic Preservation stating that they had no specific comments at that time, however, should any new information or evidence of human habitation be found as the project progresses, all work should cease and contact them immediately. A standard project condition of approval will be incorporated to address this Tribal Cultural Resources stipulation.

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.

Charlene Gallina — 8/17/17

Charlene Gallina, Supervising Planner
Napa County Planning, Building, and Environmental Services

Date

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

Discussion:

a-c. Visual resources are those physical features that make up the environment, including landforms, geological features, water, trees and other plants, and elements of the human cultural landscape. A scenic vista, then, would be a publicly accessible vantage point such as a road, park, trail, or scenic overlook from which distant or landscape-scale views of a beautiful or otherwise important assembly of visual resources can be taken-in. As generally described in the **Environmental Setting and Surrounding Land Uses** section, above, this area is defined by a mix of vineyard, winery, and residential uses.

Local regulations protecting scenic resources include the Napa County General Plan, and Napa County Zoning Ordinance, Chapter 18.106 (Viewshed Protection Ordinance) and Chapter 18.108 (Conservation Regulations). General Plan Policy AG/LU-10 directs that new wineries and other agricultural processing facilities should be designed to convey their permanence and attractiveness. They are otherwise allowed within agriculturally designated areas and considered an integral component of agricultural product processing critical to maintenance of the County's Agricultural Preserve. Wineries are consequently protected under the County's "Right to Farm" provisions. General Plan Agricultural Preservation and Land Use Goal AG/LU-1 guides the County to "preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County." General Plan Goal AG/LU-3 states that the County should "support the economic viability of agriculture, including grape growing, winemaking, other types of agriculture, and supporting industries to ensure the preservation of agricultural lands." Goal AG/LU-3 and Policy AG/LU-2 recognize wineries as agricultural uses. The "Right to Farm" is recognized throughout the General Plan and is specifically called out in Policy AG/LU-15 and in the County Code. "Right to Farm" provisions ensure that agriculture remains the primary land use in Napa County and is not threatened by potentially competing uses or neighbor complaints. Napa County's adopted General Plan reinforces the County's long-standing commitment to agricultural preservation, urban centered growth, and resource conservation. Policy AG/LU-10 ensures that the design of such facilities is complimentary to rural setting in which they lie. The proposed winery building features wood clad building resembling a barn, which was designed by an architect who has designed numerous wineries in Napa Valley and other well-known wine country destinations.

The project site is not subject to Viewshed Protection Ordinance because the project site does not contain a major or minor ridgeline and no construction is proposed on hillsides greater than 15% slope. The Viewshed Protection Ordinance requires buildings to comply with design review guidelines when located on or near ridgelines and/or steep slope that are visible from certain Viewshed Road. Old Sonoma Road is listed as a Viewshed Road, but the design guidelines are not technically applicable to the project because the site does not meet the hillside/ridgeline criteria. Nevertheless, as designed, the project would comply with the design review criteria of the Viewshed Guidelines, if they were applicable, featuring appropriate earth tone building materials and colors, shielded lighting, compliance with building height standards, and avoidance of reflective materials and surfaces.

The project also complies with the Conservation Regulations which protect riparian areas and limit native vegetation removal in hillside areas. This project primarily will occur in areas currently planted in vineyards and vineyard access roads. Views into the site from Old Sonoma Road are substantially screened by a heavily wooded riparian corridor west of the proposed building in compliance with Viewshed Guidelines. The project includes replacement of an existing vineyard access road bridge with a new clear span bridge. Construction of this bridge and associated roads will result in the removal of one tree in the vicinity of the proposed winery and branch trimming on several trims adjacent

to the replacement bridge. This tree trimming is minimal, complies with the Conservation Regulations, and results in the retention of the wooded riparian corridor.

Views into the project site from adjoining properties will not significantly be changed as a result of the project. The subject property and adjoining unincorporated properties are all predominately in agricultural use primarily featuring vineyards with several rural residences and agricultural support buildings and facilities interspersed throughout. Addition of the proposed winery building and facilities will not significantly change the rural character of the subject property or surrounding area. Incorporated property east of the project site has the potential to develop with single family residences although the existing setting remains as vacant rural land. Views of the proposed winery from this potential residential development do not constitute a potential significant aesthetic impact. These incorporated potential residential lands are located over 1,000 ft. at its closest point from the proposed winery building. The building has no potential to block views of major or minor ridgelines, scenic rock outcropping or otherwise substantial degrade the visual quality of the area.

-The project would not result in substantial damage to scenic resources or substantially degrade the visual character or quality of the site and its surroundings. The site topography is relatively flat with gentle slopes to the west toward an unnamed seasonal creek on the property which is heavily landscaped with natural vegetation. Furthermore, the site is currently developed with vineyards, a barn structure and surrounded with vineyards. Proposed physical improvements as part of the project consist of the construction of a 33,702 square foot new winery building, construction of a 1,200 square foot attached covered crush pad in which a variance of is being requested to allow construction of the winery 178 feet within the 600 foot winery setback of Old Sonoma Road. Because of the proposed project is set at a lower elevation and screened by natural vegetation, it will have minimal visual impact from the road with a less than significant impact to a scenic vista.

d. Hours of operation of the winery are proposed to be 8:30 a.m. to 6:00 p.m. (excluding harvest season), so that late, nighttime lighting (after 6:00 p.m.) would not occur for most months of the year. The marketing program involves two (2) events per month for up to 30 people and four (4) annual events for up to 150 people. The closest off-site sensitive receptor (a residence) to light and glare is approximately 640 feet to the southwest from the proposed winery. Vineyards will be located between the proposed winery and the residence; thus, the project will not have a significant potential to result in lighting impacts. The proposed winery use, if approved, would be subject to the County's standard condition of approval for wineries that limits the amount of outdoor lighting to the minimum necessary for operational and security needs. Up-lighting of buildings and landscaping is prohibited. The winery operators must keep lighting as low to the ground as possible and include shields to deflect the light downward. Avoidance of highly reflective surfaces would be required, as well, by the County's standard condition. This condition would apply to all winery activities (excluding harvest), including any events that would occur outdoors:

6.3a. ~~LANDSCAPING~~LIGHTING – PLAN SUBMITTAL
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.

6.3b. ~~LANDSCAPING~~LIGHTING – PLAN SUBMITTAL
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.

4.16a. GENERAL PROPERTY MAINTENANCE - LIGHTING
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.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FOREST RESOURCES.**[1] 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?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g), timberland as defined in Public Resources Code Section 4526, or timberland zoned Timberland Production as defined in Government Code Section 51104(g)?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion:

a/e. The project site is designated Farmland of Statewide Importance and Urban and Built-Up Land and 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 existing agricultural contract on the property. The project site currently has 4.58 acres of vineyards and only 0.98 acres of vineyards would be removed and 0.20 acres planted for a net reduction of 0.78 acres as part of the proposed project. There are no other changes included in this proposal that would result in the conversion of Farmland beyond the immediate project site. General Plan Agricultural Preservation and Land Use policies AG/LU-2 and AG/LU-13 recognize wineries, and any use consistent with the Winery Definition Ordinance and clearly accessory to a winery, as agriculture. As a result, this application would not result in the conversion of special status farmland to a non-agricultural use.

b. The County's zoning of the property is Agricultural Watershed District (AW), and the General Plan land use designation is Agriculture, Watershed, & Open Space (AWOS). The proposed winery is consistent with the property's zoning, as Napa County Code Section 18.20.030 lists wineries and related, accessory uses as conditionally permitted in the AW District. General Plan Policy AG/LU-20 also identifies processing of agricultural products (grape crushing/winemaking) as a use that is consistent with the AWOS designation. There is no Williamson Act contract applicable to this property.

c/d. According to the Napa County Environmental resource maps (based on the following layers – Sensitive Biotic Oak Woodlands, Riparian Woodland Forest and Coniferous Forest) the project site does not contain woodland or forested areas. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

Mitigation Measures: None required.

[1] "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?	☐	☐	☒	☐
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
	d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
	e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

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. ~~On June 2, 2010, the Bay Area Air Quality Management District's Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). These thresholds were designed to establish the level at which the District believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on the Air District's website and included in the Air District's May 2012 updated CEQA Guidelines.~~

~~On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the Air District had failed to comply with CEQA when it adopted the Thresholds. The court did not determine whether the Thresholds were valid on the merits, but found that the adoption of the Thresholds was a project under CEQA. The court issued a writ of mandate ordering the District to set aside the Thresholds and cease dissemination of them until the Air District had complied with CEQA. The Air District has appealed the Alameda County Superior Court's decision. The Court of Appeal of the State of California, First Appellate District, reversed the trial court's decision. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review, and the matter is currently pending there.~~

~~In view of the trial court's order which remains in place pending final resolution of the case, the Air District is no longer recommending that the Thresholds be used as a generally applicable measure of a project's significant air quality impacts. Lead agencies will need to determine appropriate air quality thresholds of significance based on substantial evidence in the record. Although lead agencies may rely on the Air District's updated CEQA Guidelines (updated May 2012) for assistance in calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures, the Air District has been ordered to set aside the Thresholds and is no longer recommending that these Thresholds be used as a general measure of project's significant air quality impacts. Lead agencies may continue to rely on the Air District's 1999 Thresholds of Significance and they may continue to make determinations regarding the significance of an individual project's air quality impacts based on the substantial evidence in the record for that project.~~

~~Over the long term, emissions resulting from the proposed project would consist primarily of mobile sources, including production-related deliveries and visitor and employee vehicles traveling to and from the winery. The Air District's 1999 CEQA Guidelines (p.24) states that projects that do not exceed a threshold of 2,000 vehicle trips per day will not impact air quality and do not require further study. The winery trip generation sheet included in the application and Traffic Impact Report prepared for the project calculates the proposed conditions for a typical weekday at approximately 50 total daily trips with 19 PM peak trips. Proposed conditions for a typical Saturday are calculated at 52 total trips with 30 PM peak trips and proposed conditions for a typical Saturday during crush are calculated at 50 total trips with 38 PM peak trips.~~

~~Vehicle trips generated are significantly below BAAQMD's recommended threshold of 2,000 vehicle trips/day for purposes of performing a detailed air quality analysis. Given the number of vehicle trips generated by this project, compared to the size of the air basin, project related vehicle trips would contribute an insignificant amount of air pollution and would not result in a conflict or obstruction of an air quality plan. The proposed project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.~~

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 (NOx and ROG), carbon monoxide (CO), nitrogen dioxide (NO2), and suspended particulate matter (PM10 and PM2.5). Other criteria pollutants, such as lead and sulfur dioxide (SO2), 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.

For the purposes of this project, the following thresholds of significance, are used to determine if an air quality impact would be significant which are consistent with BAAQMD guidelines. The project would result in a significant air quality impact if it would:

- cause daily construction-generated criteria air pollutant or precursor emissions to exceed 54 pounds per day (lbs/day) for ROG, 54 lbs/day for NOX, 82 lbs/day of PM10 exhaust, or 54 lbs/day of PM2.5 exhaust, or substantially contribute to emissions

concentrations (e.g., PM10) that exceed the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS);

- cause daily long-term regional criteria air pollutant or precursor emissions greater than 54 lbs/day for ROG and 54 lbs/day for NOX, 82 lbs/day of PM10 exhaust, or 54 lbs/day of PM2.5 exhaust, or substantially contribute to emissions concentrations (e.g., PM10) that exceed the NAAQS or CAAQS;
- not implement BAAQMD's Best Management Practices for dust emissions (e.g., PM10 and PM2.5);
- generate Toxic Air Contaminants (TAC) emissions that would expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million and/or a hazard index of 1;
- locate sensitive receptors where they would be exposed to a combined level of cancer risk from nearby sources of TACs that exceeds 100 in one million and/or a combined hazard index of 10. This threshold is consistent with the cumulative health risk threshold included in BAAQMDs CEQA Thresholds Options and Justification Report (BAAQMD 2009:5) as well as the prioritization scores BAAQMD uses to implement the Hot Spots Information and Assessment Act (ARB 2008); or
- create objectionable odors affecting a substantial number of people (i.e., five confirmed complaints per year averaged over three years).

The project was evaluated using the California Emissions Estimator Model® (CalEEMod), which is a statewide land use emissions computer model provided by the BAAQMD designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

The model is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act (NEPA) documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

Wineries, as a land use, are not themselves identified in the CalEEMod model. Therefore, to utilize the model, Planning Division Staff exercised their expertise in winery development review and assigned appropriate corresponding land use classifications used in the model to the various uses occurring within the winery. Conservative land use classifications were used. Hospitality areas were assigned a modeling land use classification for quality restaurant (2,220 sq. ft.) although visitation at wineries has a considerably lower intensity of customers per hour, and far fewer customers served daily than a typical high quality restaurant. Administrative functions were assigned office classification (4,600 sq. ft.) which directly correlates. Wine production areas were assigned a manufacturing land use classification (16,110 sq. ft.) although wine production, which involves substantial periods of fermentation and aging where minimal production activities occur, could reasonably be divided between manufacturing and lower intensity storage or warehousing land use.

Pollutant	Construction-Related Average Daily Emissions Threshold	Operational- Related Threshold	As modeled – Construction Related	As modeled – Operational Related
ROG	54 lbs./day	10 tons/yr.	0.6 tons/yr. or 3.31 lbs./day	.17 tons/yr.
NOx	54 lbs./day	10 tons/yr.	1.01 tons/yr. or 6.03 lbs./day	.42 tons/yr.
PM10	82 lbs./day	15 tons/yr.	.06 tons/yr. or .316 lbs./day	5.9 tons/yr.
PM2.5	54 lbs./day (exhaust)	10 tons/yr.	.05 tons/yr. or .29 lbs./day	5.7 tons/yr.
Green House Gas	None	1,100 MT of CO2e/yr.	n/a	354 MT of CO2e/yr.

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:

7.1c. 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 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:

7.1b. DUST CONTROL

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

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 residence is approximately 640 feet from the existing winery building site. 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 ~~Game~~ Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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~~ Wildlife or US Fish and Wildlife Service?	☐	☒	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, Coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

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. However, a draft Lake and Stream Alteration Agreement (LSAA) required by the California Department of Fish and Wildlife (CDFW) and prepared by the applicant identifies the potential presence of pallid bat, western pond turtle, and California giant salamander, all listed as special status species. During the original comment period for this initial study, a commenter identified that further analysis of potential adverse impacts to candidate, sensitive or special status species was warranted. ~~The project would not have a substantial adverse effect on any special status species, or species of particular concern, as there are none identified in the project area. The proposal and associated construction are minimal with no significant grading required. In addition, the site has been previously developed with vineyards, and an agricultural barn structure. Furthermore, there were no species or site conditions which would be considered essential for the support of a species with limited distribution or considered to be a sensitive natural plant community. The site has not been identified in any local/regional or State plans as being a sensitive community. The potential for this project to have an impact on special status species is less than significant.~~

In response, a site specific biological assessment was conducted by WRA Environmental Consultants (WRA) in May 2017 subsequent to the original comment period for this initial study, which is incorporated herein by reference. The assessment evaluates the potential for special status floral and fauna to occur within the project's potential area of affect. The assessment identifies a low potential for two special status species, pallid bat and western pond turtle, to occur and recommends precautionary mitigation measures to ensure no impacts occur to the species in the event they are present. Giant salamander was found to have no potential to occur on site. No candidate, sensitive or special status floral species were identified as well.

Pallid Bat:

Pallid bat is a California Special Concern species and Forest Service Sensitive species. A year-round resident in California, the pallid bat is found in arid desert areas, grasslands and oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California. Roost sites are typically rock outcroppings, caves, hollow trees, mines, buildings and bridges (Hermanson and O'Shea 1983). Pallid bats make use of similar structures for night roosting and will use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts. Pallid bats are largely inactive in the winter months and there is evidence for both hibernation and migration. Hibernation aggregations tend to be much smaller than summer aggregations. Pallid bats have been observed foraging during the winter when prey is available (Hermanson and O'Shea 1983). Copulation occurs in the fall, usually October through December, although in coastal California copulations have been observed as late as February. Females store the sperm and ovulation occurs the following spring. Parturition timing is determined by local climate and embryonic development usually takes about nine weeks with birth occurring in May or June. Twins are the norm in northern California but in other areas the pallid bat is known to have triplets. Maternity colonies range from 20 to 200 individual adult bats. Males roost in much smaller groupings (Hermanson and O'Shea 1983). The pallid bat feeds on large insects (20 to 70 mm in length). Prey is

most often caught on the ground. Jerusalem crickets, scorpions and beetles make up most of the diet of pallid bats central California. (Heady and Frick, Central Bat Research Group, 2007)

Bats use structures, such as bridges and buildings, for roosting habitats, including day roosts, night roosts, and maternity roosts. Day roosts are areas where bats are able to spend the non-active period of the day resting or in torpor, depending on the weather conditions. Day roosts provide shelter from the elements and safety from predators. Night roosts are used by bats to rest between foraging bouts, to allow for digestion of prey, to escape from predators, as shelter from weather, and possibly for social purposes. (Heady and Frick, Central Bat Research Group, 2007)

Night roosts are typically sites that retain heat from the day to aid the bats in maintaining the higher metabolism necessary for digestion. Maternity roosts are sites that provide protection from the elements and predators and provide the correct thermal environment for reproduction. Maternity roost sites tend to be warmer in temperature because breeding females need to maintain a high metabolism to aid in lactation and juvenile bats need to keep warm to maintain a metabolic rate that allows for rapid growth. Winter roosts are usually areas that have a stable low temperature suitable for hibernating or prolonged periods of torpor. (Heady and Frick, Central Bat Research Group, 2007)

Bats are very sensitive during the maternity season and may abandon their young if they are disturbed or disturbance may result in lowering of energy reserves affecting milk production and feeding of young. During hibernation, disturbance of hibernating bats can reduce their survival as they wake and move. During hibernation, a bat's body temperature lowers and their metabolic rate slows, meaning they use less energy and can survive on the fat they have stored up instead of trying to forage for food. Disturbance at a hibernation roost can cause the bat to awaken and increase their metabolic rate. This can result in a decrease in stored energy and decrease chance of survival through winter for the hibernating bat. Day and night roost sites are used ephemerally and there are both primary and secondary roost sites used by many bats. In an experimental study, Silvis et al (2015) found that bats where roosts were removed, did not cause bats to abandon or substantially alter their populations in areas where multiple roost sites were present. It did also did not alter populations in maternity roosts. The results were similar to observations made for other bat species. Temporary disturbance to day roosting bats will not result in significant impact because these bats are foraging nightly and often change day roost locations, therefore, no change in survival rates are anticipated as a result of daytime disturbance to day roost locations. Night roosts are roost sites which are utilized during nighttime foraging and bats are often not present at these locations during the day. Project activities are not occurring during the night when night roosts are utilized, therefore, no disturbance buffer is necessary for this roost type. (Silvis, Ford, and Britzke. 2015 Effects of Hierarchical Roost Removal on Northern Long-Eared Bat (Myotis septentrionalis) Maternity Colonies)

Within the project area of potential affect the existing barn, the farm road bridge (to be replaced), and adjacent trees were evaluated by WRA for the presence of pallid bat. No evidence of bat roosting was found within the bridge structure. Nearby trees and the existing barn were found to have potential for bat roosting although there was no evidence found that bat species are presently utilizing these features or the immediate area. No permanent loss of potential habitat will occur as a result of the project, however, construction activities could have temporary impacts should hibernating or maternity roosting bats be present during construction. WRA recommends that the site be surveyed for the presence of pallid bats prior to commencing construction. In the event bats are found during the pre-construction survey, then avoidance protocols from CDFW will be implemented as described in the pallid bat mitigation measure IV.1 listed below. Implementation of this mitigation measure will reduce any potential for impact to pallid bats to a less-than-significant level.

Western Pond Turtle

The northwestern pond turtle is a listed Federal and California Special Concern species, and are typically found in areas with permanent sources of water, including ponds, streams and creeks. The western pond turtle (Clemmys marmorata) is the only extant native aquatic turtle in California. This species inhabits a variety of lotic and lentic habitats, including streams, rivers, estuaries, ponds, marshes, and lakes (Zeiner et al. 1988). In addition, artificial or altered habitats are utilized, such as canals, excavated ponds, reservoirs and other impounded waterways (Holland 1991). Although, this turtle is widespread and exhibits plasticity in habitat use the species is in decline (Holland 1991; Jennings and Hayes 1994). Populations in Southern California are in danger of extinction (Jennings and Hayes 1994) and throughout the state it is considered a Species of Special Concern by the California Department of Fish and Game. Primary reasons for the decline of the species are the loss or alteration of habitat. Habitat loss in the Central Valley of California has extirpated many populations (Holland 1991), although some remaining extant populations appear stable (Germano and Bury 2001). In the north coast of California western pond turtles are widely distributed (Holland 1991), but trends in decline have been reported (see Jennings and Hayes 1994).

According to the CDFW, the northwestern pond turtle is known to leave aquatic sites during reproduction, aestivation and overwintering. Reproduction typically occurs in late April or early May, but may occur year-round if conditions are ideal (i.e. temperature, rainfall, and soil type). Shortly after mating, females migrate to upland areas to nesting sites up to 600 feet from the

water source (CDFW, 1994). Northwestern pond turtles nest in open, sunny areas with little vegetation to ensure the quick development of their young. Nesting for the northwestern pond turtle has been reported to occur up to 1,391 feet (402 meters) from water (Jennings and Hayes 1994), but is usually closer, averaging 92 feet (28 meters) from aquatic habitat (Rathbun et. Al. 2002). To avoid the drying of late summer and flooding of winter, northwestern pond turtles hibernate by burrowing into leaf litter in wooded upland habitats up to 1,640 feet (500 meters) away from water sources (Reese and Welsh, 1997). Two long term studies on the movement of the northwestern pond turtle calculate two separate overwintering averages. Rathbun et al. (2002) calculate an average distance from water of 164 feet (50 meters). In contrast, Reese and Welsh (1997) calculate an overwintering average of 643 feet (196 meters) from water. By using the relative sample size of each study, a weighted average from the two studies was calculated; this cumulative average overwintering distance from water is about 275 feet.

WRA Environmental Consultants surveyed the ponds and upland terrain of the subject property and vicinity in May 2017. No turtles were observed in any of the ponds on the subject property and on adjoining properties owned by the applicant. In addition, no turtles were observed in the blue line stream channel west of the winery site. The two ponds immediately adjacent to the property are manmade off-stream vineyard irrigation ponds. They are surrounded by vineyards and unpaved vineyard access roads which is not suitable upland habitat or nesting habitat. However, WRA notes that potential basking habitat is present in at least one of the ponds adjacent to the winery site. WRA concludes that there is a low potential for turtles to be present in the ponds, but recommends that pre-construction surveys occur and silt fences be erected on the perimeter of the building site during construction as precautionary mitigation measures to ensure no significant impacts occur to turtles should they be present. See mitigation measure IV.2 below for turtle avoidance measures. With implementation of the mitigation measure, the project's potential to result in impacts to western pond turtle is less-than-significant.

California Giant Salamander

The California giant salamander is listed by CDFW as a species of special concern. The species is endemic to Northern California and lives up to 6,500 feet (2,000 m) in elevation primarily in damp, coastal forests including coast Douglas fir (Pseudotsuga menziesii var. menziesii) and California coast redwood (Sequoia sempervirens) in both montane and valley-foothill riparian habitats. They tend to be common when they occur. The adult terrestrial form is found under surface litter and in tunnels underground, while the adult aquatic and larval forms are found mainly in cool, rocky streams and occasionally in lakes and ponds (Kucera, CDFW, 1997). The species is known to occur in drainages in the forests hills and mountains of Sonoma and western Napa counties which provide suitable pools and upland refugia for the species.

The project site primarily consists of vineyards with compacted dirt farm roads as well as an open dirt lot where the previously demolished residence once stood. These land features are not suitable habitat for salamander species. The blue line stream west of the winery site and in the vicinity of the farm road bridge was evaluated by WRA Environmental Consultants and found not to contain suitable habitat for California giant salamander. The blue line stream in the vicinity of the project does not provide sufficient inundation or pool habitat to support reproduction and is not in proximity to suitable habitat. The banks for the Study Area are developed with revetment walls and bridge supports limiting potential refugia, and also contains limited vegetation and burrows to support potential refugia. As such, the project does not have a significant potential to impact the species.

c/d/e. ~~According to the Napa County Environmental Resource Maps (based on the following layers – water bodies, vernal pools & vernal pool species) there is no existing structures beside the agricultural barn, irrigation pond and the vineyards. The irrigation pond is one of those features identified as artificially excavated freshwater ponds and are not considered natural habitat for species. No change to the existing ponds is proposed.~~

A USGS blue line stream traverses the western and northern central portions of the property. The existing wooden bridge that spans ~~an~~ this unnamed tributary to Congress Valley Creek will be replaced with a more substantial clear spanning ~~structure~~ bridge. A clear spanning bridge is environmentally superior to the existing bridge because the footings of the structure are located outside of the defined bed and bank for the creek resulting in no structural elements encroaching into the riparian corridor. The blue lines stream falls within the jurisdiction of the U.S Army Corps of Engineers (USACE), and CDFW (and the Regional Water Quality Control Board (RWQCB) concerning water quality / hydrology oversight – see Section IX. below). As such, the stream and adjoining riparian zone is considered a potential migratory corridor for animal species. The stream is damned a short distance downstream from the bridge site and the stream contains only intermittent flows, and therefore does not have the potential to act as a migratory corridor for fish species. As noted above and the WRA report, the Coastal Oak Woodland riparian corridor in the vicinity of the bridge does not contain suitable habitat for western pond turtle or California giant salamander. The bridge replacement project therefore has no known potential to significantly impact listed species. However, as a riparian corridor it is considered to potential serve as a migratory corridor for wildlife and construction of the replacement bridge could result in impacts to species if required permits from Responsible and Trustee agencies are not secured and implemented. Therefore, Mitigation Measure IV.3 listed below requires the permittee to obtain all required State and Federal clearances before commencing construction of the bridge replacement component of this project.

Under Section 404 of the Clean Water Act, the USACE has the authority to permit the discharge of dredge or fill material in waters of the United States, and permit work and placement of structures in navigable waters of the U.S. under Section 10 of the Rivers and Harbors Act of 1899. The Corps defines wetlands as: "sites that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR, Section 328.3(b)). Implicit in the definition is the need for a site to meet certain water, soil, and vegetation criteria to quality as a jurisdictional wetland. These criteria and the methods used to determine whether they are met are described in the Corps' 1987 wetlands delineation manual (Huffman-Broad, 2011).

~~A~~ Installation of a clear spanning bridge will allow for the applicant's voluntary removal of existing concrete pier supports, removal of revetment piers and supporting walls, and removal of most of the concrete retaining walls that form a narrow weir in the vicinity of the existing bridge. The optional removal of these existing manmade features from the stream channel is subject to USACE permitting requirements. Under the USACE's Nationwide Permit program, work performed within stream channels associated with a bridges serving commercial projects qualify for a Nationwide 39 Permit. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of commercial and institutional building foundations and building pads and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, storm water management facilities, and recreation facilities such as playgrounds and playing fields. The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (Section 10 and 404). The proposed bridge projects does not result in the loss of any non-tidal waters of the U.S. Removal of the existing manmade features within the stream channel will improve the riparian zone over existing conditions. Temporary construction-related incursions into the stream channel will be performed in accordance with State and Federal construction protocols, and will result in less than 50 lineal feet of the non-tidal wetland being disturbed, which is well below the thresholds qualifying under the Nationwide permit.

Animal species are overseen by CDFW as a Trustee Agency pursuant to CEQA Guidelines Section 15386(a). Pursuant to State Fish and Wildlife Code 1600 – 1602, a Lake and Streambed Alteration Agreement (LSAA) must be secured from CDFW prior to commencing construction. ~~–~~As a result of the bridge replacement, approximately 1,240 square feet of ruderal grassland are proposed to be temporarily impacted due to use as a construction staging area. ~~resulting in the proposed removal of 720 square feet~~. Furthermore, one yellow willow (Salix Lutea) and two white oak (Quercus Lobata) trees are proposed to be removed. To further protect the streambed, construction exclusion fencing will be installed forming a perimeter around trees and other native plants requiring protection. The applicant has incorporated into the project landscape plan any required removal or pruning of native trees or shrubs to be replaced at a 3:1 ratio. ~~A Lake and Streambed Alteration Agreement, (LSAA) will be required by the California Department of Fish and Wildlife, (CDFW) prior to construction.~~ Notification of the LSAA has already been submitted by the applicant to the Department of Fish and Wildlife. As a part of the LSAA process, CDFW requires that environmental planning and engineering plans be presented to demonstrate that the new bridge and associated construction will not cause harm to the creek environs and associated riparian plant and animal species. The LSAA will also require that environmental enhancement vegetation be monitored for a period of 5 years following construction and that success of plant establishment be reported to CDFW 2 to 3 times during that period. In addition to the mitigation measure below, a~~A~~ project specific condition will be included with project approval ensuring processing of the LSAA and compliance with final implementation prior to the issuance of a Final Certificate of Occupancy. ~~Therefore, as conditioned the potential for this project to have an impact on special status species is less than significant. Furthermore, no~~ No other winery-related development is proposed near the identified stream or within the required ~~Creekside~~ stream setback. All proposed improvements would occur within a previously developed footprint that is not a wildlife corridor. Therefore, project activities would not interfere with the movement of any native resident or migratory fish or wildlife species or with their corridors or nursery sites nor conflict with any local policies or ordinances protecting biological resources. Impacts would be less than significant.

f. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plans, Natural Community Conservation Plans or other approved local, regional or state habitat conservation plans because there are no plans applicable to the subject site. No impacts would occur.

Mitigation Measures: None required.

Mitigation Measure IV.1: Prevent Disturbance of Pallid Bat

Prior to construction, the permittee shall have a Bat Habitat Assessment conducted by a qualified biologist. The Habitat Assessment shall evaluate the trees and barn in the immediate vicinity of the overall project area for the presence of bats. The Habitat Assessment shall evaluate the suitable entry points and roost features, and shall provide focused surveys for roosting bats. If a pallid bat species is found, or if suspected roosts for special-status bats are identified, then the Habitat Assessment shall identify suitable performance measures for avoiding impacts as follows:

a. If hibernation or maternity roosting bats are discovered during the surveys, then a buffer of 100 to 150 feet shall be maintained. No such buffer shall be necessary for day or night roosting bats.
b. If eviction of bats is necessary, it shall be done by a biologist during the non-breeding season from September 1 to March 31. When evicting bats, by letting them leave and then closing entrances, structures and/or trees shall be removed carefully to avoid harming individuals, and torpid bats given time to completely arouse and fly away.
c. During the maternity season from April 1 to September 30, prior to construction, a qualified biologist shall determine if a bat nursery is present as potentially housing bats.
d. If an active nursery is present, disturbance of bats shall be avoided until the biologist determines that breeding is complete and young are reared.

Mitigation Measure IV.2: Prevent Disturbance of Wester Pond Turtle

Prior to construction, the permittee shall have a Survey for the presence of western pond turtle conducted by a qualified biologist. The Survey shall evaluate the two ponds and blue line stream in the immediate vicinity of the overall project area for the presence of turtles. If a western pond turtle species is found, then the Survey shall identify suitable performance measures for avoiding impacts as follows:

a. If turtles are discovered during the surveys, then a buffer of 100 feet shall be maintained until avoidance fencing is installed.
b. Install silt fencing, or a similar barrier preventing turtle incursion into the construction site, between the limits for work and the adjacent water features where turtle may be present. Fencing shall remain in place during the term of construction, and shall be monitored by the biologist.

Mitigation Measure IV.3: Prevent Significant Impact to Riparian Corridor

Prior to commencing construction of the replacement bridge, the permittee shall secure a Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife (CDFW). If and when the permittee exercises the option to conduct removal of existing bridge footings, piers, retaining walls, and/or install riprap or conduct other activities within stream channel, prior to commencing these activities within the stream channel the permittee shall secure approval of Nationwide Permit #39 or other appropriate authorization under the Federal Clean Water Actfrom the U.S. Army Corps of Engineers (USACE). All work performed shall be in conformance with CDFW and USACE requirements.

		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?	☐	☐	☒	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines§15064.5?	☐	☐	☒	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐
d)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

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 historic sites have been identified on the property.

Based on the Historical Resources Study of the Property dated January 19, 2017 conducted by Tom Origer & Associates, it was anticipated that prehistoric-period resources could be found within the project area and, an invitation for tribal consultation was completed independently pursuant to AB 52. The Native Heritage Commission, Cortina Band of Indians, Middletown Rancheria of Pomo Indians, Mishewal-Wappo Tribe of Alexander Valley and the Yocha Dehe Wintun Nation. Via an email dated December 14, 2016, the Native Heritage Commission responded stating that a search of the Sacred Land Files showed the presence of a tribal cultural resource; however, their search area consists of the entire township and range within the project site lies. They suggested that Scott Gabaldon of the Mishewal-Wapo Tribe of Alexander Valley be contacted for additional information. An email was sent to Mr. Galbaldon on December 21, 2016 to that effect. Mr.

Salsedo called on December 28, 2016 in response to the letter addressed to Mr. Gabaldon requesting the address for the project site so that the tribe could search their records. On January 18, 2017, Mr. Salsedo called back to say that the tribe had no record of any resources within the project site.

A letter dated December 14, 2016 was received from Mr. Leland Kinter with Yocha Dehe Wintun Nation stating that the project site is within the tribe's aboriginal territory; however, they were not aware of any cultural resources near the project site area. The letter further recommended that if new resources are found during the development of the project, they must be contacted. No responses were received as of the date of this report from Cortina Band of Indians and from the Middletown-Wappo Tribe of Alexander Valley.

On December 12, 2016, County Staff also sent out three consultation letters to Yocha Dehe Wintun Nation, Middletown Rancheria of Pomo Indians and to Mishewal-Wappo Tribe of Alexander. On January 6, 2017, Yocha Dehe Wintun Nation responded via a letter stating that they had reviewed the proposed project and concluded that it was within the aboriginal territories of the Yocha Dehe Wintun Nation and, therefore, they had cultural interest and authority in the proposed project area. The letter further stated that based on the information provided, Yocha Dehe Wintun Nation was not aware of any known cultural resources near the project site and, therefore, a Cultural Monitor is not needed. However, if any new information or cultural items are found, we should contact James Sarmento, the Cultural Resources Manager for Yocha Dehe Wintun Nation at (530) 723-0452, Email: jsarmento@yochadehe-nsn.gov

The following standard project condition of approval has been incorporated to address the Tribal Cultural Resources requirements and stipulations:

7.2 *ARCHEOLOGICAL 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.

Potential for historic resources was also evaluated in the Historical Resources Study of the Property dated January 19, 2017 conducted by Tom Origer & Associates, included herein by reference. The study finds that the subject property does not contain any historically significant structures or improvements. The general location of the proposed winery contained a residence and associated accessory buildings with historical records indicating that structures may have dated back to 1902. However, the residence and associated accessory structures and improvements (with the exception of a modernized well head) were demolished in the summer of 2006. The only remaining improvements include a modernized barn on the adjoining property owned by the project applicant and a farm road bridge crossing the blue line stream channel immediately west of the proposed winery site. The existing barn is not historic and it will not be altered or otherwise affected by the proposed project although winery access roads will be improved adjacent to the structure. The farm road bridge will be removed and replaced. Comments received during the initial public comment questioned whether the existing bridge structure qualified as a historic resource. In response, a subsequent historic analysis was performed to evaluate the bridge, which finds that the bridge does not meet the criteria to qualify as a historic resource. The subsequent analysis was prepared by Naomi Miroglio, as qualified historic architect with Architectural Resource Group, and her July 21, 2017 letter is incorporated herein by reference.

d. No human remains have been encountered on the property and no information has been encountered that would indicate that this project would encounter human remains. All construction activities would occur on previously disturbed portions of the site. However, if resources are found during project grading, construction of the project is required to cease, and a qualified archaeologist would be retained to investigate the site in accordance with standard condition of approval noted above. 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
VI.	**GEOLOGY AND SOILS.** Would the project:				

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil 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 Materials) D 4829.	☐	☐	☒	☐
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?	☐	☐	☒	☐

Discussion:

a. i.) The project site lies along an active faulty zone within the West Napa Fault Lines which runs along the east side of Old Sonoma Road as shown on the most recent Alquist-Priolo Earthquake Fault Zoning Map. Based on the project's Geological Study Report dated November 23, 2015 prepared by RGH Consultants, the nearest Fault Lines to the project site are distributed as follows: San Andreas 31 miles west, Healdsburg 10 miles west, Concord-Green Valley 8 miles east and West Napa Fault is 4 miles south. However, it must be noted that, RGH Consultants believe that further risk of fault rupture at the site is high. Based on their subsurface exploration program, they identified a surface fault rupture resulting from the South Napa Earthquake, and recommended to the applicant that structures not be constructed over active traces of the fault.

ii.) According with the project's Geological Study Report that was done by RGH Consultants dated November 23, 2015, data presented by the Working Group on California Earthquake Probabilities (2007) estimates the chance of one or more large earthquakes (Magnitude 6.7 or greater) in the San Francisco Bay region within the next 30 years to be approximately 63 percent. Therefore, future seismic shaking should be anticipated at the site. It will be necessary to design and construct the proposed improvements in strict adherence with current standards for earthquake-resistant construction. All areas of the Bay Area are subject to strong seismic ground shaking. Additionally, the site is within an area affected by strong seismic activity. Several northwest-trending Earthquake Fault Zones exist in close proximity to and within several miles of the site (Bortugno, 1982). Given this, 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. Therefore, impacts would be less than significant with mitigation.

iii.) 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.) According to the Napa County Environmental Resource Maps (Landslides line, polygon, and geology layers) there are no landslide deposits in the proposed development area.

b. The limited proposed improvements would occur on slopes of five percent or less. Based upon the Soil Survey of Napa County, prepared by the United States Department of Agriculture (USDA), the soils on site are comprised of Bressa-Dibble complex which is Hydraulic Soil Group C. The applicant has submitted a Stormwater Control plan as part of their application, which was reviewed and approved by the Engineering Division. The project would require incorporation of best management practices and would be subject to the Napa County Stormwater Ordinance which addresses sediment and erosion control measures and dust control, as applicable. The site plan identified the fault and

development is out of the required 30 foot setback. Therefore, as designed potential impacts would be less than significant. The predominant soil type on the project site is Bressa-Dibble complex, which is the Hydraulic Soil Group C.

c/d. According to preliminary geologic mapping of the St. Helena Quandrangle performed by the California Geologic Survey (CGS-2004), the property is underlain by alluvial deposits and the majority of the site is underlain by early or mid-Pleistocene fan or terrace deposits. Based on the Napa County Environmental Sensitivity Maps (liquefaction layer) the project site has a very low susceptibility for liquefaction on the entirety of the property. Development would be required to comply with the latest building standards and codes, including the California Building Code that would reduce any potential impacts to a less than significant level.

e. According to the Septic feasibility Study prepared by R.S.A. Engineering dated December 12, 2016, the adjacent parcel has adequate capacity to serve the project. The study concluded that the soil will be capable of disposing the wastewater onsite.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. **GREENHOUSE GAS EMISSIONS.** 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Discussion:

GHGs are the atmospheric gases, including carbon dioxide, methane, nitrogen dioxide, and synthetic fluorinated gases, whose absorption of solar radiation is responsible for global warming and that, contribute to climate change, a widely accepted theory/science explaining human effects on the atmosphere. Carbon dioxide (CO_2) is the principal GHG being emitted by human activities, and whose concentration in the atmosphere is most affected by human activity. Commercial and industrial sources of GHG include space conditioning and other metal and chemical production processes. Agricultural sources of carbon emissions include forest clearing, land use changes, and burning of fossil fuels related to goods movement and gas and diesel-powered vehicles and farm equipment (https://www3.epa.gov/climatechange/science/causes.html). CO_2 also serves as the reference gas to which to compare other greenhouse gases. The effect that each unit of the other GHGs (methane, nitrogen dioxide and synthetic fluorinated gases) has on causing the global warming effect is exponentially greater than the impact of a unit of CO_2, to the degrees of tens to tens of thousands of times. Thus, GHG emissions are measured in "carbon dioxide equivalents." Carbon dioxide equivalents (CO_2e) is a unit of measurement of GHG emissions that uses carbon dioxide as a common denominator, and it is a way to get one number that approximates total emissions from all the different gases that contribute to GHG emissions (BAAQMD CEQA Air Quality Guidelines, May ~~2012~~2017). CO_2e are measured in units of metric tons, equal to approximately 2,204 pounds.

Napa County has been working to develop a Climate Action Plan (CAP) for several years. In 2012, a Draft CAP (March 2012) was recommended using the emissions checklist in the Draft CAP, on a trial basis, to determine potential 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 GHG, 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, in order to ensure that projects address the County's goal related to reducing GHG emissions.

In July 2015, the County re-commenced preparation of the CAP to: 1) account for present day conditions and modeling assumptions (such as but not limited to methods, emission factors, and data sources); 2) address the concerns with the previous CAP effort as outlined above; 3) meet applicable State requirements; and 4) 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 No. 1: *2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016.* This initial phase included updating the unincorporated County's community-wide GHG emissions inventory to 2014 and preparing new GHG emissions

forecasts for the 2020, 2030, and 2050 horizon years. Table 1 of the Technical Memorandum indicates that two percent of the County's GHG emissions in 2014 were a result of land use change.

Additional information on the County CAP can be obtained at the Napa County Department of Planning, Building and Environmental Services or online at http://www.countyofnapa.org/CAP/.

a/b. Overall increases in GHG emissions in Napa County were assessed in the Environmental Impact Report (EIR) prepared for the Napa County General Plan Update and certified by the Napa County Board of Supervisors 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 emissions 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.

As discussed in the Air Quality section of this Initial Study, in 2010, the BAAQMD adopted and later incorporated into its 2011 CEQA Guidelines project screening criteria (Table 3-1 – Criteria Air Pollutants and Precursors & GHG Screening Level Sizes) and thresholds of significance for air pollutants, including GHG emissions, which have now been updated by BAAQMD through May 2017. The BAAQMD's threshold of significance for proposed projects' potential GHG emissions was set at 1,100 metric tons of CO_2e ($MTCO_2e$) per year. Though the BAAQMD cannot endorse the use of the 1,100 $MTCO_2e$ threshold due to a court decision, agencies may choose to use the threshold as best available information; thus, the 1,100 $MTCO_2e$ threshold 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 with "ongoing" winery operations are discussed. One-time construction emissions associated with the winery development project include 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 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). See Section XVI, Transportation/Traffic, for anticipated number of operational trips. 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 consists of construction and operation of a new winery on a portion of a site, the majority of which is currently developed with a vineyard and a barn for agricultural purposes. Using comparable land use categories as described in the Air Quality discussion, a project with 9,000 square feet of hospitality of accessory office use areas or 121,000 square feet of barrel storage/production area would potentially generate more than 1,100 $MTCO_2e$ annually and would be considered to have a potentially significant impact on the environment; the proposed winery is smaller than those screening criteria. More specifically, given the size of the proposed winery's hospitality and office spaces (approximately 8,960 square feet compared to the BAAQMD's screening criterion of 9,000 square feet) and production/barrel storage and ancillary use areas (approximately 24,018 square feet compared to the BAAQMD's screening criterion of 121,000 square feet), the proposed winery and its associated trips would not contribute a significant amount of air pollution to the region and thus would not have a significant air quality impact.

As noted in Air Quality, Section III., above projected air pollutants levels resulting from the project were modeled using BAAQMD's CalEEMod. Modeling indicated that the project will result in 354 $MTCO_2e$ annually which is far below the GHG emissions threshold. The applicant proposes to incorporate additional GHG reduction methods including: recycling 75 percent of all waste; installing water efficient fixtures; and using of recycled materials. The following GHG reduction methods have already been implemented at the project site: pre-plumb to accept photovoltaic panels in the future; compliance with CALGREEN Tier 1 energy efficiency standards, use of LED lighting, as well as motioned sensor/automatic times to reduced unwanted light, bicycle parking and locking facilities for guests, compost 75% food and garden material, planting of shade trees on the south side of the building elevation, installation of electrical vehicle charging stations with the parking area, serve locally grown food products as part of our food and wine pairings, educate 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. 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. For these reasons, project impacts related to GHG emissions are considered less than significant.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury or death involving wild-land fires, including where wild-lands are adjacent to urbanized areas or where residences are intermixed with wild-lands?	☐	☐	☒	☐

Discussion:

a. The proposed project would not involve the transport of hazardous materials other than those small amounts utilized in typical winery operations. A Business Plan would be filed with the Environmental Health Division should hazardous materials reach reportable levels. Impacts would be less than significant.

b. Hazardous materials such as diesel, maintenance fluids, and paints would be used onsite during construction. Should they be stored onsite, these materials would be stored in secure locations to reduce the potential for upset or accident conditions. The proposed project consists of a modification to an existing winery that would not be expected to use any substantial quantities of hazardous materials. Therefore, it would not be reasonably for the proposed project to create upset or accident conditions that involve the release of hazardous materials into the environments. Impacts would be less than significant.

c. There are no schools located within one-quarter mile from the proposed project site. According to Google Earth, the nearest school to the project site is Irene M. Snow Elementary School, located approximately 1.02 miles to the east. No impacts would occur.

d. Based on a search of the California Department of Toxic Substances Control Database, the project revealed some deposits of chlorinated pesticides and/or other hazardous materials contamination in the soil from the previous property owner that operated a structural pest control business from 1992 to 2003. However, reports on file in the Napa County records provided testimonial evidence that site investigative reports of contaminated soil removal, and a request for a case closure were instituted in 2005 and the Case Closure Report was completed by CSC

Engineers on November 15, 2005. After the completion of its review of the referenced reports, Napa County Department of Environmental Management issued a Case Closure Letter dated August 24, 2006 to Mr. Anthony M. Truchard. Based on all the evidence provided by SCS Engineers that is on file with Napa County, it can be determined that necessary site cleanup was properly carried out to the satisfaction of Napa County's Department of Environmental Health Management. Therefore no further mitigation is required.

e. No impact would occur as the project site is not located within the vicinity of any private airports.

f. The project site and the surrounding vineyards are all located within the AW (Agricultural Watershed) zoning district of the Napa County which allows wineries and uses accessory to wineries subject to use permit approval.

g. Based on the project site location and the traffic analysis conducted for the proposed project, no left-turn lane on Old Sonoma Road is warranted. The existing two access driveways - one dedicated to winery visitors and the other dedicated to winery employees/production activities and the agricultural purposes will meet Napa County Road and Street Standards upon construction of improvements. Therefore, the proposed winery building and existing agricultural barn would not obstruct emergency vehicle access. The project has been reviewed by the County Fire Department and Engineering Services Division and found acceptable, as conditioned.

h. The project would not increase exposure of people and/or structures to a significant loss, injury or death involving wild land fires. The project currently complies and would continue to comply with current California Department of Forestry and California Building Code requirements for fire safety. 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
IX.	**HYDROLOGY AND WATER QUALITY.** Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☒	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☒	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Discussion:

a. The project would not violate any water quality standards or waste discharge requirements. According to the Winery Wastewater Feasibility Report prepared by R.S.A. Engineering dated October 13, 2016, the project site and proposed system has adequate disposal capacity to serve the project. The Division of Environmental Health reviewed this report and concurred with its findings.

b. On January 14, 2014, Governor Jerry Brown declared a drought emergency in the state of California. The declaration stopped short of imposing mandatory conservation measures statewide. Mandatory water restrictions are being left to individual jurisdictions. On April 1, 2015, Governor Brown issued Executive Order B-29-15 imposing restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. However, such restrictions were not placed on private well users in rural areas. At this time, Napa County has not adopted or implemented mandatory water use restrictions. The County requires all use permit applicants to complete necessary water analyses in order to document that sufficient water supplies are available for their proposed projects.

To better understand groundwater resources, on June 28, 2011, the Napa County 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 Consulting Engineers (LSCE), who completed a County-wide assessment of groundwater resources (Napa County Groundwater Conditions and Groundwater Monitoring Recommendations Report, February 2011); developed a groundwater monitoring program (Napa County Groundwater Monitoring Plan 2013, January 2013) and also completed a 2013 Updated Hydrogeologic Conceptualization and Characterization of Groundwater Conditions (January 2013).

Groundwater Sustainability Objectives were recommended by the GRAC and adopted by the Board of Supervisors. These objectives acknowledged the important role of monitoring as a means to achieving groundwater sustainability and the principles underlying the sustainability objectives. 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, conducted by 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 (Milliken Sarco Tulocay) 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). LSCE prepared the 2014 Annual Groundwater Monitoring Report, presented to the Napa County Board of Supervisors on March 3, 2015.

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.

There are no active wells on the winery parcel. Currently, there are two wells on the parcel, located in the south and in the west of the winery parcel. These two wells were never fully developed and have been abandoned per Napa County standards. The Truchard family own parcels APN: 043-040-001 with 11.52 acres and APN: 043-061-022 with 126.1 acres which are both included in the water demand and are located at 4062 Old Sonoma Road. The two parcels are included in the groundwater demand analysis. The proposed project well will be located on Parcel 043-061-022. The Groundwater Recharge Report prepared by RSA, dated October 13, 2016 identified a water use criteria of .53 ac-ft. per year, and an annual of 6.3 ac-ft. in an average rainfall year. In accordance with the Napa County Availability Analysis (WAA), the estimated groundwater recharge rate in a dry year is assumed to be 75% of the average year.

In accordance with the Napa County Water Availability Analysis (WAA) prepared by RSA, also dated October 13, 2016, two water supply alternatives were analyzed. Alternative One analyzes relying on the existing municipal water connection for winery domestic and process from Congress Valley Water District, irrigation water from an existing project well located on APN 043-061-022. However, the water supplier is changing from Congress Valley Water District to the City of Napa. There is a current "will serve" from the Congress Valley Water District to serve the expected water demands. Because of the reasonable and foreseeable uncertainty the project demonstrated that the proposed new winery can be also provided by Alternative two, relying on groundwater from a new well for winery domestic and process water and irrigation water from an existing project well all located on APN 043-061-022. Therefore, in either scenario, it is determined that the project will have dependable and enough water supply sources. The water availability calculations for the two alternatives are presented below

Alternative 1-Winery Domestic and Process Water from Congress Valley Water District

APN 043-040-001 – Usage Type	Existing Usage [af/yr]	Proposed Usage [af/yr]
Vineyard Irrigation	2.29	1.95
Winery: Process Water Landscaping Domestic Water -Employees -Visitors -Events	 0.00 0.00 0.00	 1.53 1.36 0.24 • 0.104 • 0.10 • 0.04
Water Supplied from Congress Valley Water District	0.00	-1.77
Net Water Supplied from Well	2.29	3.31
Groundwater Recharge	6.30	6.30

APN 043-061-022 – Usage Type	Existing Usage [af/yr]	Proposed Usage [af/yr]
Vineyard Irrigation	41.20	41.20
Water Supplied from Well	41.20	41.20
Groundwater Recharge	59.59	59.59

Total (Combined Parcel) Water Supplied	Existing Usage [af/yr]	Proposed Usage [af/yr]
Water Supplied from Congress Valley Water District	0	-1.77
Water Supplied from Well	43.49	44.51
Groundwater Recharge	65.89	65.89

The proposed well water demand of 44.51 ac-ft. per year is less than the estimated annual recharge of 65.89 ac-ft. per year in an average rainfall year and less than the estimated annual recharge rate of 49.42 ac-ft. per year in a dry year. It is proposed that winery domestic and process water will be supplied from the Congress Valley Water District. A "will serve" letter, dated March 24, 2016 from the Congress Valley Water District has been provided to the applicant. If the above alternative is to be implemented to supply water to two parcels, the existing water usage will be 65.89 ac-ft. per year and the proposed water usage will remain at 65.89 ac-ft. year.

Alternative 2- All Winery Water Supplied by the Water Well

APN 043-040-001 – Usage Type	Existing Usage [af/yr]	Proposed Usage [af/yr]
Vineyard Irrigation	2.29	1.95
Winery: Process Water Landscaping Domestic Water -Employees -Visitors -Events	 0.00 0.00 0.00	 1.53 1.36 0.24 • 0.104 • 0.10 • 0.04
Net Water Supplied from Well	2.29	5.08
Groundwater Recharge	6.30	6.30

APN 043-061-022 – Usage Type	Existing Usage [af/yr]	Proposed Usage [af/yr]
Vineyard Irrigation	41.20	41.20
Water Supplied from Well	41.20	41.20
Groundwater Recharge	59.59	59.59

Total (Combined Parcel) Water Supplied	Existing Usage [af/yr]	Proposed Usage [af/yr]
Water Supplied from Well	43.49	46.28
Groundwater Recharge	65.89	65.89

The proposed well water demand of 46.28 ac-ft. per year is less that the estimated annual recharge of 65.89 ac-ft. per year in an average rainfall year and less that the estimated annual recharge rate of 49.42 ac-ft. per year in dry years.

c-d. The replacement bridge spanning the blue line stream west of the winery site will result in minor alterations of the riparian corridor. The permittee is proposing to remove existing piers and a concrete weir located within the stream channel as part of removal of the existing bridge structure. Following removal, a clear span bridge with no encroachments into the defined bed and bank will be located in place of the old structure. This bridge replacement project will result in an overall improvement in the hydrologic function of the stream as a result of the removal of the concrete weir and piers. However, these activities could result in temporary impacts to water quality during construction. As discussed in Section IV., Biological Resources, the proposed bridge replacement work is subject to approval by USACE, and CDFW. The permitting processes from both of these agencies mandate rigorous construction related best management practices designed to prevent or significantly reduce potential water quality impacts when work is occurring within and adjacent to stream channels. Therefore, implementation of Mitigation Measure IV.3, which requires that the permittee obtain clearance from USACE and CDFW prior to commencing construction will ensure that the project does not result in significant water quality impacts or result in a significant alteration of the stream channel.

The project is also subject to National Pollution Discharge Elimination System (NPDES) permit program administered by Napa County in concert with State's Regional Water Quality Control Board (RWQCB). The NPDES permit program was created in 1972 under the provisions of the Clean Water Act (CWA), and addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. The permit provides two levels of control: technology-based limits and water quality-based limits. Under the CWA, EPA authorizes the NPDES permit program to state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. In states authorized to implement CWA programs, EPA retains oversight responsibilities. California is one of 46 states and one territory currently authorized to implement the NPDES program, which is administered within California by those local agencies who local codes and programs have be endorsed by the State, which is the case for Napa County.Storm Water Pollution Prevention Program (SWPPP). A preliminary SWPPP was prepared for the project by RSA Consulting Engineers, and reviewed for compliance with County and RWQCB standards by a licensed civil engineer and certified stormwater inspector with the Engineering Division. The SWPPP was found to comply with standards as designed and conditioned.

The remainder of the project would not substantially alter the drainage pattern on site or cause a significant increase in erosion or siltation on or off the cultivated agricultural vineyard site. Impacts from the winery improvements other than the bridge would be less than significant.

e. The preliminary grading and drainage plan and stormwater control plan have been reviewed by the Engineering Division. As conditioned, impacts would be less than significant.

f. There is nothing included in this proposal that would otherwise substantially degrade water quality. No information has been encountered that would indicate a substantial impact to water quality.

g/h. No portion of the project site is located within the FEMA-designated 100-year floodplain. No impact would occur.

i/j. The parcel is not located in an area that is subject to inundation by tsunamis, seiches, or mudflows. Impacts would be less than significant.

Mitigation Measures: ~~None.~~

See Mitigation Measure IV.3 in Biological Resources

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

Discussion:

a. The proposed project site is currently developed with vineyard and an agricultural barn. Surrounding land uses are also predominantly agricultural and rural residential and would not be physically modified (as by demolition of an existing structure or division of land), such that the vineyard and winery uses would integrate with the property's surroundings rather than divide an existing, established community.

b,c. The project site is zoned Agricultural Watershed (AW), which allow a winery upon grant of a use permit. 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 proposed project is compliant with the use limitations of the Napa County Zoning Ordinance. The project includes an application for a variance to allow the construction of the winery within the required 600 foot winery setback from Old Sonoma Road. The winery is proposed approximately 178 feet from the centerline of Old Sonoma Road.

Agricultural Preservation and Land Use Policy AG/LU 1 of the 2008 General Plan states that the County shall, "preserve existing agricultural land uses and plan for agriculture and related activities as the primary land uses in Napa County." The property's General Plan land use designation is AWOS (Agricultural, Watershed, and Open Space), which allows "agriculture, processing of agricultural products, and single-family dwellings." More specifically, General Plan Agricultural Preservation and Land Use Policy AG/LU-2 recognize wineries and other agricultural processing facilities, and any use clearly accessory to those facilities, as agriculture. 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.

The proposed use of the property for the "fermenting and processing of grape juice into wine" (NCC §18.08.640) supports the economic viability of agriculture within the county consistent with General Plan Agricultural Preservation and Land Use Policy AG/LU-4 ("The County will reserve agricultural lands for agricultural use including lands used for grazing and watershed/ open space…") and General Plan Economic Development Policy E-1 (The County's economic development will focus on ensuring the continued viability of agriculture…).

The General Plan includes two complimentary policies requiring wineries to be designed generally of a high architectural quality for the site and its surroundings. There are no applicable habitat conservation plans or natural community conservation plans applicable to the property.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XI.	**MINERAL RESOURCES.** Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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. No impacts would occur.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XII.	**NOISE.** 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?	☐	☐	☒	☐
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Discussion:

a/b. The project would result in a temporary increase in noise levels during grading and construction of the proposed new driveway and parking area. This project is not subject to a left-turn lane requirement, and therefore, the noise level during construction would be reduced. Construction activities would be limited to daylight hours using properly muffled vehicles. Noise generated during this time is not anticipated to be significant. As such, the project would not result in potentially significant temporary construction noise impacts or operational impacts. Because the nearest residence to the project site is approximately 640 feet to the southwest of the proposed project site, there is a low potential for impacts related to construction noise to result in a significant impact. Further, construction activities would occur during the period of 7am-7pm on weekdays, during normal hours of human activity. All construction activities would be conducted in compliance with the Napa County Noise Ordinance (Napa County Code Chapter 8.16). The proposed project would not result in long-term significant construction noise impacts. Conditions of approval would require construction activities to be limited to daylight hours, vehicles to be muffled, and backup alarms adjusted to the lowest allowable levels. Impacts would be less than significant. A standard noise condition of approval applied to use permits 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.

c/d. Noise from winery operations is generally limited and intermittent, meaning the sound level can vary over the course of the year, depending on the activities at the winery. The primary noise-generating activities are equipment associated with wineries include refrigeration equipment, bottling equipment, barrel washing, de-stemmer and press activities occurring during the harvest crush season, and delivery and delivery trucks and other vehicles. Community noise is commonly described in terms of the "ambient" noise level which is defined as the all-encompassing noise level associated with a given noise environment. The Napa County General Plan EIR indicates the average, or equivalent, sound level (L_{eq}) for winery activities is 51dBA in the morning and 41dBA in the afternoon. Audibility of a new noise source and/or increase in noise levels within recognized acceptable limits are not usually considered to be significant noise impacts, but these concerns should be addressed and considered in the planning and environmental review processes.

The standard conditions of approval as indicated above would require that any exterior winery equipment be enclosed or muffled and maintained so as not to create a noise disturbance in accordance with the Napa County Code. The proposed marketing activities could create additional noise impacts, with the submitted marketing plan including an additional 24 events of 30 guests and four (4) events of up to 150 guests on an annual basis. The Napa County Noise Ordinance, which was adopted in 1984, sets the maximum permissible received sound level for a residence in a rural area as 45 dBA between the hours of 10 p.m. and 7 a.m. While the 45 dBA limitation is strict (45 dBA is roughly equivalent to the sound generated by a quiet conversation), the area surrounding the subject property is developed, with large lot residential uses and vineyards with the nearest residence located approximately 640 feet from proposed project site. The potential for the creation of significant noise from visitation is significantly reduced, since the tasting areas are predominantly within the winery (hospitality building) itself. Continuing enforcement of Napa County's Noise Ordinance by the Division of Environmental Health and the Napa County Sheriff, including the prohibition against amplified music, should further ensure that marketing events and other winery activities do not create a significant noise impact. Events and non-amplified music are required to finish by 10:00 p.m. The proposed project would not result in long-term significant permanent noise impacts. A standard noise condition of approval applied to use permits is as follows:

4.10 AMPLIFIED MUSIC
There shall be no amplified sound system or amplified music utilized outside of the approved, enclosed, winery buildings.

e/f. The project site and its vicinities are located within Zone AW, and are located more than two miles away from the influence area of the Napa County Airport or any private airstrip. Based on this information, 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
XIII.	**POPULATION AND HOUSING.** 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)?	☐	☐	☒	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

a. Staffing for the winery would include up to a maximum of four (4) full time and three (3) 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 four (4) and three (3) part time employees which are part of this project could lead to minor population growth in Napa County. Relative to the County's projected low to moderate growth rate and overall adequate programmed housing supply that population growth does not raise to a level of environmental significance. In addition, the project would 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 would not displace a substantial volume of existing housing or a substantial number of people and would not necessitate the construction of replacement housing elsewhere. No impacts would occur.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. **PUBLIC SERVICES.** 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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Discussion:

a. Public services are currently provided to the project area and the additional demand placed on existing services as a result of the proposed project would be minimal. Fire protection measures would be required as part of the development pursuant to Napa County Fire Marshall conditions and there would be no foreseeable impact to emergency response times with compliance with these conditions of approval. The Fire Department and Engineering Services Division have reviewed the application and recommend approval, as conditioned. School impact fees, which assist local school districts with capacity building measures, would be levied pursuant to building permit submittal. The proposed project would have minimal impact on public parks as no residences are proposed. Impacts to public services would be less than significant.

Mitigation Measures: None required.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. **RECREATION.** 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Discussion:

a. The project would not significantly increase use of existing park or recreational facilities based on its limited scope. Impacts would be less than significant.

b. No recreational facilities are proposed as part of the project. No impact would occur.

Mitigation Measure(s): None.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI.	**TRANSPORTATION/TRAFFIC.** 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e)	Result in inadequate emergency access?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Discussion:

a/b A Traffic Analysis, dated January 28, 2016, was prepared by W-TRANS in accordance with the criteria established by the Napa County, and is consistent with the standard traffic engineering techniques. The project-related traffic impacts to the intersection of State Route (SR) 12/SR 121/SR 29 were also considered. Old Sonoma Road is a two-lane undivided highway that runs north-south in the study area, with eleven-foot travel lanes in each direction, and a posted speed limit of 45 miles per hour (MPH). Based on mechanical tube counts collected in October 2013, the average daily traffic (ADT) on Old Sonoma Road is approximately 4,500 vehicles per day on weekdays and 3,600 vehicles per day on weekend days. The study looked at existing and proposed trip generation rates, trip distribution, roadway segment operations, cumulative conditions, impacts to Old Sonoma Road intersections, and the County left-turn lane warrant.

The proposed project would generate an average of 50 new weekday trips and 52 new weekend trips, including 19 weekday PM peak hour trips and 30 Saturday PM peak hour trips. Proposed conditions for a typical Saturday crush are calculated at 67 total trips and 38 PM peak trips. The Old Sonoma Road is currently operating acceptably and would be expected to continue operating acceptably under Cumulative Conditions with or without the proposed project. The marketing events proposed for the project would be held outside of traffic peak periods. Events would be scheduled to begin and end outside of normal traffic peak period of 4:00 p.m. to 6:00 p.m. for weekdays and 12:00 p.m. to 2:00 p.m. for weekend days. As a result, no significant event-related traffic impacts would be expected during the weekday p.m. or Saturday peak periods.

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)

Cumulative operating conditions were determined by the calculating the project's percentage contribution to the total growth in traffic from existing conditions, and compared with growth projected and modeled in the horizon year (2030) of the General Plan. Horizon year conditions were evaluated both with project and without project generated traffic to determine the project's contribution to cumulative conditions. General Plan horizon year cumulative growth analysis accounts for traffic increases resulting from forecasted development in both unincorporated Napa County as well as the cities of Napa County and neighboring counties, and thus accounts for cumulative traffic increases possible from development of additional residential developments within city limits in proximity to the project. The 2007 update to the General Plan identifies Old Sonoma Road to operate at a LOS C under the 2003 conditions as well as under projected 2030 cumulative conditions. As compared to Napa County's LOS Standard of LOS D, Old Sonoma Road is expected to continue operating better than the County's standard with the higher volumes projected for the horizon year of 2030. Based on the limited number of project trips generated as well as the available capacity of Old Sonoma Road, Old Sonoma Road would be expected to operate acceptably under cumulative conditions. Regionally, the project is located northwest of the intersection of SR12/SR 121/SR29. Old Sonoma Road, can be accessed from Napa, north of SR12/SR121/SR29, or at SR12-SR121/Old Sonoma Road, west of SR12/SR121/SR29. Based upon the submitted W-Trans Traffic Analysis, Old Sonoma Road is currently operating acceptably and would be expected to continue operating acceptably under cumulative conditions with or without the proposed project. Furthermore, the proposed project would be expected to result in minimal, if any, change to intersection delay at SR12/SR 121/SR29.

Access to the project would be through two existing driveways on Old Sonoma Road, located approximately 650 and 1,000 feet south of Congress Valley Road. One driveway would be for winery operations and employee use/agriculture purposes only and the other driveway would be used exclusively by tasting room visitors. Sight distance along Old Sonoma Road at the project driveways were 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 are based on stopping sight distance. The approaching travel speeds are used asthe basis for determining the recommended sight distance. Additionally, the stopping sight distance needed fora 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. The posted speed on Old SonomaRoad is 45 miles per hour which would require a minim u m stopping site distance of 360 feet. The available site distance from both driveways are greater than or equal to 360 feet in both the north and south directions. Therefore, the site distances at both project driveways are adequate.

The need for a left-turn lane on southbound Old Sonoma Road at the project driveways was also evaluated using Napa County's Left-Turn Lane Warrant, which is based on the ADT of the roadway and the projected ADT of the proposed use, as well as safety criteria. Based on the intended users of each driveway, the employee driveway is expected to generate an ADT of 19 vehicle trips while the tasting room driveway has an anticipated ADT of 31 vehicle trips per weekday. Under Existing plus Project conditions, with approximately 4,500 vehicles per weekday on Old Sonoma Road, the proposed project volumes would not exceed the left-turn lane warrant threshold on Old Sonoma Road at either driveway.

c. No air traffic is proposed and there are no new structures proposed for this project that would interfere with or require alteration of air traffic patterns. No impact would occur.

d-e. The site is currently accessed via two existing driveways located approximately 650 feet and 1,000 feet south of Old Congress Valley Road. The project will not result in any increased hazards or in inadequate emergency access. The Fire Department and Engineering Services Division have reviewed the application and recommend approval, as conditioned.

f. The project is proposing 13 parking spaces. Staff believes this number of parking spaces is commensurate with the proposed number of employees and visitation. The proposed parking will meet the anticipated parking demand and will avoid providing excess parking, and will therefore have no impact.

g. There is no aspect of this proposed project that would conflict with any adopted policies, plans, or programs supporting alternative transportation. The applicant has indicated that the project will incorporate bicycle incentives and providing priority parking for efficient transportation as part of their voluntary best management practices:

Mitigation Measures: None required.

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

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 in accordance with Public Resources Code Section 21080.3.1, and two responses dated January 6, 2017 and January 26, 2017 were received as discussed above under the Section V. Cultural Resources. Consultation with representatives of local Native American tribes who have a cultural interest in the area was not requested. 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.

Mitigation Measures: None required.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVIII.	**UTILITIES AND SERVICE SYSTEMS.** Would the project:				
	a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
	b) Require or result in the construction of a new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
	c) Require or result in the construction of a new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
	d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
	e) Result in a determination by the wastewater treatment provider 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?	☐	☐	☒	☐
	f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

a-b. Wastewater disposal would be accommodated on-site in compliance with State and County regulations. The project will not exceed wastewater treatment requirements of the Regional Water Quality Control Board and will not result in a significant impact. The project will not require construction of any new water treatment facilities that will result in a significant impact to the environment. Water will be provided through an existing well located by Congress Valley District/City of Napa and an existing well and/or through a new well located on APN 043-040-001. Potential impacts would be less than significant.

c. The project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, which would cause a significant impact to the environment. The preliminary grading and drainage plan and storm water control plan have been reviewed by the Engineering Division. As conditioned, impacts would be less than significant.

The project is not expected to violate any water quality standards or waste discharge requirements nor substantially deplete local groundwater supplies. The facility's domestic water system is classified as transient, non-community and is managed by employees of the winery. There are no active wells on the winery parcel. Currently, there are two wells on the parcel, located in the south and in the west of the winery parcel. These two wells were never fully developed and have been abandoned per Napa County standards. According to the Water Availability Analysis (WAA) prepared by R.S.A. Engineering, there is sufficient ground water for both irrigation and domestic water purposes to be provided by the new project well in the event that the Congress Valley Water District or City of Napa are not able to supply the needed water for the daily winery operations.

d. Wastewater will be treated on-site and will not require a wastewater treatment provider. As such, impacts would be less than significant.

e. According to the Napa County Baseline Data Report, all of the solid waste landfills where Napa County's waste is disposed have more than sufficient capacity related to the current waste generation. Therefore, impacts would be less than significant.

g. The project would comply with federal, state, and local statutes and regulations related to solid waste. 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
XIX.	**MANDATORY FINDINGS OF SIGNIFICANCE**				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐☒	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion:

a. As discussed in **Section IV, Biological Resources** and **Section IX, Hydrology and Water Quality** above, all potential biological and hydrological related impacts would be less than significant with mitigation incorporated. As identified in **Section V** above, no known historically sensitive sites or structures, archaeological or paleontological resources, sites or unique geological features have been identified within the project site. In the event archaeological artifacts are found, a standard condition of approval would be incorporated into the project. Impacts would be less than significant with the incorporation of the biological resources mitigation measure and standard condition of approval related to cultural resources.

b. The project does not have impacts that are individually limited, but cumulatively considerable. Potential air quality, greenhouse gas emissions, hydrology, and traffic impacts are discussed in the respective sections above. The project would also increase the demands for public services to a limited extent, increase traffic and air pollutions, 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: recycling 75 percent of all waste; installing water efficient fixtures; and using of recycled materials. The following GHG reduction methods have already been implemented at the project site: generation of on-site renewable energy; restoration on an on-site seasonal creek by replanting natural vegetation; use of energy conserving lighting; availability of on-site bicycle parking; located on a primary class II bicycle route with an existing class II bicycle lane; installation of a metered connection to the Los Carneros Water District recycled water line; installation of rock lined vegetated swales on the southern site boundary; south of the production building; and in the seasonal creek; installation of drip and drought tolerant landscaping; composting 75 percent of food and garden material; abiding by a responsible procurement code; certification as a Napa Green Winery and Napa Green Land; education to staff and visitors on sustainable practices; retaining biomass removed via pruning and thinning rather than burning on-site; and certification under the Certified California Sustainable Winegrowing (CCSW) program.

Potential impacts are discussed in the respective sections above. The project trip generation was calculated from winery operations, where the calculated trips reflect total visitation, on-site employees and wine production trips generated by the winery. Under the Napa County General Plan, traffic volumes are projected to increase and will be caused by a combination of locally generated traffic as well as general regional growth. The General Plan EIR indicates that much of the forecasted increase in traffic on the arterial roadway network will result from traffic generated outside of the county, however, the project would contribute a small amount toward the general overall increase.

General Plan Policy CIR-16 states that "The County will seek to maintain an arterial Level of Service D or better on all County roadways, except where the level of Service already exceeds this standard and where increased intersection capacity is not feasible without substantial additional right of way." Old Sonoma Road currently operates at a LOS C. With the proposed new traffic Old Sonoma Road will continue to operate at a LOS C and will not contribute to potential cumulative impacts and therefore is a less than significant level.
State Route 12/121 is listed as two-lane Rural Throughways on the General Plan Circulation Map and already operates at a LOS E. As discussed above under Section XVI Transportation, the project's additional traffic at the peak hours would avoid a deterioration of the level

of service on Highway 12/121 by adding less than one percent to the existing volume, reducing potential cumulative impact to a less than significant level.

c. All impacts identified in this initial study are either less than significant after mitigation or less than significant and do not require mitigation. Therefore, the proposed project would not result in environmental effects that cause substantial adverse effects on human being either directly or indirectly. Impacts would be less than significant.

Mitigation Measures: ~~None Required.~~ See Mitigation Measures Section IV and IX

wra
ENVIRONMENTAL CONSULTANTS

August 7, 2017

Anthony Truchard
Truchard Family Vineyards
3234 Old Sonoma Road
Napa, California 94559

RE: Response to Western Pond Turtle Mitigation Measures for Truchard Winery Project

Dear Mr. Truchard,

This letter is to respond to questions regarding potential western pond turtle (*Actinemys marmorata*) mitigation measures and recommendations for the proposed Truchard Winery Project (P14-00330-UP/Variance P14-0033; Project). This letter is supplemental to the wildlife assessment letter by WRA, Inc (WRA) dated June 21, 2017 to provide additional pre-cautionary measures for western pond turtle.

No western pond turtles were observed in the two irrigation ponds immediately adjacent to the proposed Project during the May 12, 2017 survey. The irrigation pond immediately east of the proposed Truchard Winery Project has an access road along the western and southern banks of the irrigation pond but is otherwise surrounded on all sides by vineyards. The access road is graded with hard-packed soils. The vineyard and access road do not provide suitable nesting habitat for western pond turtle based upon substrate. Accordingly, western pond turtles are not believed to be present.

Although no pond turtles were observed, a question has been raised on whether mitigation measures similar to those proposed for the Napa Oaks Project, a proposed development on undeveloped lands east of Truchard Winery, would be appropriate here. The Napa Oaks Project mitigation measures for western pond turtle are based upon an assessment conducted by Rana Resources in February 2011 in which western pond turtle were reportedly observed through binoculars from a long-distance view point in an irrigation pond adjacent to the proposed Napa Oaks Project Site. There is undeveloped habitat to the north and east of this pond, and vineyards to the south and west.

One proposed western pond turtle mitigation measure for the Napa Oaks Project is installation of silt fencing along the boundary of construction operations to prevent movement of pond turtle onto the construction site. WRA concurs with this measure for the Truchard project site, as pond turtles will move through upland habitats in search of nesting habitat or when dispersing between habitats. Although no pond turtles were observed in the irrigation pond immediately adjacent to the Truchard Winery Project, WRA concurs installation of silt fencing prior to initial ground disturbance is a pre-cautionary measure to prevent western pond turtle, if present, from entering the project site during ground disturbance.

The second mitigation measure for the Napa Oaks Project Site is a setback of 200 feet from the edge of high water. The 200-foot setback is intended to provide an area for wetland mitigation and upland habitat for western pond turtle. Upland habitat for pond turtles is used for nesting and overwintering. As described above, the Napa Oaks Project Site currently contains undeveloped and potential upland habitat for western pond turtle.

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In contrast, the irrigation pond immediately east of the proposed Truchard Winery Project does not have suitable upland habitat surrounding the pond, and the proposed Truchard Winery Project will not convert upland habitat for pond turtle. The substrate and soils in the Truchard Winery Project Area are hard-packed and the access road is graded. No nesting habitat or vegetative cover suitable for overwintering turtles is present at the Truchard Winery Project. No impacts to pond turtle nests, hatchlings, or overwintering adults is anticipated. Since there is no need to maintain upland nesting habitat because it is not present, there is no biological need for a buffer of any size. WRA therefore does not recommend this as a mitigation measure here.

Instead, as an added measure of precaution, a pre-construction survey within the irrigation pond immediately east of the Truchard Project Area is recommended. The pre-construction survey shall be conducted no more than 14 days prior to installation of the silt fence. The installation of silt fencing will be sufficient to prevent pond turtle from entering the Project Area if present, but the survey will provide an update on the presence of the species in the adjacent irrigation pond prior to Project activities.

In sum, no pond turtles were observed during a WRA survey on May 12, 2017 for pond turtle in the irrigation pond east of the proposed Truchard Winery Project. Based on this most recent survey and habitat conditions adjacent to the pond and within the Project Area, no pond turtles are anticipated to be present or impacted by the Project. However, as added precaution, installation of silt fencing between project activities during construction and the irrigation pond is recommended. A pre-construction survey of the adjacent irrigation pond is also recommended to provide an update on presence of pond turtle in adjacent habitats. No upland habitat is present in the Truchard Winery Project Area; therefore, the 200-foot buffer is not appropriate or recommended.

Please do not hesitate to contact me if you have any further questions regarding potential western pond turtle recommendations.

Sincerely,

Patricia Valcarcel

Patricia Valcarcel
Associate Wildlife Biologist

wra
ENVIRONMENTAL CONSULTANTS

June 21, 2017

Anthony Truchard
Truchard Family Vineyards
3234 Old Sonoma Road
Napa, California 94559

RE: Results of the Western Pond Turtle Survey and Special-Status Wildlife Review for the Truchard Winery Study Area

Dear Mr. Truchard,

This letter is to report the findings of the western pond turtle (*Actinemys marmorata*) survey and review of special-status wildlife species in the vicinity of the proposed Truchard Winery Project Area (Study Area). The Study Area is located at 4062 Old Sonoma Road, Napa, Napa County, California. Western pond turtle is a California Department of Fish and Wildlife (CDFW) Species of Special Concern. The Study Area was surveyed to assess the suitability of the site to provide aquatic and nesting habitat for the western pond turtle and determine if pond turtles were currently utilizing the Study Area. In addition, the potential for and presence in the Study Area of California giant salamander (*Dicamptodon ensatus*), pallid bat (*Antrozous pallidus*), and special-status wildlife species documented in the vicinity of the Study Area were assessed. A table of all wildlife species reviewed and their potential for occurrence is provided as Attachment A. A survey and assessment for special-status plant species has also been conducted in the Study Area and is provided as Attachment B.

Study Area

The Study Area is located at 4062 Old Sonoma Road, Napa, Napa County, California. The proposed Project includes replacement of a bridge over an unnamed tributary to Congress Creek, access drive improvements, and construction of a tasting room. The Study Area includes the Project footprint and surrounding areas within 200 feet, and the immediately adjacent irrigation pond. The Study Area resides in an agricultural setting dominated by vineyards, and is bordered to the north, south, and east by vineyards and associated infrastructure including irrigation ponds. To the west is Old Sonoma Road and a mix of vineyards, rural residential, and oak woodland.

Survey Methods

A site visit to the Study Area was made on May 12, 2017 by WRA biologist Patricia Valcarcel. Prior to the site visit, a review was conducted of background information. Database searches for known occurrences of special-status wildlife species focused on the Napa 7.5-minute USGS quadrangle and the eight surrounding USGS quadrangles. The following sources were reviewed to determine which special-status wildlife species have been documented to occur in the vicinity of the Study Area:

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2017)

- U.S. Fish and Wildlife Service (USFWS) 7.5' Quadrangle Species Lists for the Napa quadrangles (USFWS 2017)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication "California Bird Species of Special Concern" (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- National Marine Fisheries Service (NMFS) Species List and Essential Fish Habitat Maps of California (NMFS 2017)
- Breeding Birds of Napa County, California (Berner et al 2003)
- Western Bat Working Group (WBWG) online species accounts (WBWG 2017)
- eBird online database (eBird 2017)
- iNaturalist online database (2017)

Special-status species include wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). Additionally, CDFW Species of Special Concern, CDFW Fully Protected species, CDFW Special-status Invertebrates, and Western Bat Working Group High and Medium Priority Species are all considered special-status wildlife species and were considered in this review.

The Study Area was traversed on foot by the WRA biologist and examined for the presence, and potential to support, special-status wildlife species with a focus on western pond turtle, California giant salamander, and pallid bat. If a special-status species was observed during the site visit, its presence is recorded and discussed further below.

Survey Results

Study Area Description

The Study Area includes vineyards, unpaved access roads, non-native annual grassland, an irrigation pond, and the unnamed tributary to Congress Valley Creek. Valley oak trees (*Quercus lobata*) are present along the unnamed tributary and scattered through the Study Area. The unnamed tributary contained standing water approximately 6-10 inches deep under the bridge and 4-6 inches deep elsewhere. The tributary is intermittent and was not flowing at the time of the site visit.

Western Pond Turtle

The survey was conducted by Patricia Valcarcel, a biologist experienced with western pond turtle and survey methodology. The survey was conducted between 11:00 am and 2:00 pm when turtles would be visible basking and active. Conditions during the survey were suitable for detection of western pond turtle: clear, winds at 8-15 mph, and air temperature approximately 70-76°F. One hour was spent focused on the irrigation pond along the edge with views of all banks and basking habitat. Vegetation within the irrigation pond is limited to the bank and is predominantly tules (*Scirpus spp.*). Basking habitat is present in areas of fallen tules, but no western pond turtles or turtle species were observed. The unnamed tributary was also investigated within 200 feet of the existing bridge, and no western pond turtle or turtle species were observed. The tributary is intermittent and typically dries by early summer within the Study Area, and is shaded with no basking habitat present. A brief investigation of nearby irrigation ponds was also conducted, but no western pond turtles or turtle species were observed. The

Study Area is predominantly vineyard or access roads and not suitable for pond turtle nesting. The non-native annual grassland contains extremely hard-packed and rocky substrate and is not suitable nesting substrate for pond turtle.

California Giant Salamander

The unnamed tributary was investigated for potential to support California giant salamander. This species requires creek or steam habitat which contain pools through the summer or permanent pools to support successful larval development and metamorphosis. Adult California giant salamanders require subterranean refugia outside of the reproductive period. No California giant salamanders were observed. The tributary does not provide sufficient inundation or pool habitat to support reproduction and is not in proximity to suitable habitat. The banks within the Study Area are developed with revetment walls and bridge supports limiting potential refugia. The bank habitat also contains limited vegetation and burrows to provide refugia for adult giant salamanders. The unnamed tributary does not provide habitat to support the California giant salamander and this species is not likely to occur within the tributary. This species is known in drainages in the forested hills and mountains of Sonoma County and western Napa which provide suitable pools and upland refugia for the species.

Pallid Bat

The Valley oak trees and existing bridge within the Study Area were investigated for potential to support pallid bat and other special-status roosting bats. Typical roost habitat for pallid bat is rocky outcrops and cliffs with spacious crevices, caves, mines, barns, and bridges with suitable crevice structures. Tree roosting is not common but may occur in trees with large cavities. The existing bridge structure is an open slat structure which exposes the underside of the bridge. These types of bridge structures do not provide the protected habitat required by bats for roost locations. Roost locations provide protection from temperature and winds. The existing bridge does not support roost habitat for bat species, and pallid bat is unlikely to roost on the bridge structure. No bat species were observed roosting under the bridge.

Large oaks within the Study Area contain cavities which may support some cavity or tree roosting bat species. However, only one small oak is proposed for removal at the bridge location. All other oak trees are to be avoided. The oak tree proposed for removal is approximately 10-inch diameter at breast height, and does not contain branch structure or cavities to support bat roosting. Branches overhanging the existing bridge were investigated in case trimming is required for bridge replacement activities. Branches were not of suitable size to support bat roosting and no cavities were present. No pallid bat or potential bat roost habitat is present in the tree proposed for removal or branches with potential to be trimmed during project activities. No evidence of bat roosting in trees was observed.

Special-status Wildlife Species Review

A brief review of background literature as described above was conducted to determine the potential for special-status wildlife documented within the nine surrounding 7.5-minute quadrangles. No special-status species were observed within or adjacent to the Study Area. A total of 64 special-status wildlife species have been documented in the surrounding nine quadrangles. Four of these special-status wildlife species have been documented within two miles and include pallid bat, American badger (*Taxidea taxus*), longfin smelt (*Spirinchus thaleichthys*), and western bumblebee (*Bombus occidentalis*). Pallid bat is discussed above,

and two of the remaining species do not have potential to occur within the Study Area. American badger requires open, uncultivated grasslands for dens and foraging. The Study Area is predominantly vineyard and associated infrastructure which does not support this species. The Study Area is not contiguous with open habitat which may support this species. The unnamed tributary does not support fish species including longfin smelt. Longfin smelt is known in the San Francisco Bay Estuary and may occur in the lower Napa River.

Western bumblebee is a generalist forager, but does require flowering plants for foraging which can include some crops (Xerces 2017). Bees are not known to forage for grape pollen; however, may occur in oak woodlands adjacent to vineyards (LeBuhn and Fenter 2008). The Study Area is predominantly vineyards which does not provide foraging habitat, but the species may use oak trees for nests. Foraging habitat is limited to the non-native annual grassland habitat. The extremely limited amount of foraging habitat within the Study Area reduces potential for the western bumblebee to nest within the Study Area. In addition, all oak trees with suitable cracks and cavities for bumblebee nesting will be avoided by the proposed Project. Although it is unlikely western bumblebee will occur within the Study Area, the project is avoiding potential nest habitat.

Summary

No special-status wildlife species were observed during the May 12, 2017 survey, and none of the wildlife species reviewed have a moderate or high potential to occur. Western pond turtle was not observed within the irrigation pond adjacent to the proposed Project and conditions were suitable to detect them if present. This species was possibly observed through binoculars at a distance in 2011 adjacent to the Study Area; however, no evidence that the species is currently present was observed. Nesting habitat for pond turtles is extremely limited within the Study Area and unlikely based on substrate. The existing bridge and one oak tree proposed for removal do not provide roost habitat for pallid bat or other bat species. Potential roost habitat for bat species is present in other oak trees within the Study Area; however, pallid bat is not a typical tree roosting bat species. The oak trees are to be avoided by the proposed Project. The Study Area does not provide suitable habitat for special-status amphibians documented in the vicinity, and foraging habitat is limited for western bumblebee reducing potential for it to nest within the Study Area. In addition, the proposed Project will avoid oak trees with potential to support bumblebee nests.

The Study Area has only limited potential to support special-status wildlife species and such potential habitat is limited to the large oaks. All of the large oak trees will be avoided by the proposed Project. No special-status wildlife species were observed during the survey on May 12, 2017, and none are anticipated to be found or impacted by the proposed Project based on the survey results.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Patricia Valcarcel
Associate Wildlife Biologist

Attachments

Attachment A. Table of Special-Status Wildlife Species Potential for Occurrence
Attachment B. Truchard Winery Project 2017 Special Status Plant Survey (Kelly Biological Consulting 2017)

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Attachment A

Attachment B

Attachment A. Potential for Special Status Wildlife Species to Occur in the Study Area. List compiled from the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB; CDFW 2017); U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation Database (USFWS 2017); National Marine Fisheries Service (NMFS) Endangered Species Act Listed Species, Critical Habitat, Essential Fish Habitat, and Marine Mammal Protection Act Species Data (NMFS 2017) searches of the Napa, Sonoma, Sears Point, Capell Valley, Rutherford, Yountville, Mount George, Cuttings Wharf, and Cordelia USGS 7.5' quadrangles; a review of historical and current satellite imagery via Google Earth (2017); available on-line databases such as iNaturalist and eBird; and other publications.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Mammals				
pallid bat *Antrozous pallidus*	SSC, WBWG	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, forages along river channels. Roost sites include crevices in rocky outcrops and cliffs, caves, mines, trees and various human structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Moderate Potential.** The Study Area is predominantly maintained grape vines; however, this species may use cavities in adjacent oak trees for day roosting. Tree cavities in the adjacent oak trees are unlikely to be suitable for maternity roost sites based on size. The bridge does not provide suitable roost habitat for bat species based on design, there is no potential for pallid bat to use the existing bridge.	Avoidance of large oak trees within and near the Study Area.
Townsend's big-eared bat *Corynorhinus townsendii*	SSC, WBWG	This species is associated with a wide variety of habitats from deserts to mid-elevation mixed coniferous-deciduous forest. Females form maternity colonies in buildings, caves and mines and males roost singly or in small groups. Foraging occurs in open forest habitats where they glean moths from vegetation.	**Unlikely**. The Study Area is predominantly maintained grape vines. This species is not known to use trees for roosting, and the existing bridge does not provide bat roost habitat. No buildings are present, and no abandoned buildings are present in the vicinity of the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
western red bat *Lasiurus blossevillii*	SSC, WBWG	This species is typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores).	**Unlikely**. The Study Area is predominantly maintained grape vines. Typical riparian habitat of this species is not present; however, this species may on occasion use trees adjacent to the Study Area for day roost. The Study Area is unlikely to support maternity roosts of this species based on a lack of dense cover in trees within the Study Area. The existing bridge does not provide bat roost habitat.	No further actions are recommended for this species.
hoary bat *Lasiurus cinereus*	WBWG	Prefers open forested habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	**Unlikely**. The Study Area is predominantly maintained grape vines. Typical forested habitat of this species is not present; however, this species may on occasion use trees near the Study Area for day roost. The existing bridge does not provide bat roost habitat. This species has not been documented within 5 miles.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
silver-haired bat *Lasionycteris noctivagans.*	WBWG	Primarily a forest dweller, feeding over streams, ponds, and open brushy areas. Summer habitats include a variety of forest and woodland types, both coastal and montane. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	**Unlikely**. The Study Area is predominantly maintained grape vines. Typical forested habitat of this species is not present. The existing bridge does not provide bat roost habitat. This species has not been documented within 5 miles.	No further actions are recommended for this species.
long-eared myotis *Myotis evotis*	WBWG Medium	Occurs in semiarid shrublands, sage, chaparral, and agricultural areas, but is usually associated with coniferous forests from sea level to 9000 feet. Individuals roost under exfoliating tree bark, and in hollow trees, caves, mines, cliff crevices, and rocky outcrops on the ground. They also sometimes roost in buildings and under bridges.	**Unlikely**. The Study Area is predominantly maintained grape vines. Typical shrub and chaparral habitat of this species is not present. The existing bridge does not provide bat roost habitat. This species has not been documented within 5 miles.	No further actions are recommended for this species.
fringed myotis *Myotis thysanodes*	WBWG	Associated with a wide variety of habitats including dry woodlands, desert scrub, mesic coniferous forest, grassland, and sage-grass steppes. Buildings, mines and large trees and snags are important day and night roosts.	**Unlikely.** This species has not been documented within 5 miles, and the Study Area is predominantly maintained grape vines. Tree cavities in the adjacent oak trees are unlikely to be suitable for maternity roost sites based on size. No snags are present. The bridge does not provide suitable roost habitat for bat species based on design.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
long-legged myotis *Myotis volans*	WBWG	Primarily found in coniferous forests, but also occurs seasonally in riparian and desert habitats. Large hollow trees, rock crevices and buildings are important day roosts. Other roosts include caves, mines and buildings.	**Unlikely**. The Study Area is predominantly maintained grape vines. Coniferous forest habitat is not present. The existing bridge does not provide bat roost habitat. This species has not been documented within 5 miles.	No further actions are recommended for this species.
American badger *Taxidea taxus*	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**Unlikely.** The Study Area is a vineyard and surrounding habitats also include agricultural uses and development. This species may be in open habitats west of the Study Area but is unlikely to occur within the Study Area.	No further actions are recommended for this species.
ring-tailed cat (Ringtail) *Bassariscus astutus*	CFP	Widely distributed throughout most of California, absent from some portions of the Central Valley and northeastern California. Found in a variety of habitats throughout the western US including riparian areas, semi-arid country, deserts, chaparral, oak woodlands, pinyon pine woodlands, juniper woodlands and montane conifer forests usually under 1400m in elevation. Typically uses cliffs or large trees for shelter.	**Unlikely.** The Study Area is a vineyard and surrounding habitats also include agricultural uses and development. The trees within and adjacent to the Study Area are unlikely to provide suitable refugia based on lack of large cavities or other cover.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
salt-marsh harvest mouse *Reithrodontomys raviventris*	FE, SE, CFP, SSC	Found only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat, but may use other thick wetland vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	**No Potential.** The Study Area is outside the range of this species. No saltmarsh habitat is within or near the Study Area.	No further actions are recommended for this species.
Suisun shrew *Sorex ornatus sinuosus*	SSC	Tidal marshes of the northern shores of San Pablo and Suisun Bays. Require dense low-lying cover and driftweed and other litter above the mean hightide line for nesting and foraging.	**No Potential.** The Study Area is outside the range of this species. No saltmarsh habitat is within or near the Study Area.	No further actions are recommended for this species.
Birds				
golden eagle *Aquila chrysaetos*	CFP	Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees, usually within otherwise open areas.	**Unlikely.** The Study Area does not contain potential nest habitat. This species forages widely and may be observed flying over the Study Area on occasion, although it is unlikely to forage within the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
bald eagle *Haliaeetus leucocephalus*	FD, SE, CFP	Occurs year-round in California, but primarily a winter visitor. Nests in large trees in the vicinity of larger lakes, reservoirs and rivers. Wintering habitat somewhat more variable but usually features large concentrations of waterfowl or fish.	**Unlikely.** The Study Area does not contain potential nesting or foraging habitat. Small irrigation ponds in the vicinity are unlikely to contain typical prey and be used as foraging for this species.	No further actions are recommended for this species.
northern harrier *Circus cyaneus*	SSC	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	**Unlikely.** This species requires open grasslands for nesting or foraging. The Study Area and surrounding areas are predominantly vineyards and development which are unsuitable for this species.	No further actions are recommended for this species.
white-tailed kite *Elanus leucurus*	CFP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	**Unlikely.** This species forages over open habitats and typically nests in proximity to foraging habitat. The Study Area and surrounding areas are predominantly vineyards and development which is not suitable foraging habitat. This species is unlikely to nest in trees within or near the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
American peregrine falcon *Falco peregrinus anatum*	FD, SD, CFP	Year-round resident and winter visitor. Occurs in a wide variety of habitats, though often associated with coasts, bays, marshes and other bodies of water. Nests on protected cliffs and also on man-made structures including buildings and bridges. Preys on birds, especially waterbirds. Forages widely.	**Unlikely.** The Study Area does not contain potential nest habitat. This species forages widely and may be observed flying over the Study Area on occasion, although it is unlikely to forage within the Study Area.	No further actions are recommended for this species.
Swainson's hawk *Buteo swainsoni*	ST	Summer resident in California's Central Valley and limited portions of the southern California interior. Nests in tree groves and isolated trees in riparian and agricultural areas, including near buildings. Forages in grasslands and scrub habitats as well as agricultural fields, especially alfalfa. Preys on arthropods year-round as well as smaller vertebrates during the breeding season.	**Unlikely.** The Study Area does not contain foraging habitat, and the species is unlikely to nest in or near the Study Area based on a lack of typical foraging habitat. A small population is known to nest in the vicinity of Napa County Airport; however it has not been documented east of the City of Napa.	No further actions are recommended for this species.
northern spotted owl *Strix occidentalis caurina*	FT, ST, SSC	Year-round resident in dense, structurally complex forests, primarily those with old-growth conifers. Nests on platform-like substrates in the forest canopy, including in tree cavities. Preys on mammals.	**No Potential.** The Study Area and vicinity do not contain suitable habitat for this species. This species is not known in southern Napa County.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
burrowing owl *Athene cunicularia*	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	**No Potential.** The Study Area and vicinity do not contain suitable habitat for this species. The Study Area and vicinity are predominantly vineyards and development. This species is extremely rare in Napa County.	No further actions are recommended for this species.
short-eared owl *Asio flammeus*	SSC	Occurs year-round, but primarily as a winter visitor; breeding very restricted in most of California. Found in open, treeless areas (e.g., marshes, grasslands) with elevated sites for foraging perches and dense herbaceous vegetation for roosting and nesting. Preys mostly on small mammals, particularly voles.	**No Potential.** The Study Area and vicinity do not contain suitable habitat for this species. The Study Area and vicinity are predominantly vineyards and development. This species is extremely rare in Napa County.	No further actions are recommended for this species.
long-eared owl *Asio otus*	SSC	Occurs year-round in California. Nests in trees in a variety of woodland habitats, including oak and riparian, as well as tree groves. Requires adjacent open land with rodents for foraging, and the presence of old nests of larger birds (hawks, crows, magpies) for breeding.	**Unlikely.** The Study Area and vicinity do not contain suitable foraging habitat for this species. The Study Area and vicinity are predominantly vineyards and development and this species is unlikely to nest in these habitats.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
California Ridgway's (clapper) rail *Rallus obsoletus obsoletus*	FE, SE, CFP	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on molluscs and crustaceans.	**No Potential.** The Study Area is outside the range of this species. No tidal marsh habitat is within or near the Study Area.	No further actions are recommended for this species.
California black rail *Laterallus jamaicensis coturniculus*	ST, CFP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	**No Potential.** The Study Area is outside the range of this species. No marsh habitat is within or near the Study Area.	No further actions are recommended for this species.
great blue heron *Ardea herodias*	none (breeding sites protected by CDFW)	Year-round resident. Nests colonially or semi-colonially in tall trees and on cliffs, also sequester terrestrial substrates. Breeding sites usually in close proximity to foraging areas: marshes, lake margins, tidal flats, and rivers. Forages primarily on fishes and other aquatic prey, also smaller terrestrial vertebrates.	**Unlikely.** The Study Area does not contain a rookery and there is no potential for the Study Area to support a nesting colony. This species may on occasion be observed passing over the Study Area when moving between foraging sites.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
California least tern *Sternula antillarum browni*	FE, SE, CFP	(Nesting colony) nests along the coast from San Francisco Bay south to northern Baja California. Breeding colonies in San Francisco Bay found in abandoned salt ponds and along estuarine shores. Colonial breeder on barren or sparsely vegetated, flat substrates near water.	**No Potential.** The Study Area is outside the nesting range of the species. No suitable habitat is present.	No further actions are recommended for this species.
great egret *Ardea alba*	none (breeding sites protected by CDFW)	Year-round resident. Nests colonially or semi-colonially, usually in trees, occasionally on the ground or elevated platforms. Breeding sites usually in close proximity to foraging areas: marshes, lake margins, tidal flats, and rivers. Forages primarily on fishes and other aquatic prey, also smaller terrestrial vertebrates.	**Unlikely.** The Study Area does not contain a rookery and there is no potential for the Study Area to support a nesting colony. This species may on occasion be observed passing over the Study Area when moving between foraging sites.	No further actions are recommended for this species.
western snowy plover *Charadrius nivosus (alexandrines) nivosus*	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	**No Potential.** The Study Area is outside the nesting range of the species. No suitable habitat is present.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
olive-sided flycatcher *Contopus cooperi*	SSC	Summer resident. Typical breeding habitat is montane coniferous forests. Also occurs in wooded canyons and mixed forests and woodlands at lower elevations. Often associated with forest edges. Arboreal nest sites located well off the ground.	**Unlikely.** The Study Area does not contain typical habitat of this species. In lower elevation habitats, this species typically nests within eucalyptus groves which are not present in or near the Study Area.	No further actions are recommended for this species.
purple martin *Progne subis*	SSC	Inhabits woodlands and low elevation coniferous forests. Nests in old woodpecker cavities and human-made structures. Nest is often located in tall, isolated tree or snag.	**Unlikely.** This species is typically found in mixed chaparral and coniferous forests and is rare in southern Napa County. The Study Area and vicinity do not provide suitable habitat.	No further actions are recommended for this species.
bank swallow *Riparia riparia*	ST	Migrant in riparian and other lowland habitats in western California. Colonial nester in riparian areas with vertical cliffs and bands with fine-textured or fine-textured sandy soils near streams, rivers, lakes or the ocean. Historical range in southern and central areas of California has been eliminated by loss of nesting habitat due to flood and erosion-control projects, but currently is known to breed in Siskiyou, Shasta, and Lassen Cos., and along Sacramento River from Shasta Co. south to Yolo Co.	**No Potential.** The Study Area and vicinity do not contain riparian or cliff habitat to support this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
loggerhead shrike *Lanius ludovicianus*	SSC	Year-round resident in open woodland, grassland, savannah and scrub. Prefers areas with sparse shrubs, trees, posts, and other suitable perches for foraging. Preys upon large insects and small vertebrates. Nests are well-concealed in densely-foliaged shrubs or trees.	**Unlikely.** The Study Area does not contain typical nesting habitat, and the species is not known to forage within vineyards. Shrubs and trees with dense vegetation are preferred nesting substrate and open habitats for foraging.	No further actions are recommended for this species.
black swift *Cypseloides niger*	SSC	Summer resident with a fragmented breeding distribution; most occupied areas in California either montane or coastal. Breeds in small colonies on cliffs behind or adjacent to waterfalls, in deep canyons, and sea-bluffs above surf. Forages aerially over wide areas.	**Unlikely.** The Study Area and vicinity do not contain cliff or canyon habitat to support nesting. This species may be observed on occasion foraging or migrating over the Study Area.	No further actions are recommended for this species.
San Francisco common yellowthroat *Geothlypis trichas sinuosa*	SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Unlikely.** This species is associated with marsh habitat. No marsh habitat suitable for this species is present within or near the Study Area.	No further actions are recommended for this species.
yellow warbler *Setophaga (Dendroica) petechia brewsteri*	SSC	Summer resident throughout much of California. Breeds in riparian vegetation close to water, including streams and wet meadows. Microhabitat used for nesting variable, but dense willow growth is typical. Occurs widely on migration.	**Unlikely.** The Study Area does not provide dense riparian vegetation for nesting and is unlikely to occur within the Study Area during the breeding season. This species may by observed passing through during migration.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
yellow-breasted chat *Icteria virens*	SSC	Summer resident, occurring in riparian areas with an open canopy, very dense understory, and trees for song perches. Nests in thickets of willow, blackberry, and wild grape.	**Unlikely.** The Study Area does not provide dense riparian vegetation suitable for this species. It is unlikely to occur in the Study Area during the breeding or migration seasons.	No further actions are recommended for this species.
grasshopper sparrow *Ammodramus savannarum*	SSC	Summer resident. Breeds in open grasslands, generally with low- to moderate-height grasses and scattered shrubs. Well-hidden nests are placed on the ground.	**Unlikely.** The Study Area and vicinity do not contain open habitat for this species. The Study Area and vicinity are predominantly vineyards and development and this species is unlikely to occur in these habitats.	No further actions are recommended for this species.
Bell's sage sparrow *Amphispiza belli belli*	SSC	Year-round resident, though shows seasonal movements. Prefers dense chaparral and scrub habitats for breeding; strongly associated with chamise. Also occurs in more open habitats during winter.	**Unlikely.** The Study Area and vicinity do not contain scrub or chaparral habitats for this species. The Study Area and vicinity are predominantly vineyards and development and this species is unlikely to occur in these habitats.	No further actions are recommended for this species.
San Pablo song sparrow *Melospiza melodia samuelis*	SSC	Resident of salt marshes along the north side of San Francisco and San Pablo Bays. Inhabits tidal sloughs in the *Salicornia* marshes; nests in *Grindelia* bordering slough channels.	**Unlikely.** The Study Area and vicinity do not contain salt marsh or tidal habitats. This species is unlikely to occur within or near the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Suisun song sparrow *Melospiza melodia maxillaris*	SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and *Salicornia*; also known to frequent tangles bordering sloughs.	**Unlikely.** The Study Area and vicinity do not contain salt marsh or tidal habitats. This species is unlikely to occur within or near the Study Area.	No further actions are recommended for this species.
tricolored blackbird *Agelaius tricolor*	SC, SSC	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	**Unlikely.** The Study Area and vicinity do not contain suitable marsh or riparian habitat to support this species. The Study Area is predominantly vineyards and no dense riparian vegetation is present. Adjacent irrigation ponds lack dense vegetation to support a nesting colony.	No further actions are recommended for this species.
yellow-headed blackbird *Xanthocephalus xanthocephalus*	SSC	Summer resident. Breeds colonially in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. Requires abundant large insects such as dragonflies; nesting is timed for maximum emergence of insect prey.	**Unlikely.** The Study Area and vicinity do not contain suitable marsh or riparian habitat to support this species. The Study Area is predominantly vineyards and no dense riparian vegetation is present. This species is extremely rare in Napa County.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Reptiles and Amphibians				
California red-legged frog *Rana draytonii*	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**Unlikely.** The Study Area and vicinity are vineyards and associated development. No breeding habitat is present within or near the Study Area. Adjacent irrigation ponds are typically occupied with predators such as American bullfrogs and fish. This species is not documented within 5 miles.	No further actions are recommended for this species.
foothill yellow-legged frog *Rana boylii*	SSC	Found in or near rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	**No Potential.** The intermittent stream within the Study Area is not suitable habitat for this species, and is not in the vicinity of typical rocky stream habitat. The species is not documented within 4 miles of the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
California tiger salamander *Ambystoma californiense*	FE/FT, ST	Populations in Santa Barbara and Sonoma counties currently listed as endangered. Inhabits grassland, oak woodland, ruderal and seasonal pool habitats. Seasonal ponds and vernal pools are crucial to breeding. Adults utilize mammal burrows as estivation habitat.	**No Potential.** The Study Area is outside of the range of this species. No breeding habitat is present within or near the Study Area. Adjacent irrigation ponds are typically occupied with predators such as American bullfrogs and fish. This species is not documented within 5 miles.	No further actions are recommended for this species.
California giant salamander *Dicamptodon ensatus*	SSC	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams. Larvae usually remain aquatic for over a year.	**Unlikely.** The intermittent stream within the Study Area is not suitable habitat, and is not in the vicinity of typical forested stream habitat. The stream banks are dry and exposed and no pool habitat remains for larvae to successfully metamorphose. The nearest occurrence is over 4 miles north of the Study Area.	No further actions are recommended for this species.
red-bellied newt *Taricha rivularis*	SSC	Inhabits coastal forests from southern Sonoma County northward, with an isolated population in Santa Clara County. Redwood forest provides typical habitat; though other forest types are used. Adults are terrestrial and fossorial. Breeding occurs in streams, usually with relatively strong flow.	**No Potential.** The Study Area is outside the range of this species and no forest habitat is present.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
western (Pacific) pond turtle *Actinemys marmorata*	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**Unlikely.** The Study Area does not contain suitable aquatic to support this species throughout the year. The hard substrate within the Study Area precludes nesting, and no pond turtles were observed in adjacent irrigation ponds during the site assessment on May 12, 2017.	No further actions are recommended for this species.
Fishes				
river lamprey *Lampetra ayresi*	SSC	Lower Sacramento River, San Joaquin River and Russian River. May occur in coastal streams north of San Francisco Bay. Adults need clean, gravelly riffles, Ammocoetes need sandy backwaters or stream edges, good water quality and temps < 25 degrees C.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.
green sturgeon *Acipenser medirostris*	FT, SSC	Spawn in the Sacramento River and the Klamath River. Spawn at temperatures between 8-14 degrees C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Sacramento splittail *Pogonichthys macrolepidotus*	SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Sacramento Delta, Suisun Bay and associated marshes. Occurs in slow-moving river sections and dead end sloughs. Requires flooded vegetation for spawning and foraging for young. Splittail are primarily freshwater fish, but are tolerant of moderate salinity.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.
Delta smelt *Hypomesus transpacificus*	FT, SE	Lives in the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.
longfin smelt *Spirinchus thaleichthys*	FC, ST, SSC	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
tidewater goby *Eucyclogobius newberryi*	FE, SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.
steelhead - central CA coast DPS *Oncorhynchus mykiss irideus*	FT, NMFS	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	**No Potential.** The Study Area is outside the range of the species and the intermittent stream does not provide suitable habitat.	No further actions are recommended for this species.
Invertebrates				
western bumble bee *Bombus occidentalis*	SSI	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2017). Occurs in a wide variety of habitat types. Nests are constructed annually in pre-existing cavities, usually on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.	**Unlikely.** The Study Area and vicinity are predominantly vineyards and development. Bees are not known to forage on grape pollen. Therefore, the Study Area has limited potential to support foraging of this species, and reduces potential for the species to nest in trees within the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Callippe silverspot butterfly *Speyeria callippe callippe*	FE, SSI	Two populations in San Bruno mountain and the Cordelia Hills are recognized. Hostplant is *Viola pedunculata*, which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	**No Potential.** The Study Area is outside the range of this species and does not contain serpentine habitat.	No further actions are recommended for this species.
monarch butterfly *Danaus plexippus*	SSI (winter roosts protected by CDFW)	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	**Unlikely.** The Study Area does not contain winter roost habitat and winter roosts are typically in close association with the coast or San Francisco Bay. This species may be observed passing through during migration.	No further actions are recommended for this species.
Ricksecker's water scavenger beetle *Hydrochara ricksecker*i	SSI	Small aquatic beetle known only from pond habitats scattered around the San Francisco Bay area, including Marin, Sonoma, Alameda, Lake, and Contra Costa counties. Extensive surveys from 1988 failed to locate this species. The locations of existing populations remain unknown (Hafernick 1989).	**No Potential**. The Study Area does not contain natural pond habitat. The intermittent stream is unlikely to support this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
(No common name) Isopod *Calasellus californicus*	SSI	A blind isopod found in freshwater habitats, the known collections are from a freshwater well and two springs. This poorly known species has been collected from one locality each in Napa, Lake and Santa Clara counties.	**Unlikely.** The Study Area does not contain natural pond habitat, and the intermittent stream is unlikely to support this species. The occurrence in Napa County is from a spring site (CDFW 2017).	No further actions are recommended for this species.
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT, SSI	Occurs only in the central valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberrry 2 to 8 inches in diameter; some preference shown for "stressed" elderberry.	**No Potential.** The Study Area is outside of the range of this species, and not elderberry plants are present.	No further actions are recommended for this species.
California freshwater shrimp *Syncaris pacifica*	FE, SE, SSI	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main stream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	**No Potential.** The intermittent stream within the Study Area does not provide suitable habitat and is not in the vicinity of suitable stream habitat. This species has not been documented within the Congress Creek watershed.	No further actions are recommended for this species.
vernal pool fairy shrimp *Branchinecta lynchi*	FT, SSI	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**No Potential.** The Study Area is does not contain vernal pool or seasonal wetland habitats. The Study Area is predominantly vineyard and developed habitats.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA	RECOMMENDATIONS
Conservancy fairy shrimp *Branchinecta conservatio*	FE, SSI	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	**No Potential.** The Study Area is does not contain vernal pool or seasonal wetland habitats. The Study Area is predominantly vineyard and developed habitats.	No further actions are recommended for this species.

FE	Federal Endangered
FT	Federal Threatened
FC	Federal Candidate
SE	State Endangered
ST	State Threatened
SC	State Candidate
SSC	CDFW Species of Special Concern
SSI	CDFW Special-Status Invertebrate
CFP	CDFW Fully Protected Animal
WBWG	Western Bat Working Group High or Medium Priority species

Potential to Occur:

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

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

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

Truchard Winery Project

2017 Special Status Plant Survey

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June 12, 2017

1.0 Introduction

A special status plant survey of the Truchard Winery Project was completed on June 6, 2017. The purpose of this special status plant survey was to conduct a site visit to determine the potential for special status plants to be present. The site is located along Old Sonoma Road in Napa County, California (APN 043-040-001). It is on the Napa USGS quad, at approximately 38.281645 latitude and -122.323544 longitude. The Study Area is shown in yellow on Figure 1.

2.0 Methods

2.1 Literature Search

Potential occurrence of special status plants in the Study Area was evaluated by first determining which special status species occur in the vicinity through a literature and database search. The California Natural Diversity Database (California Department of Fish and Wildlife 2017) and California Native Plant Society Inventory (CNPS) (CNPS 2017) were queried. From the above sources, a target list of special-status plant species with potential to occur on or in the vicinity of the Study Area was developed (Table 1). Potential for special status species to occur in the Study Area was evaluated according to the following criteria:

(1) Not Present. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (based on cover, substrate, elevation, hydrology, plant community, site history, or disturbance regime).

(2) Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

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

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

(5) Present. Species has been observed on the site or recorded (i.e. CNDDB, other reports) on the site recently.

2.2 Field Studies

On June 6, 2017, Micki Kelly, a qualified plant ecologist (Kelly Biological Consulting) conducted a special status plant survey of the Study Area using methods similar to those identified in California Department of Fish and Wildlife's *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFW 2009). The Study Area was traversed on foot. Potential special status plant habitat was examined; and all plant taxa observed

were keyed to the highest taxonomic level necessary for rarity determination. A list of plant taxa found in the Study Area was compiled and included in this report (Table 2).

3.0 Results

The site is roughly 135 feet above sea level and relatively flat. There is an intermittent creek flowing through the site, with old wooden bridge crossing it. The NRCS soils map identifies the soils on the northeast part of the site as 112- Bressa-Dibble complex, 5 to 15 percent slope (NRCS 2017); the west part of the site as 118 - Cole silt loam, 0 to 2 percent slopes; the south-southeast part of the as 146- Haire loam, 2 to 9 percent. None of the soils provide serpentine habitat for special status plants. The adjacent land use is predominately vineyards, with dirt, gravel, and paved roads interspersed. There is a barn and a small parking area along the northeast boundary of the Study Area.

Within the Study Area, the primary plant community is Non-native Grassland. A wooded creek flows south to north, through the site. The Non-native Grassland is similar to the Harding Grass Sward (*Phalaris aquatica* Semi-Natural Herbaceous Stands) discussed in the Manual of California Vegetation (Sawyer, et. al. 2009). This habitat covers most of survey area, with the exception of the creek area. The dominant species is Harding grass (*Phalaris aquatica)* interspersed with minor patches of loosestrife (*Lythrum hyssopifolium*) and other non-native grasses and forbs. Prior to the site visit the northeastern part of the Study Area had been mowed. Several large oaks book-end this mowed area.

The southwestern part of the Study Area consists of similar Non-native Grassland. Though it had not been mowed. There are landscape plantings, including small redwoods (*Sequoia sempervirens*) in this area, along the old driveway, and near Old Sonoma Road.

The creek overstory consists of coast live oak (*Quercus agrifolia* ssp. *agrifolia*), valley oak (*Quercus lobata*), and willow (*Salix lasiolepis)*. The understory is a dense mix of blackberry (*Rubus armeniacus*), poison oak (*Toxicodendron diversilobum*), and various common grasses and forbs. There were several non-native sweet pea plants (*Lathyrus odoratus*) amid the understory.

4.0 Conclusion

Table 1 summarizes the potential for each special status plant species to occur in the Study Area. It should be noted that, the site visit was conducted in June, which is somewhat late in the growing season. No special status plants were observed within the Study Area.

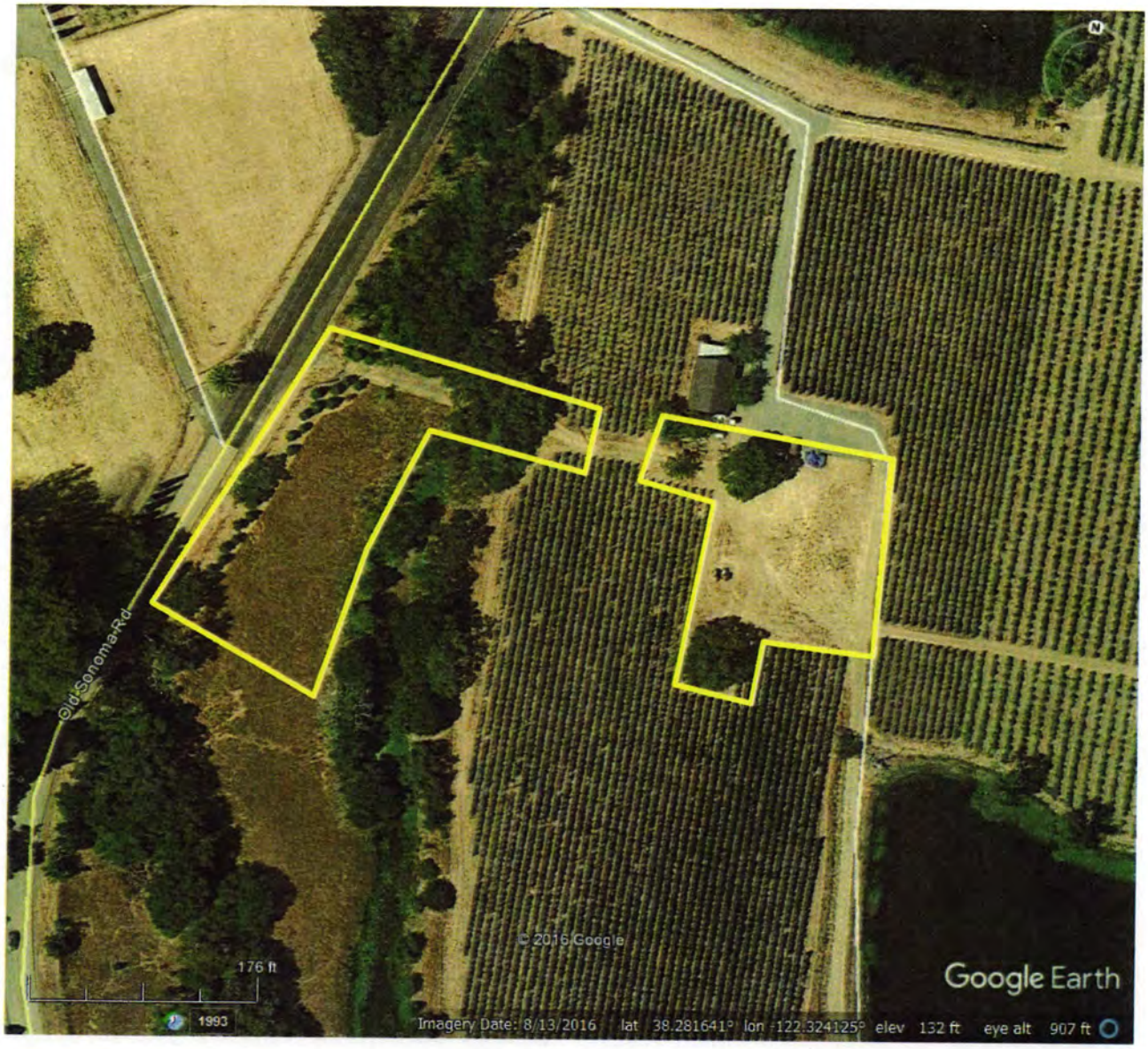

Figure 1. Truchard Property Study Area Boundary (Shown in yellow)

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Table 1. Special Status Plant Species Known to Occur in the Region

Scientific Name	Common Name	Federal Status*	State Status	CNPS Rare Plant Rank	Family, Life Form, Flowering Period, Habitats	Potential Occurrence on the Site
Astragalus tener var. *tener*	alkali milk-vetch	None	None	1B.2	Fabaceae. Annual herb. Mar-Jun. Alkali playa, Valley & foothill grassland, Vernal pool, Wetland.	Unlikely. The site provides marginal potential habitat. The density of the harding grass and the past land uses make occurrence unlikely. No Astragalus species were observed during the survey, which was conducted during the time when the species would be identifiable.
Atriplex joaquiniana	San Joaquin spearscale	None	None	1B.2	Chenopodiaceae. Annual herb. April - October, Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland.	Not present. The site does not provide the habitat typically required by this species.
Brodiaea leptandra	narrow-anthered brodiaea	None	None	1B.2	Themidaceae. Perennial bulbiferous herb. May-July. Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland.	Unlikely. The site provides marginal potential habitat. The density of the harding grass and the past land uses make occurrence unlikely. No *Brodiaea* species were observed during the survey, which was conducted during the time when the species would be identifiable.
Downingia pusilla	dwarf downingia	None	None	2B.2	Campanulaceae. Annual herb. March-May. Valley & foothill grassland, Vernal pool, Wetland.	Unlikely. The site provides marginal potential habitat. The density of the harding grass and the past land uses make occurrence unlikely. However the fieldwork was conducted too late in the season to fully confirm absence.
Erigeron greenei	Greene's narrow-leaved daisy	None	None	1B.2	Apiaceae. Perennial herb. May-September. Chaparral, Ultramafic.	Unlikely. The site provides marginal potential habitat. The density of the harding grass and the past land uses make occurrence unlikely. No Astragalus species were observed during the survey, which was conducted during the time when the species would be identifiable.

Scientific Name	Common Name	Federal Status*	State Status	CNPS Rare Plant Rank	Family, Life Form, Flowering Period, Habitats	Potential Occurrence on the Site
Juglans hindsii	Northern California black walnut	None	None	1B.1	Junglandaceae. Perennial deciduous tree. April-May. Riparian forest, Riparian woodland.	Not present. Several walnut trees were observed. However, they were grafted plantings, not native occurrences.
Lasthenia conjugens	Contra Costa goldfields	FE	None	1B.1	Asteraceae. Annual herb. March-June. Alkali playa, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland.	Unlikely. The site provides marginal potential habitat. The density of the harding grass and the past land uses make occurrence unlikely. No Lasthenia species were observed during the survey, which was conducted during the time when the species would be identifiable.
Lathyrus jepsonii var. jepsonii	Delta tule pea	None	None	1B.2	Fabaceae. Perennial herb. May-July (occasionally Aug. - September). Freshwater marsh, Marsh & swamp, Wetland.	Not present. No appropriate habitat. The only member of the genus found was a common sweet pea.
Leptosiphon jepsonii	Jepson's leptosiphon	None	None	1B.2	Polemoniaceae. Annual herb. April- May. Chaparral, Cismontane woodland, Ultramafic	Unlikely. The heavy disturbance may make occurrence unlikely. However the fieldwork was conducted too late in the season to fully confirm absence.
Lilaeopsis masonii	Mason's lilaeopsis	None	SR	1B.1	Apiaceae. Perennial rhizomatous herb. April-November. Freshwater marsh, Marsh & swamp, Riparian scrub, Wetland.	Not present. Unlikely within the Study Area due to absence of appropriate habitat. Not observed in the Study Area.
Symphyotrichum lentum	Suisun Marsh aster	None	None	1B.2	Asteraceae. Perennial rhizomatous herb. Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland.	Not present. The Study Area does not provide the appropriate habitat. Not observed during the site visit.
Trichostema ruygtii	Napa bluecurls	None	None	1B.2	Lamiaceae. Annual herb. June-October. Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland, Vernal pool, Wetland.	Unlikely. Survey was conducted during the flowering season when this species would be identifiable. This species was not observed.

Scientific Name	Common Name	Federal Status*	State Status	CNPS Rare Plant Rank	Family, Life Form, Flowering Period, Habitats	Potential Occurrence on the Site
Trifolium amoenum	two-fork clover	FE	None	1B.1	Fabaceae. Annual herb. April-June. Coastal bluff scrub, Ultramafic, Valley & foothill grassland	Not present. All Trifolium observed during the survey were keyed to species.
Trifolium hydrophilum	saline clover	None	None	1B.2	Fabaceae. Annual herb. April-June. Marsh & swamp, Valley & foothill grassland, Vernal pool, Wetland	Unlikely. The site provides limited habitat. The density of the harding grass and the absence of saline or alkali conditions make occurrence unlikely. All Trifolium observed during the survey were keyed to species.

*

Federal

FE Federal endangered

California State

SR California rare

California Native Plant Society ("CNPS") List

1B.1 Rare, threatened or endangered in California and elsewhere. Fairly endangered in California.

1B.2 Rare, threatened or endangered in California and elsewhere. Not very endangered in California.

1B.3 Rare, threatened, or endangered in California and elsewhere. Not very endangered in California.

2.1 Rare, threatened or endangered in California, more common elsewhere. Fairly endangered in California.

2.2 Rare, threatened or endangered in California, more common elsewhere. Not very endangered in California.

2.3 Rare, threatened, or endangered in California, but more common elsewhere. Not very endangered in California.

Table 2. Plant Species Observed During the Truchard Fieldwork on June 6, 2017

Family	Scientific Name	Common Name
Other		
moss	*Homalothecium (nuttallii?)*	
Cupressaceae	*Sequoia sempervirens*	redwood
Eudicots		
Anacardiaceae	*Toxicodendron diversilobum*	poison oak
Apiaceae	*Conium maculatum*	poison hemlock
Apiaceae	*Foeniculum vulgare*	fennel
Apiaceae	*Torilis arvensis* ssp. *purpurea*	hedge parsley
Asteraceae	*Baccharis pilularis*	coyote brush
Asteraceae	*Carduus pycnocephalus*	Italian thistle
Asteraceae	*Helminthotheca echioides*	bristly ox-tongue
Asteraceae	*Hypochaeris radicata*	rough cats ear
Asteraceae	*Lactuca serriola*	prickly lettuce
Asteraceae	*Taraxacum officinale*	common dandelion
Brassicaceae	*Brassica rapa*	field mustard
Brassicaceae	*Raphanus sativus*	radish
Cactaceae	*Opuntia* sp.	prickly pear
Caryophyllaceae	*Spergularia rubra*	red sand spurrey
Fabaceae	*Lathyrus odoratus*	sweet pea
Fabaceae	*Medicago polymorpha*	bur clover
Fabaceae	*Trifolium fragiferum*	strawberry clover
Fabaceae	*Trifolium repens*	white clover
Fabaceae	*Vicia sativa* ssp. *sativa*	spring vetch
Fagaceae	*Quercus agrifolia* var. *agrifolia*	coast live oak
Fagaceae	*Quercus lobata*	valley oak
Geraniaceae	*Erodium brachycarpum*	storks bill
Geraniaceae	*Geranium dissectum*	cut leaf geranium
Juglandaceae	*Juglans sp. (with grafts)*	planted walnut
Lythraceae	*Lythrum hyssopifolium*	loosestrife
Myrsinaceae	*Lysimachia arvensis* (prev. *Anagallis a.*)	scarlet pimpernel
Onagraceae	*Epilobium brachycarpum*	epilobium
Plantaginaceae	*Kickxia spuria*	kickxia
Plantaginaceae	*Plantago lanceolata*	English plantain
Polygonaceae	*Rumex crispus*	curly dock

Family	Scientific Name	Common Name
Polygonaceae	*Rumex pulcher*	bitterdock
Rosaceae	*Malus* sp.	apple
Rosaceae	*Prunus* sp.	prunus
Rosaceae	*Rubus armeniacus*	Himalayan blackberry
Rosaceae	*Rubus ursinus*	California blackberry
Rubiaceae	*Galium aparine*	goosegrass
Salicaceae	*Salix lasiolepis*	arroyo willow
Monocots		
Iridaceae	Iris sp. (landscape planting)	iris
Poaceae	*Avena fatua*	wild oat
Poaceae	*Bromus diandrus*	ripgut brome
Poaceae	*Bromus hordeaceus*	soft chess
Poaceae	*Cortaderia jubata*	pampus grass
Poaceae	*Festuca perennis*	perennial ryegrass
Poaceae	*Holcus mollis*	creeping velvet grass
Poaceae	*Hordeum murinum*	wall barley
Poaceae	*Phalaris aquatica*	Harding grass
Poaceae	*Polypogon monspeliensis*	rabbitfoot grass

Representative Photographs

Northeast part of the Study Area (mowed Non-native Grassland), Taken 6-6-2017

Southwest part of the Study Area (Non-native Grassland, not mowed), Taken 6-6-2017

Bridge crossing the Creek. Photo also shows adjacent vineyards. Taken 6-6-2017

State of California – Department of Fish and Wildlife
NOTIFICATION OF LAKE OR STREAMBED ALTERATION
FISH AND GAME CODE SECTION 1602
DFW 2023 (REV. 10/01/16) Page 1

FOR DEPARTMENT USE ONLY				
Date Received	*Amount Received*	*Amount Due*	*Date Complete*	*Notification No.*
	$	$		
Assigned to:				

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name	Anthony Truchard		
Business/Agency	Truchard Winery		
Mailing Address	3234 Old Sonoma Rd.		
City, State, Zip	Napa, CA 94559		
Telephone	707.253.7153	Fax	
Email	anthony@truchardvineyards.com		

2. CONTACT PERSON (*Complete only if different from applicant*)

Name	Phill Blake		
Street Address	1515 Fourth Street		
City, State, Zip	Napa, CA, 94559		
Telephone	707.252.3301	Fax	
Email	pblake@rsacivil.com		

3. PROPERTY OWNER (*Complete only if different from applicant*)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name		Truchard Winery Replacement Bridge		
B. Agreement Term Requested		☑ Regular (*5 years or less*) ☐ Long-term (*greater than 5 years*)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (*year*)	Ending (*year*)	Start Date (*month/day*)	End Date (*month/day*)	
2017	2018	05/15	10/30	110

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, E, or F is checked, complete the specified attachment.	
A.	☑ Standard *(Most construction projects, excluding the categories listed below)*
B.	☐ Gravel/Sand/Rock Extraction (*Attachment A*) *Mine I.D. Number:* _____
C.	☐ Timber Harvesting (*Attachment B*) *THP Number:* _____
D.	☐ Water Diversion/Extraction/Impoundment (*Attachment C*) *SWRCB Number:* _____
E.	☐ Routine Maintenance (*Attachment D*)
F.	☐ Remediation of Marijuana Cultivation Sites (*Attachment E*)
G.	☐ Department Grant Programs *Agreement Number:* _____
H.	☐ Master
I.	☐ Master Timber Operations

6. FEES

See the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. ***Note: The Department may not process this notification until the correct fee has been received.***

	A. Project	B. Project Cost	C. Project Fee
1	Bridge Replacement	$150,000.00	$3,095.00
2			
3			
4			
5			
6			
7			
8			
9			
10			
		D. Base Fee *(if applicable)*	
		E. TOTAL FEE*	$3,095.00

** Check, money order, and Visa or MasterCard payments are accepted. When payment is made by credit card, CDFW shall assess a separate credit card processing fee of 1.6% to the Total Fee. Credit card payment must be submitted with a completed Credit Card Payment Authorization Form (DFW 1443b (Rev. 8/15)) available online at: https://www.wildlife.ca.gov/Conservation/LSA/Forms or at a Department regional office.*

7. PRIOR NOTIFICATION AND ORDERS

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

☐ Yes (*Provide the information below*) ☑ No

Applicant	Notification Number	Date

B. Is this notification being submitted in response to a court or administrative order or notice, or a notice of violation (NOV) issued by the Department?

☑ No ☐ Yes (*Enclose a copy of the order, notice, or NOV. If the applicant was directed to notify the Department verbally rather than in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.*)

☐ *Continued on additional page(s)*

8. PROJECT LOCATION

A. Address or description of project location.

(*Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway*)

Driving east from the City of Napa on Old Sonoma Rd.: From a beginning point at the intersection of Old Sonoma Rd. and Jefferson Street, drive 1.85 miles to the existing driveway. Turn left into the driveway and proceed 200 feet to the bridge location at the creek, (see attached map).

☐ *Continued on additional page(s)*

B. River, stream, or lake affected by the project.	Unnamed tributary to Congress Valley Crk
C. What water body is the river, stream, or lake tributary to?	Napa River
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	☐ Yes ☑ No ☐ Unknown
E. County	Napa

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Napa	5N	4W	17	SW

☐ *Continued on additional page(s)*

K. Meridian (*check one*) ☐ Humboldt ☑ Mt. Diablo ☐ San Bernardino

L. Assessor's Parcel Number(s)

043-040-001

☐ *Continued on additional page(s)*

M. Coordinates (*If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes*)			
Latitude/Longitude	*Latitude:* 38.28185 deg. N	*Longitude:* -122.32438 deg. W	
	☐ Degrees/Minutes/Seconds	☐ Decimal Degrees	☑ Decimal Minutes
UTM	*Easting:* 559090	*Northing:* 4237303	☑ Zone 10 ☐ Zone 11
Datum used for Latitude/Longitude or UTM	☐ NAD 27	☑ NAD 83 or WGS 84	

9. PROJECT CATEGORY

WORK TYPE	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR-MAINTAIN-OPERATE EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	☐	☐	☐
Bank stabilization – rip-rap/retaining wall/gabion	☐	☐	☐
Boat dock/pier	☐	☐	☐
Boat ramp	☐	☐	☐
Bridge	☐	☑	☐
Channel clearing/vegetation management	☐	☐	☐
Culvert	☐	☐	☐
Debris basin	☐	☐	☐
Dam	☐	☐	☐
Filling of wetland, river, stream, or lake	☐	☐	☐
Geotechnical survey	☐	☐	☐
Habitat enhancement – revegetation/mitigation	☐	☐	☐
Levee	☐	☐	☐
Low water crossing	☐	☐	☐
Road/trail	☐	☐	☐
Sediment removal: pond, stream, or marina	☐	☐	☐
flood control	☐	☐	☐
Storm drain outfall structure	☐	☐	☐
Temporary stream crossing	☐	☐	☐
Utility crossing: horizontal directional drilling	☐	☐	☐
jack/bore	☐	☐	☐
open trench	☐	☐	☐
Water diversion without facility	☐	☐	☐
Water diversion with facility	☐	☐	☐
Other *(specify)*:	☐	☐	☐

10. PROJECT DESCRIPTION

A. Describe the project in detail. Include photographs of the project location and immediate surrounding area.

- Written description of all project activities with detailed step-by-step description of project implementation.
- Include any structures (e.g., rip-rap, culverts) that will be placed or modified in or near the stream, river, or lake, and any channel clearing.
- Specify volume, and dimensions of all materials and features (e.g., rip rap fields) that will be used or installed.
- If water will be diverted or drafted, specify the purpose or use.
- Enclose diagrams, drawings, plans, and maps that provide all of the following: site specific construction details; dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, stockpile areas, areas of temporary disturbance, and where the equipment/machinery will access the project area.

A spanning bridge will replace an existing non-spanning bridge structure located on an unnamed tributary to Congress Valley Creek. The new bridge will provide access to a proposed winery, located on the same parcel. The existing bridge will be removed with equipment operating from the top-of-bank, lifting the deck and supporting walls, piers, and posts without entering or disturbing the bed and banks of the creek.

On the right bank, a total of 40 lineal feet of 10" thick concrete walls will removed. On the left bank, a total of 60 lineal feet of 10" thick concrete walls will be removed. A total of 11, 12" diameter concrete support posts, under the existing bridge deck. Immediately downstream of the bridge, a total of 6, 12" diameter concrete posts will be removed, (these posts appear to have previously supported a revetment wall in the creek channel).

The existing bridge slated for replacement measures 14 feet wide, (deck width) by 45 feet long. The deck, railings, and supporting beams consist of pressure-treated lumber. The replacement bridge will be a steel prefabricated structure with a concrete deck, measuring 20 feet wide, (deck width) by 55 feet long. The deck will rest on reinforced concrete abutments constructed on the top of banks, located entirely out of bed and banks of the channel. Total volume of concrete will be 37 cubic yards, with 10.6 cubic yards of the total extending above natural ground. Abutment walls will be 12 inches thick and 20 feet in length on each bank. Walls will protrude 1 ft. above natural ground, at each top-of-bank.

☑ *Continued on additional page(s)*

B. Specify the equipment and machinery that will be used to complete the project.

A crane will operate from top of bank to lift and remove the old bridge and set the new one.
A medium excavator will operate from top of bank to assist with old bridge removal, as well as for lifting of piers, posts, and old concrete walls.
Backhoe and concrete supply truck.

☐ *Continued on additional page(s)*

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).	☐ Yes ☑ No (*Skip to box 11*)
D. Will the proposed project require work in the wetted portion of the channel?	☐ Yes (*Enclose a plan to divert water around work site*) ☐ No

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Impacts to the bed, channel and banks of the creek will be minimal. On the right bank, a total of 40 lineal feet of 10" thick concrete walls will be removed. On the left bank, a total of 60 lineal feet of 10" thick concrete walls will be removed. A total of 11, 12" diameter concrete support posts under the existing bridge deck will be removed.

☑ *Continued on additional page(s)*

B. Will the project affect any vegetation? ☑ Yes (*Complete the tables below*) ☐ No (*Include aerial photo with date supporting this determination*)

Vegetation Type	Temporary Impact	Permanent Impact
Ruderal grassland	Linear feet: 22 Total area: 1240 sq. ft.	Linear feet: 8 Total area: 720 sq. ft.
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
Yellow willow, (Salix lutea)	1	22 inches
White oak, (Quercus lobata)*	2	10 to 20 inches

☑ *Continued on additional page(s)*

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

☑ Yes (*List each species and/or describe the habitat below*) ☐ No ☐ Unknown

☑ *Continued on additional page(s)*

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

CNDDB. RSA+ site observations. Known mappings in the area.

☐ *Continued on additional page(s)*

E. Has a biological study been completed for the project site?

☐ Yes (*Enclose the biological study*) ☑ No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

☑ Yes (*Enclose the hydrological study*) ☐ No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

G. Have fish or wildlife resources or waters of the state been mapped or delineated on the project site?

☑ Yes (*Enclose the mapped results*) ☐ No

Note: Check "yes" if fish and wildlife resources or waters of the state on the project site have been mapped or delineated. "'Wildlife' means and includes all wild animals, birds, plants, fish, amphibians, reptiles and related ecological communities, including the habitat upon which the wildlife depends." (Fish & G. Code, § 89.5.) If "yes" is checked, submit the mapping or delineation. If the mapping or delineation is in digital format (e.g., GIS shape files or KMZ), you must submit the information in this format for the Department to deem your notification complete. If "no" is checked, or the resolution of the mapping or delineation is insufficient, the Department may request mapping or delineation (in digital or non-digital format), or higher resolution mapping or delineation for the Department to deem the notification complete.

12. MEASURES TO PROTECT FISH, WILDIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Sediment containment fences and fiber rolls will be placed at the top of bank prior to commencement of work. All disturbed ground will be straw mulched and re-seeded with native perennial grasses. All construction activities will be limited to the non-rainy season, and sediment control devices will be inspected prior to fall rains to insure that sediment control devices are functional. Biotechnical streambank protection practices and native plantings will also be in place prior to Oct. 30 of construction season.

☐ *Continued on additional page(s)*

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Construction exclusion fencing will be installed prior to initial entry of construction equipment. Fencing will form a perimeter around trees and other native plants requiring protection. Ingress, egress, and construction equipment staging areas will be clearly marked and established in non-sensitive buffer areas. The contractor will be trained and will be instructed to strictly adhere to sensitive specie protection by the project designated biologist.

☐ *Continued on additional page(s)*

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

California native trees and shrubs will be replaced at a 3:1 ratio to those plants removed or pruned. A vegetation enhancement plan will be prepared and submitted to CDFW, as required in the final LSAA. The designated biologist will monitor the site before and during construction and will conduct a final inspection to confirm that fish, wildlife, and plant resources have been adequately protected.

☐ *Continued on additional page(s)*

13. PERMITS

List any local, State, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. _____ ☐ Applied ☐ Issued

B. _____ ☐ Applied ☐ Issued

C. _____ ☐ Applied ☐ Issued

D. Unknown whether ☐ local, ☐ State, or ☐ federal permit is needed for the project. (*Check each box that applies*)

☑ *Continued on additional page(s)*

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA)?

☐ Yes (*Check the box for each CEQA or NEPA document that has been prepared and enclose a copy of each.*)

☐ No (*Check the box for each CEQA or NEPA document listed below that will be or is being prepared.*)

☐ Notice of Exemption	☐ Mitigated Negative Declaration	☐ NEPA document (*type*):
☐ Initial Study	☐ Environmental Impact Report	_____
☐ Negative Declaration	☐ Notice of Determination *(Enclose)*	
☐ THP/ NTMP	☐ Mitigation, Monitoring, Reporting Plan	

B. State Clearinghouse Number (*if applicable*)			
C. Has a CEQA lead agency been determined?	☐ Yes (*Complete boxes D, E, and F*)	☐ No (*Skip to box 14.G*)	
D. CEQA Lead Agency			
E. Contact Person		F. Telephone Number	

G. If the project described in this notification is not the "whole project" or action pursuant to CEQA, briefly describe the entire project (Cal. Code Regs., tit. 14, § 15378).

☐ *Continued on additional page(s)*

H. Has a CEQA filing fee been paid pursuant to Fish and Game Code section 711.4?

☐ Yes (*Enclose proof of payment*) ☐ No (*Briefly explain below the reason a CEQA filing fee has not been paid)*

Note: If a CEQA filing fee is required, the Lake or Streambed Alteration Agreement may not be finalized until paid.

15. SITE INSPECTION

Check one box only.

☐ In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.

☐ I request the Department to first contact (*insert name*) _____ at (*insert telephone number*) _____ to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

☑ Yes (Please enclose the information via digital media with the completed notification form)

☐ No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

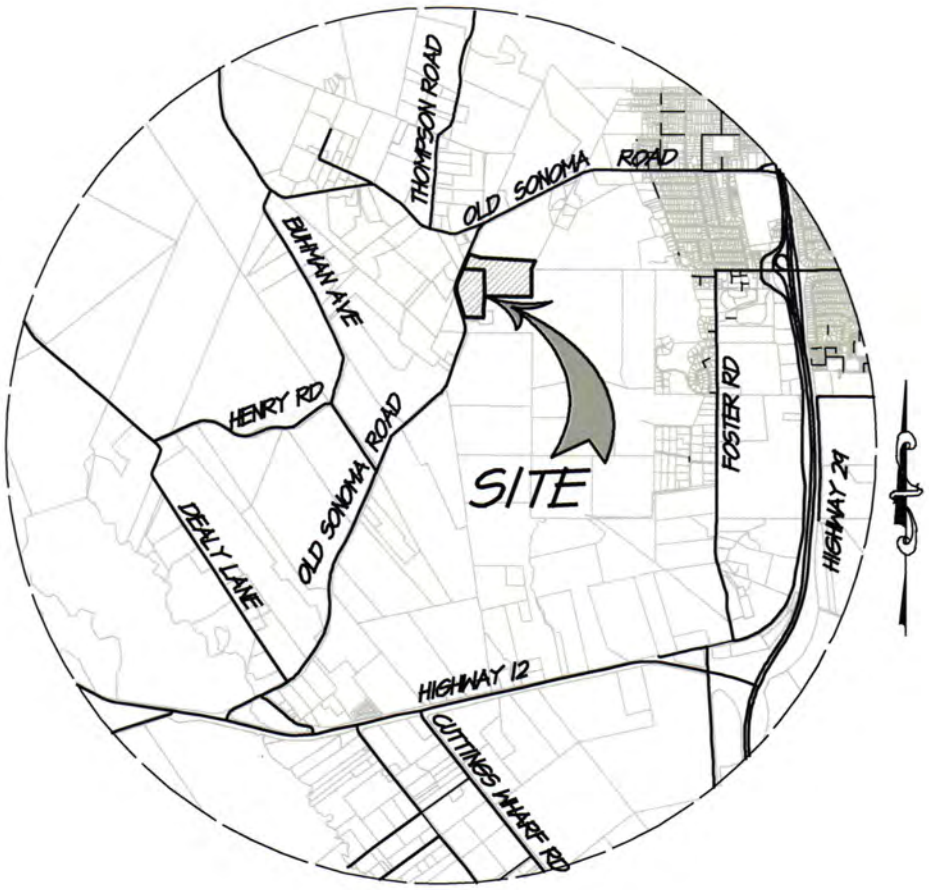
_____ _____

Signature of Applicant or Applicant's Authorized Representative Date

_____

Print Name

TRUCHARD WINERY
VICINITY MAP
NAPA COUNTY CALIFORNIA



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MARCH 23, 2017 4113042.0 Exh-Vic Map.dwg

Attachment B

Project Description

Bridge Exhibit

Truchard Winery Replacement Bridge

Section 10 - Project Description

A spanning bridge will replace an existing non-spanning bridge structure located on an unnamed tributary to Congress Valley Creek. The new bridge will provide access to a proposed winery, located on the same parcel. The existing bridge will be removed with equipment operating from the top-of-bank, lifting the deck and supporting walls, piers, and posts without entering or disturbing the bed and banks of the creek.

On the right bank, a total of 40 lineal feet of 10" thick concrete walls will removed. On the left bank, a total of 60 lineal feet of 10" thick concrete walls will be removed. A total of 11, 12" diameter concrete support posts, under the existing bridge deck. Immediately downstream of the bridge, a total of 6, 12" diameter concrete posts will be removed, (these posts appear to have previously supported a revetment wall in the creek channel).

The existing bridge slated for replacement measures 14 feet wide, (deck width) by 45 feet long. The deck, railings, and supporting beams consist of pressure-treated lumber. The replacement bridge will be a steel prefabricated structure with a concrete deck, measuring 20 feet wide, (deck width) by 55 feet long. The deck will rest on reinforced concrete abutments constructed on the top of banks, located entirely out of bed and banks of the channel. Total volume of concrete will be 37 cubic yards, with 10.6 cubic yards of the total extending above natural ground. Abutment walls will be 12 inches thick and 20 feet in length on each bank. Walls will protrude 1 ft. above natural ground, at each top-of-bank.

The roadway will ramp up to meet the bridge deck elevation at 1 foot above grade. Ramping will consist of compacted earth fill and asphalt paving. A total volume of 17 cubic yards of compacted earth fill and gravel, and 8 cubic yards of asphalt will be required for the ramp up. Ramp up lengths on each side of the bridge will be 33 feet. A total of 40 feet of the total ramp up length will extend beyond the 81 foot wide riparian corridor, as measured at the outboard dripline of the riparian canopy.

A 10 foot section of an existing wall on the upstream right bank will be retained to provide ongoing erosion scour protection for the right bank abutment. This will provide ongoing protection of water quality. The wall will be tested for support strength at the time of construction to determine if anchoring is needed. If wall integrity is determined to be inadequate, a 10 foot section of bio-technical slope protection, (vegetation reinforced slope stabilization, VRSS) will be used.

Care will be taken to insure that no sediment or fill enters the bed or bank of the stream within the ordinary high water mark, (OHWM). VRSS, if deemed necessary will not exceed a fill volume of 1 cubic yard per running foot within the OHWM zone. All construction work will be conducted during the dry season, and no creek waters will be diverted or drafted.

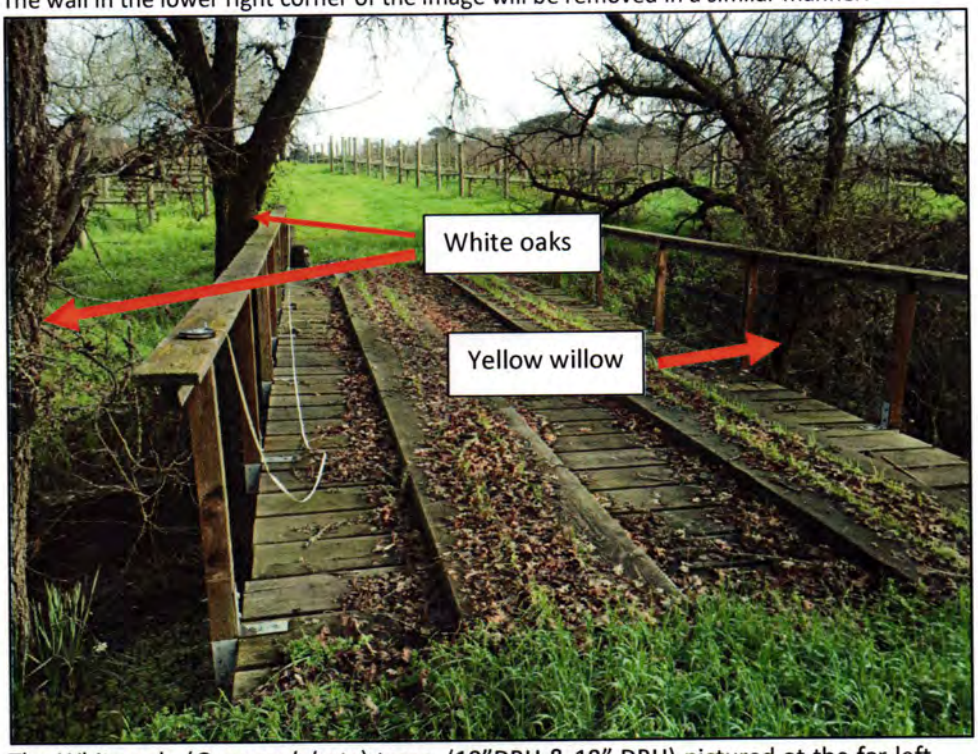
The following photos and maps provide specific site conditions, construction layout and details, and mapping of stockpile areas, and equipment staging/ site access locations.

Looking downstream at the old bridge.

Concrete support posts and most concrete revetment walls will be lifted and removed from the bed and banks taking care not to allow rubble or detritus from entering the channel cross section as fill.

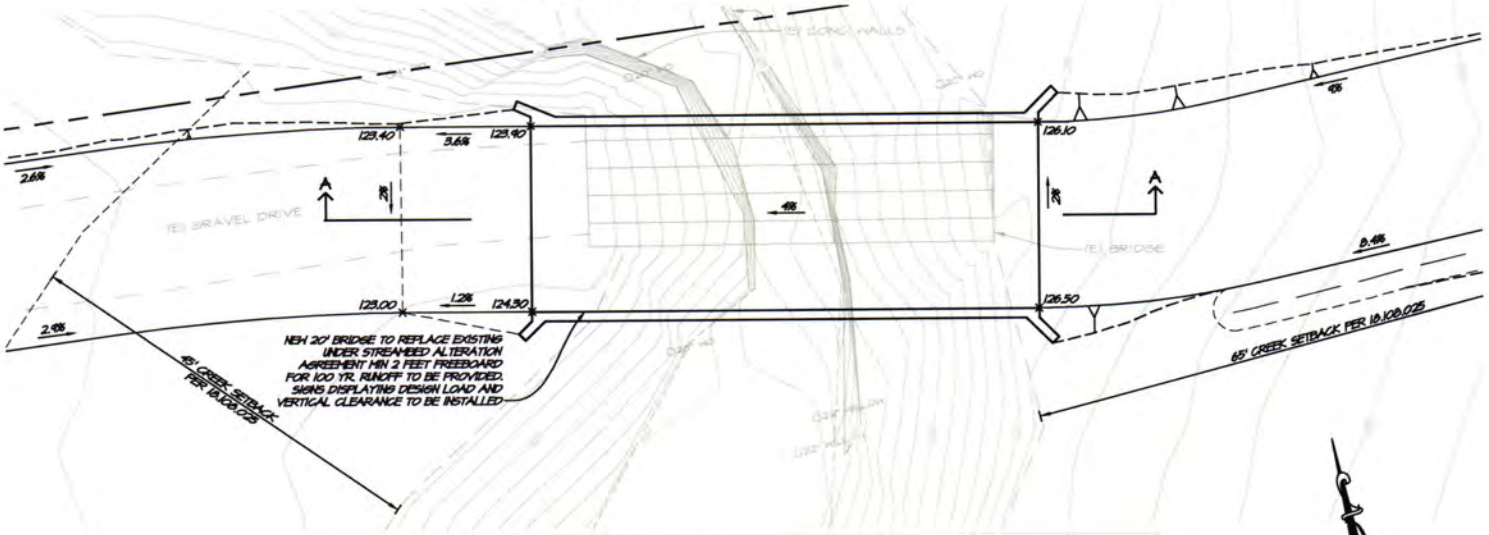
This 10 foot section of existing wall may remain, to provide necessary erosion scour protection. If it is deemed too weak to stand in place, it will be replaced with VRSS. Any replacement material will not exceed 1 cubic yard per running foot of stream. Avoidance of fill and in-stream construction activity will also void the need to acquire a Section 404 federal permit from USACOE.

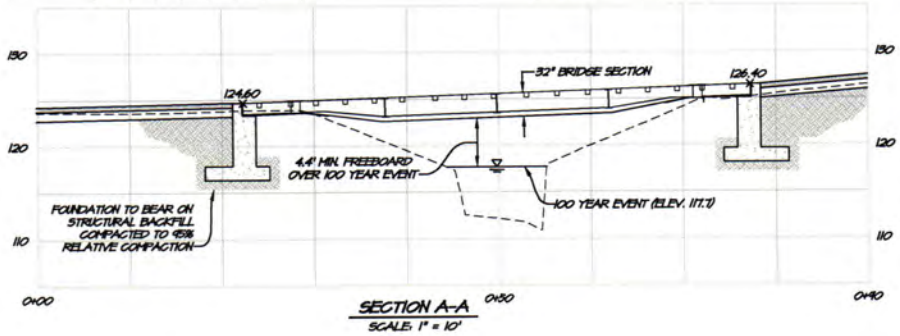
The 6 concrete posts shown here, immediately downstream of the bridge will be pulled out of the creek from the top of bank, taking care not to allow for fill to enter the creek. The wall in the lower right corner of the image will be removed in a similar manner.



The White oak, (*Quercus lobata*) trees, (10"DBH & 18" DBH) pictured at the far left abutments will need to be either trimmed or removed to accommodate construction of the new bridge. All attempts will be made to save the trees and/or minimize trimming of branches. The over-sized Yellow willow, (*Salix lutea*) pictured near the far right end of the bridge will be removed. Willow cuttings will be harvested for use as some of the replacement/ enhancement vegetation, including the VRSS, if needed.

TRUCHARD WINERY
BRIDGE EXHIBIT





SECTION A-A
SCALE: 1" = 10'

GRAPHIC SCALE
10 0 10 20
(IN FEET)
1 inch = 10 FT

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MARCH 22, 2017 411304.2.0 Exh-Bridge.dwg

Attachment C

Project Impacts Narrative

Section 11.c - Project Impacts

11.f – Hydrology Study

Truchard Winery

Project Impacts Narrative

Section 11 a. Project Impacts:

Impacts to the bed, channel and banks of the creek will be minimal. On the right bank, a total of 40 lineal feet of 10" thick concrete walls will be removed. On the left bank, a total of 60 lineal feet of 10" thick concrete walls will be removed. A total of 11, 12" diameter concrete support posts under the existing bridge deck will be removed. Immediately downstream of the bridge, a total of 6, 12" diameter concrete posts will be removed.

Total area impacted by concrete removal for the project equals 590 ft^2, (.014 acres). The concrete walls and concrete posts to be removed total 21.4 yds^3.

It should be noted that because the walls and posts will be lifted out of the channel, ground disturbance will be held to a minimum. Removal of the above-listed "impact" concrete materials will allow for a more natural flow conveyance, and will also make it possible to plant native plant materials in place of the concrete.

The new spanning bridge will be placed within the footprint of the old one, and because abutments will be set at the top-of-bank only, impacts to the natural environs will also be reduced to a significant degree.

If the 15 foot section of wall upstream of the bridge on the right bank is replaced with a vegetation-reinforced soil treatment, native willow, (Salix laseolepsis) will be used, in addition to native soil and heavy coconut, (non-plastic reinforced) erosion control fabric. If this treatment is used, a total of 3.3 yds^3 of soil, coconut fabric and live willow cuttings will be used. Within the ordinary high water mark, (OHWM) less than 1 cubic yard of soil fill will be necessary.

Section 11 b. Project Impacts- Trees:

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
Yellow willow, (Salix lutea)	1	22 inches
White oak, (Quercus lobata)*	2	10 to 20 inches

- *Every effort will be made to save the 2 oaks listed above. If trees can be saved, branches will require pruning to allow for setting of the new bridge.*

Truchard Winery Replacement Bridge - LSAA Section 11 C. Project Impacts
CNDDB Napa Quadr.- List of Species w/ Potential Occurrence *

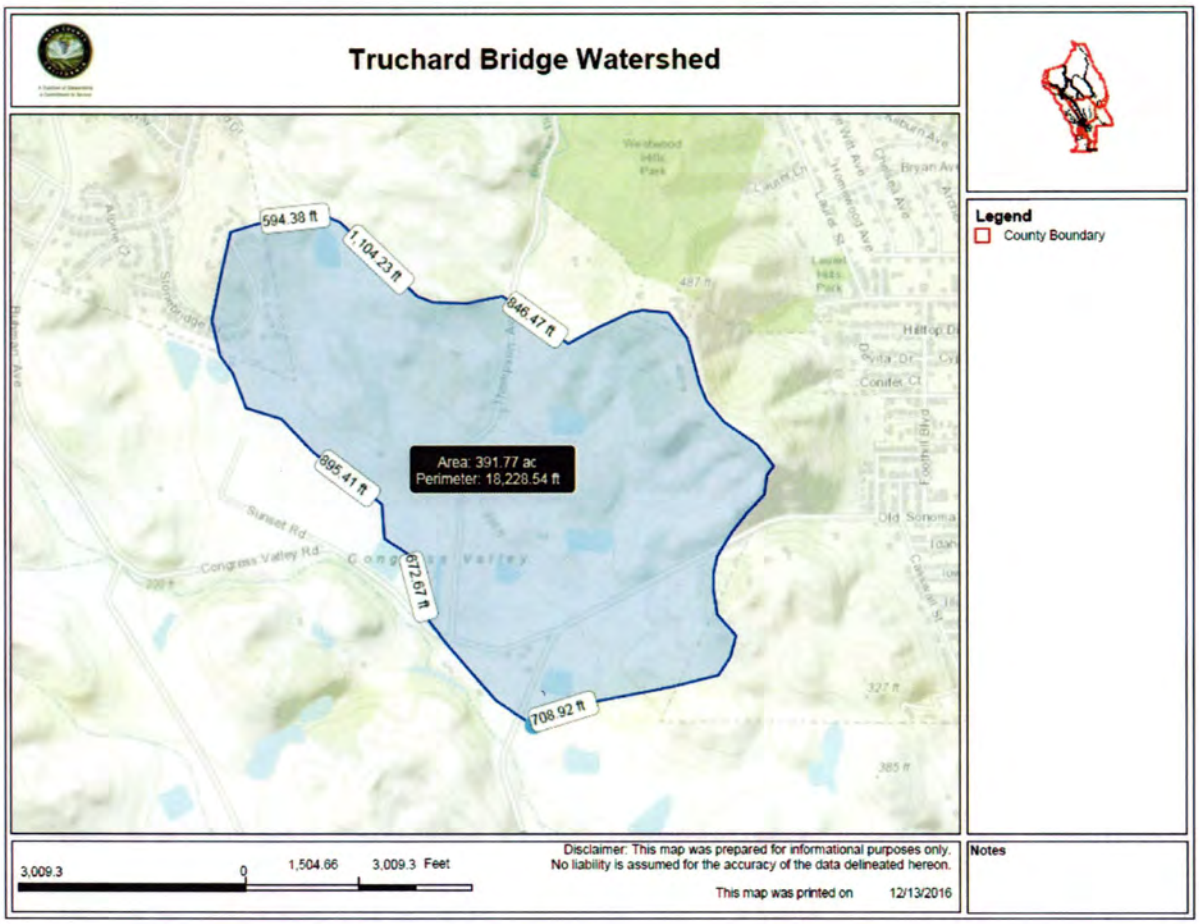
Element Type	Scientific Name	Common Name	Habitat	Occurrence in Study Area/ Mitigation Needed
Animals-Amphibians	*Dicamptodon ensatus*	California Giant Salamander	Larvae of this species usually inhabit clear, cold streams, lakes and ponds. Adults are found in humid forests under rocks and logs	Occurrence is possible. Dry season construction activities should be pursued for avoidance.
Animals-Amphibians	*Rana boylii*	Foothill yellow-legged frog	Variety of habitats with shallow, flowing water, small to moderate sized streams with some cobble-sized substrate and sparse riparian cover	Low. Habitat in the area is not likely to support the species. Cobble substrate is lacking. Bullfrog predators are present in the creek.
Animals-Amphibians	*Rana draytonii*	California red-legged frog	Prefers semi-permanent and permanent stream pools, ponds and creeks with emergent vegetation. Occupies upland habitat, especially in wet winter months.	Low. Winter habitat is lacking. Bullfrog predators are present in the immediate creek environs. No known mapping in the area.
Animals-Reptiles	*Emys marmorata*	Western pond turtle	Prefer permanent, slow moving creeks, streams, ponds, rivers, marshes and irrigation ditches for basking sites.	Potential habitat is present. Surveys should be conducted prior to construction and the site should be monitored by a biologist.
Animals- Fish	*Oncorhynchus mykiss irideus*	Steelhead, Central CA	Requires suitable stream flows, migration passage, and suitable spawning habitat.	None. Suitable stream flows, migration passage and spawing habitat in Congress Valley Creek are not present. Not mapped in this section of creek.

Element Type	Scientific Name	Common Name	Habitat	Occurence in Study Area/ Mitigation Needed
Animals-Crustaceans	*Syncaris pacifica*	California freshwater shrimp	Low elevation, low gradient streams with densely-vegetated margins.	Not known to occur within 4 or more miles from project area. Appropriate habitats are lacking on or near the site. No mapping in Congress Valley Creek.
Animals-Mammals	*Antrozoas pallidus*	Pallid bat	Deserts, grasslands, shrublands, woodlands. Most common in open, dry habitats with rocky areas for roosting.	Medium. Pre-construction surveys should be conducted to determine presence, and any necessary protection measures.
Animals-Insects	*Bombus occidentalis*	Western bumblebee	Grasslands and open meadows.	None. Disturbance of appropriate habitats will not occur.
Animals-Insects	Desmocerus californicus dimorphus	Elderberry Longhorn Beetle	Utilizes elderberry plants, (Sambucus nigra) as habitat.	Nont present. Sambucus spp does not occur in the project area.
Plants-Vascular	*Juglans hindsii*	Northern California black walnut	Riparian woodlands and upland woodlands.	None. Is not present in the project area.

** Note: A variety of CNDDB-listed birds, (neo-tropicals and raptors) may be present, or nearby. The designated biologist for the project will need to conduct a bird survey prior to construction and construction scheduling may also need to be modified to avoid nesting season, (post- August 31).*

Truchard Winery Replacement Bridge

Section 11.f – Hydrology Study



HYDROLOGY/ HYDRAULICS SUMMARY

Watershed Area: 392 acres

T_c: 0.183 hours

Storm Data:

Q_2: 68.55 cfs

Q_{10}: 194.55 cfs

Q_{50}: 344.79 cfs

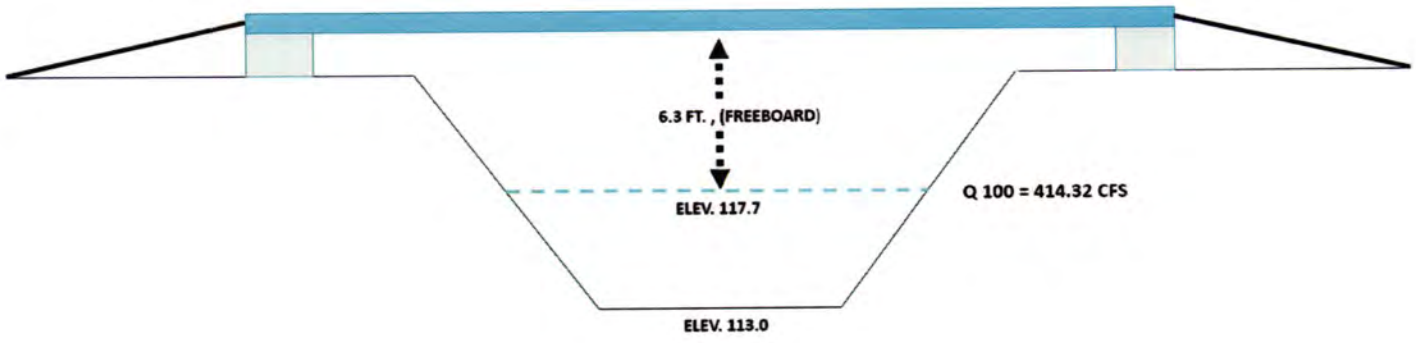
Q_{100}: 411.45 cfs

Channel "D": 13.5 ft.

Q_{100} "D" @ Structure: 4.7 ft.

Freeboard Above Q_{100}: 6.3 ft.

NEW BRIDGE

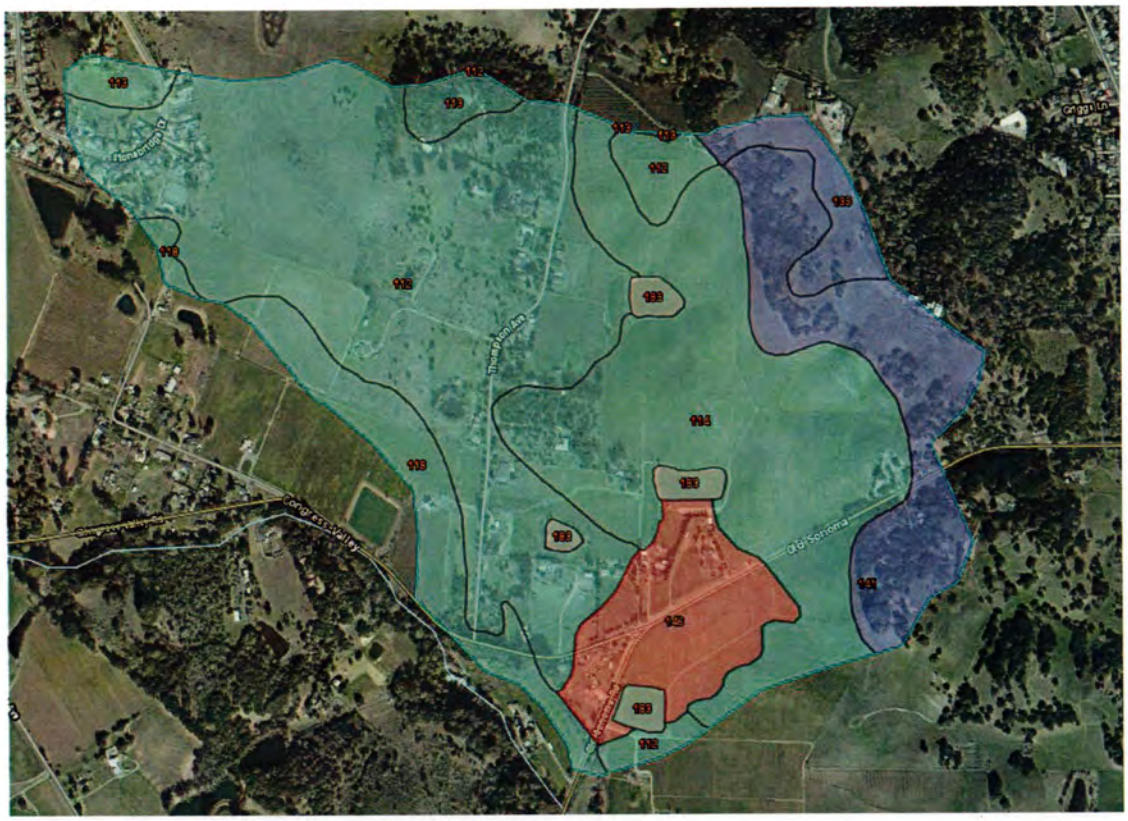


NO SCALE

Watershed Soils (Source: USDA Napa County Soil Survey)

Napa County, California (CA055)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
112	Bressa-Dibble complex, 5 to 15 percent slopes	157.6	41.1%
113	Bressa-Dibble complex, 15 to 30 percent slopes	9.6	2.5%
114	Bressa-Dibble complex, 30 to 50 percent slopes	98.3	25.7%
118	Cole silt loam, 0 to 2 percent slopes	26.3	6.9%
139	Forward gravelly loam, 9 to 30 percent slopes	10.7	2.8%
141	Forward-Kidd complex, 50 to 75 percent slopes	43.6	11.4%
146	Haire loam, 2 to 9 percent slopes	30.1	7.9%
183	Water	6.8	1.8%
Totals for Area of Interest		**383.2**	**100.0%**

Hydrologic Soil Groups:



Tables – Hydrologic Soil Group – Summary By Map Unit

Summary by Map Unit – Napa County, California (CA055)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
112	Bressa-Dibble complex, 5 to 15 percent slopes	C	157.6	41.1%
113	Bressa-Dibble complex, 15 to 30 percent slopes	C	9.6	2.5%
114	Bressa-Dibble complex, 30 to 50 percent slopes	C	98.3	25.7%
118	Cole silt loam, 0 to 2 percent slopes	C	26.3	6.9%
139	Forward gravelly loam, 9 to 30 percent slopes	B	10.7	2.8%
141	Forward-Kidd complex, 50 to 75 percent slopes	B	43.6	11.4%
146	Haire loam, 2 to 9 percent slopes	D	30.1	7.9%
183	Water		6.8	1.8%
Totals for Area of Interest			**383.2**	**100.0%**

NOAA Rainfall Data:

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.122 (0.108-0.136)	0.153 (0.136-0.174)	0.196 (0.174-0.223)	0.231 (0.205-0.266)	0.281 (0.237-0.336)	0.320 (0.263-0.392)	0.360 (0.288-0.454)	0.402 (0.312-0.524)	0.461 (0.341-0.630)	0.509 (0.362-0.722)
10-min	0.174 (0.155-0.196)	0.220 (0.196-0.250)	0.281 (0.249-0.320)	0.332 (0.294-0.382)	0.402 (0.340-0.481)	0.458 (0.378-0.561)	0.516 (0.413-0.650)	0.577 (0.447-0.751)	0.661 (0.489-0.903)	0.729 (0.519-1.03)
15-min	0.211 (0.188-0.239)	0.266 (0.236-0.302)	0.340 (0.301-0.387)	0.401 (0.352-0.462)	0.487 (0.411-0.582)	0.554 (0.457-0.679)	0.624 (0.500-0.786)	0.697 (0.541-0.908)	0.800 (0.592-1.09)	0.882 (0.627-1.25)
30-min	0.300 (0.268-0.341)	0.379 (0.337-0.431)	0.484 (0.429-0.552)	0.572 (0.502-0.658)	0.694 (0.586-0.830)	0.790 (0.651-0.968)	0.889 (0.713-1.12)	0.994 (0.772-1.29)	1.14 (0.844-1.56)	1.26 (0.895-1.79)
60-min	0.433 (0.386-0.491)	0.546 (0.486-0.621)	0.698 (0.619-0.795)	0.824 (0.724-0.948)	1.00 (0.844-1.20)	1.14 (0.938-1.39)	1.28 (1.03-1.61)	1.43 (1.11-1.88)	1.64 (1.22-2.24)	1.81 (1.29-2.57)
2-hr	0.658 (0.586-0.748)	0.818 (0.728-0.930)	1.03 (0.913-1.17)	1.21 (1.06-1.39)	1.44 (1.22-1.73)	1.63 (1.34-2.00)	1.82 (1.46-2.29)	2.02 (1.57-2.63)	2.29 (1.69-3.13)	2.50 (1.78-3.55)
3-hr	0.840 (0.748-0.953)	1.04 (0.927-1.19)	1.31 (1.16-1.49)	1.53 (1.34-1.76)	1.82 (1.54-2.18)	2.05 (1.69-2.51)	2.28 (1.83-2.86)	2.52 (1.99-3.26)	2.85 (2.11-3.89)	3.11 (2.21-4.41)
6-hr	1.24 (1.10-1.41)	1.55 (1.38-1.76)	1.95 (1.73-2.22)	2.27 (1.99-2.61)	2.71 (2.28-3.23)	3.04 (2.50-3.72)	3.37 (2.70-4.28)	3.71 (2.88-4.83)	4.17 (3.09-5.70)	4.53 (3.22-6.40)
12-hr	1.68 (1.50-1.91)	2.17 (1.93-2.47)	2.80 (2.48-3.19)	3.30 (2.90-3.79)	3.96 (3.35-4.74)	4.46 (3.68-5.47)	4.96 (3.99-6.28)	5.47 (4.25-7.12)	6.15 (4.55-8.39)	6.67 (4.74-9.46)
24-hr	2.27 (2.04-2.57)	3.03 (2.73-3.44)	4.00 (3.59-4.55)	4.77 (4.25-5.47)	5.79 (5.02-6.81)	6.55 (5.58-7.84)	7.30 (6.06-8.92)	8.05 (6.57-10.1)	9.05 (7.13-11.7)	9.81 (7.51-13.1)
2-day	2.94 (2.64-3.33)	3.92 (3.52-4.45)	5.16 (4.63-5.87)	6.15 (5.48-7.04)	7.45 (6.48-8.77)	8.42 (7.15-10.1)	9.39 (7.64-11.5)	10.4 (8.45-13.0)	11.7 (9.15-15.1)	12.6 (9.67-16.8)
3-day	3.44 (3.10-3.90)	4.57 (4.10-5.18)	5.99 (5.36-6.82)	7.12 (6.35-8.16)	8.61 (7.47-10.1)	9.73 (8.29-11.6)	10.8 (9.04-13.2)	11.9 (9.74-14.9)	13.4 (10.6-17.4)	14.5 (11.1-19.4)
4-day	3.85 (3.46-4.36)	5.11 (4.59-5.80)	6.70 (6.01-7.63)	7.96 (7.09-9.11)	9.60 (8.32-11.3)	10.8 (9.22-13.0)	12.0 (10.0-14.7)	13.2 (10.8-16.6)	14.8 (11.7-19.2)	16.0 (12.3-21.4)
7-day	4.74 (4.28-5.37)	6.38 (5.73-7.24)	8.40 (7.53-9.55)	9.95 (8.87-11.4)	11.9 (10.4-14.1)	13.4 (11.4-16.0)	14.8 (12.4-18.1)	16.2 (13.2-20.3)	18.0 (14.2-23.3)	19.3 (14.8-25.7)
10-day	5.38 (4.84-6.10)	7.29 (6.55-8.27)	9.60 (8.61-10.9)	11.4 (10.1-13.0)	13.6 (11.8-16.0)	15.2 (13.0-18.2)	16.7 (14.0-20.5)	18.2 (14.9-22.8)	20.1 (15.9-26.1)	21.5 (16.5-28.7)
20-day	7.10 (6.39-8.05)	9.55 (8.59-10.8)	12.5 (11.2-14.2)	14.7 (13.1-16.9)	17.5 (15.2-20.6)	19.4 (16.9-23.3)	21.3 (17.8-26.0)	23.1 (18.8-28.9)	25.3 (20.0-32.8)	26.9 (20.6-36.9)
30-day	8.59 (7.73-9.74)	11.4 (10.3-13.0)	14.8 (13.3-16.8)	17.3 (15.4-19.8)	20.5 (17.7-24.1)	22.7 (19.3-27.2)	24.8 (20.7-30.3)	26.8 (21.9-33.5)	29.3 (23.1-37.9)	31.1 (23.8-41.4)
45-day	10.7 (9.59-12.1)	13.9 (12.5-15.7)	17.7 (15.9-20.1)	20.6 (18.3-23.5)	24.1 (20.9-28.4)	26.6 (22.7-31.9)	29.0 (24.2-35.4)	31.2 (25.5-39.1)	34.1 (28.9-44.1)	36.1 (27.6-48.1)
60-day	12.8 (11.5-14.5)	16.4 (14.7-18.6)	20.6 (18.4-23.4)	23.7 (21.1-27.2)	27.6 (24.0-32.5)	30.4 (25.9-36.4)	33.0 (27.8-40.3)	35.5 (29.0-44.4)	38.6 (30.4-50.0)	40.8 (31.3-54.5)

TR-55 Hydrology Modeling:

P Blake

Truchard Winery
Winery Bridge Replacement
Napa County, California

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
1a	Row Crop SR + Crop residue	(good)	C	134.2	82
	Row Crop SR + Crop residue	(good)	D	30	85
	Woods - grass combination	(good)	B	54.3	58
	Woods - grass combination	(good)	C	158	72
	Total Area / Weighted Curve Number			376.5	75

P Blake

Truchard Winery
Winery Bridge Replacement
Napa County, California

Storm Data

Rainfall Depth by Rainfall Return Period

2-Yr (in)	10-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)	-Yr (in)	-Yr (in)
3.03	4.77	6.55	7.3	.0	.0	.0

Storm Data Source: User-provided custom storm data
Rainfall Distribution Type: Type IA
Dimensionless Unit Hydrograph: <standard>

P Blake

Truchard Winery
Winery Bridge Replacement
Napa County, California

Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
1a							
SHEET	100	0.1000	0.170				0.097
SHALLOW	1000	0.1000	0.050				
CHANNEL	2375	0.0073	0.035	69.00	22.50	7.671	0.086
					Time of Concentration		.183

P Blake

Truchard Winery
Winery Bridge Replacement
Napa County, California

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 2-Yr (cfs) (hr)	10-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)
SUBAREAS				
1a	68.55	194.55	344.79	411.45
	8.03	8.02	8.00	8.00
REACHES				
OUTLET	68.55	194.55	344.79	411.45

Truchard- Congress Valley Creek Area

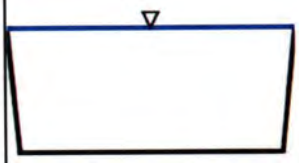
estimated flows at Truchard bridge

Set units: m | mm | ft | in

Bottom width	10	ft
Side slope 1 (horiz./vert.)	1	
Side slope 2 (horiz./vert.)	1	
Manning roughness, n ?	.028	
Channel slope	.0073	rise/run
Flow depth	4.7	ft
Bend Angle? (for riprap sizing)		
Stone specific gravity (2.65)		

Results

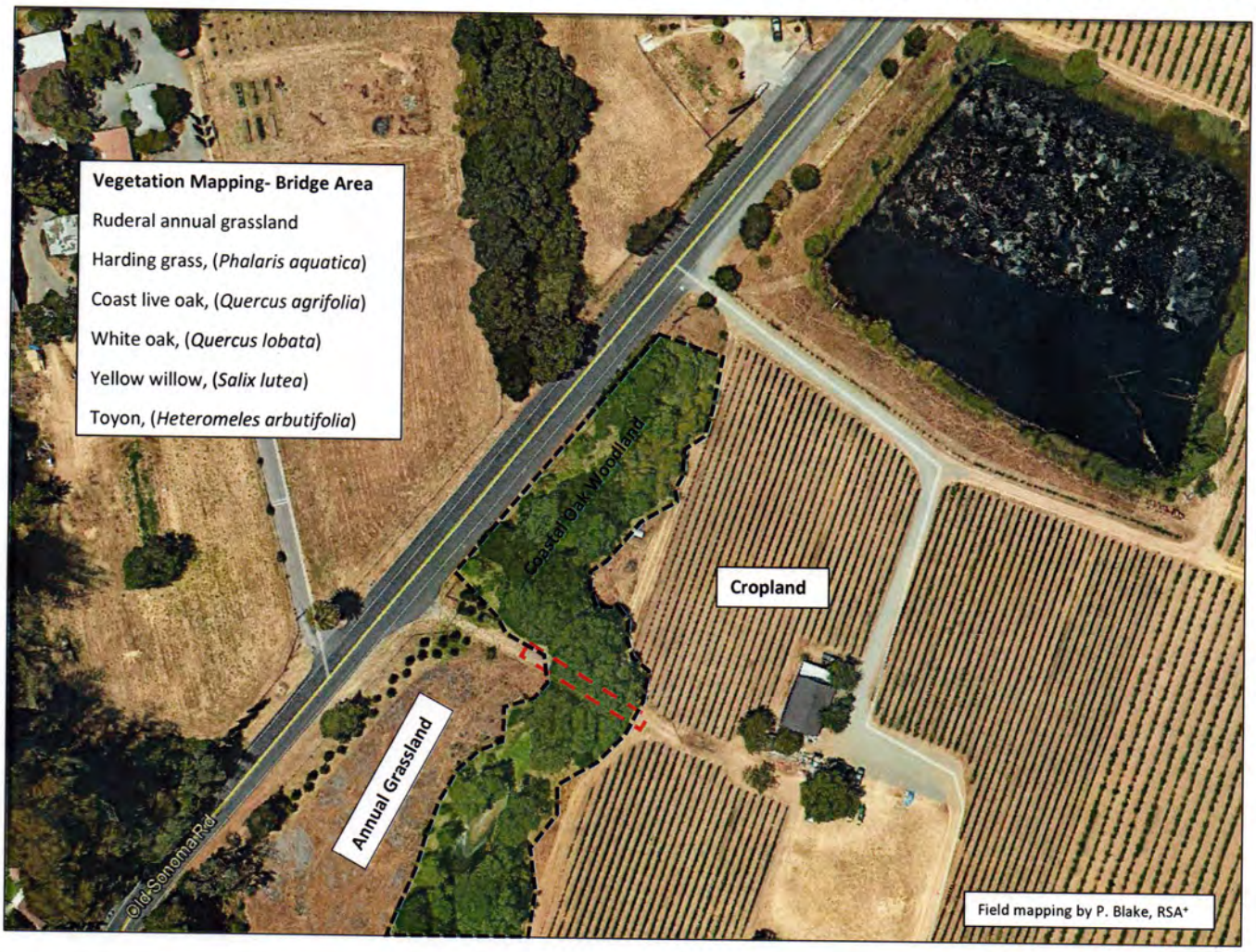
Flow area	49.21	ft^2
Wetted perimeter	19.45	ft
Hydraulic radius	2.53	ft
Velocity, v	8.42	ft/sec
Flow, Q	414.32	cfs
Velocity head, h_v	1.10	ft
Top width, T	10.94	ft
Froude number, F	0.70	
Shear stress (tractive force), tau	2.14	psf
Implied riprap size based on n	0.14	ft
Required bottom angular riprap size, D50, Maricopa County	-1.35	ft
Required side slope 1 angular riprap size, D50, Maricopa County	-13.60	ft
Required side slope 2 angular riprap size, D50, Maricopa County	-13.60	ft
Required angular riprap size, D50, per Maynord, Ruff, and Abt (1989)	NaN	ft
Required angular riprap size, D50, per Searcy (1967)	0.48	ft



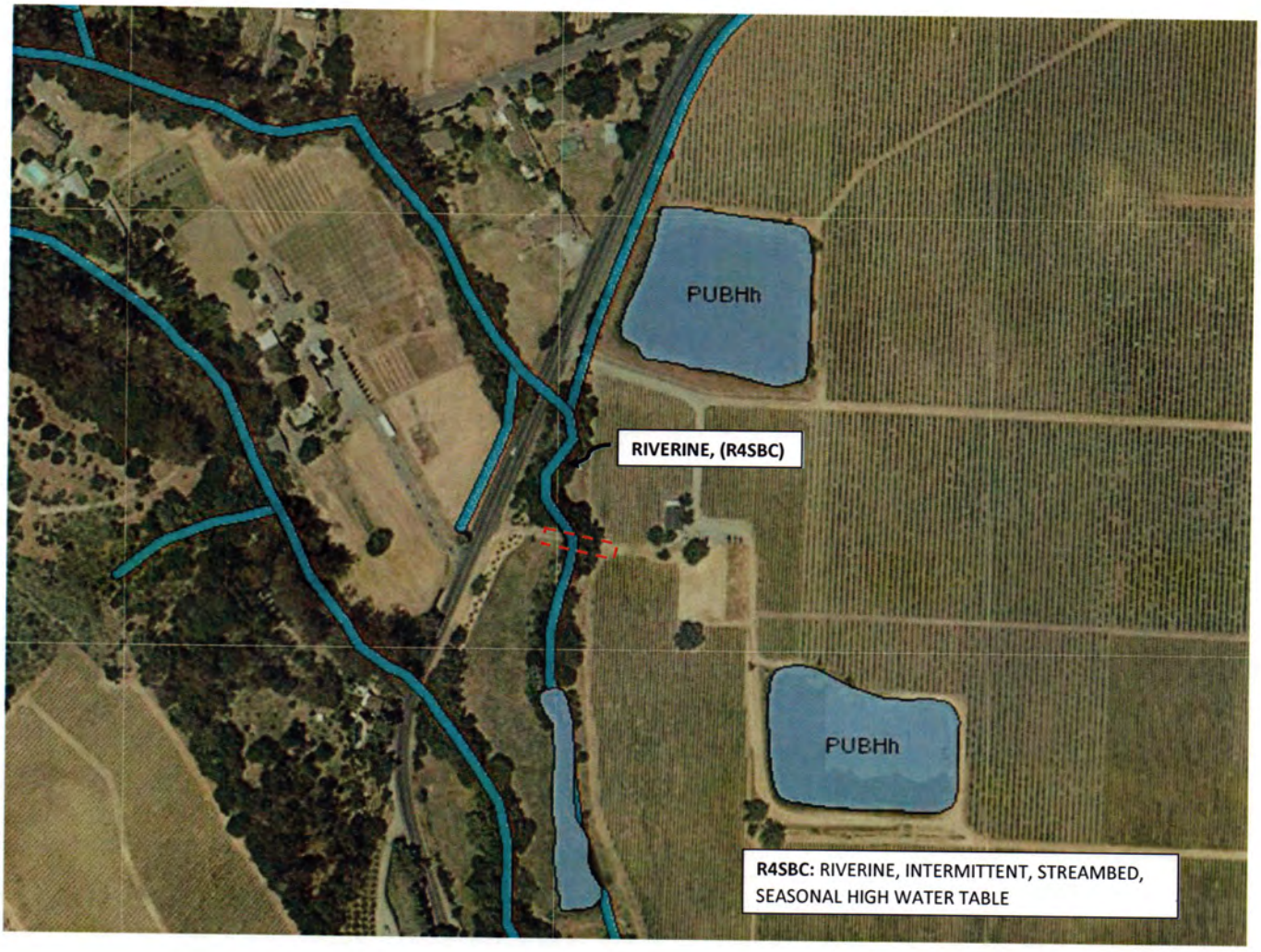
Attachment D

11.g – Resource Mapping

Section 11.g Resource Mapping- Map 1 of 3: SOURCE- CA Wildlife Habitat Relations System, CWHR, 2005 (With Presumed CDFW Jurisdictional Area)



Section G. Resource Mapping- Map 2 of 3 : SOURCE- National Wetlands Inventory, V2



Section G. Resource Mapping- Map 3 of 3 : SOURCE- Bay Area Aquatic Resource Inventory, (BAARI), San Francisco Estuary Institute

Attachment E

Section 13 – Permits

Truchard Winery Replacement Bridge

Section 13. Permits- Continuation Sheet

A use permit is in progress with the County of Napa. It is assumed that the county will assume duties as lead agency. As stated in Section 10, "Project Description", no fill in quantity exceeding 1 cubic yard per running foot of channel is planned to be placed with the ordinary high water mark, (OHWM) of the channel. Therefore, no Army Corp. of Engineers Section 404 permit will apply.

Truchard Family Winery

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	16.11	1000sqft	0.37	16,107.00	4
Quality Restaurant	2.20	1000sqft	0.05	2,204.00	60
General Office Building	1.16	1000sqft	0.03	1,156.00	1
General Office Building	3.44	1000sqft	0.08	3,440.00	1

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Truchard Family Winery - Napa County, Annual

Project Characteristics -

Land Use - Population over-rided based on true facts supported by the application

Construction Phase - Based on typical construction

Grading - Site preparation over-riden based on the additional road construction

Demolition -

Vehicle Trips - over-rode the model based on the use permit limitations on the number of people per day. 40 ppl/day '/, 2.6 ppl/car x 2 trips for weekdays and 60 ppl/day weekends.

Land Use Change -

Sequestration -

Mobile Commute Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	NumDays	1.00	56.00
tblConstructionPhase	PhaseEndDate	4/30/2018	4/17/2018
tblConstructionPhase	PhaseStartDate	5/1/2018	4/15/2018
tblGrading	AcresOfGrading	28.00	1.50
tblLandUse	BuildingSpaceSquareFeet	16,110.00	16,107.00
tblLandUse	BuildingSpaceSquareFeet	2,200.00	2,204.00
tblLandUse	BuildingSpaceSquareFeet	1,160.00	1,156.00
tblLandUse	LandUseSquareFeet	16,110.00	16,107.00
tblLandUse	LandUseSquareFeet	2,200.00	2,204.00
tblLandUse	LandUseSquareFeet	1,160.00	1,156.00
tblLandUse	Population	0.00	4.00
tblLandUse	Population	0.00	60.00
tblLandUse	Population	0.00	1.00
tblLandUse	Population	0.00	1.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSequestration	NumberOfNewTrees	0.00	31.00
tblVehicleTrips	ST_TR	2.46	11.03
tblVehicleTrips	ST_TR	94.36	20.90
tblVehicleTrips	SU_TR	1.05	11.03
tblVehicleTrips	SU_TR	72.16	20.90
tblVehicleTrips	WD_TR	89.95	13.90

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0981	1.0138	0.6670	1.1500e-003	0.0163	0.0577	0.0740	6.5800e-003	0.0534	0.0600	0.0000	104.4906	104.4906	0.0282	0.0000	105.1958
2019	0.6004	0.2560	0.2129	3.5000e-004	2.7500e-003	0.0152	0.0179	7.4000e-004	0.0141	0.0149	0.0000	31.0229	31.0229	7.8900e-003	0.0000	31.2202
Maximum	**0.6004**	**1.0138**	**0.6670**	**1.1500e-003**	**0.0163**	**0.0577**	**0.0740**	**6.5800e-003**	**0.0534**	**0.0600**	**0.0000**	**104.4906**	**104.4906**	**0.0282**	**0.0000**	**105.1958**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0981	1.0138	0.6670	1.1500e-003	0.0163	0.0577	0.0740	6.5800e-003	0.0534	0.0600	0.0000	104.4905	104.4905	0.0282	0.0000	105.1957
2019	0.6004	0.2560	0.2129	3.5000e-004	2.7500e-003	0.0152	0.0179	7.4000e-004	0.0141	0.0149	0.0000	31.0228	31.0228	7.8900e-003	0.0000	31.2201
Maximum	**0.6004**	**1.0138**	**0.6670**	**1.1500e-003**	**0.0163**	**0.0577**	**0.0740**	**6.5800e-003**	**0.0534**	**0.0600**	**0.0000**	**104.4905**	**104.4905**	**0.0282**	**0.0000**	**105.1957**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1014	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.1000e-004	4.1000e-004	0.0000	0.0000	4.4000e-004
Energy	4.4700e-003	0.0406	0.0341	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	119.7351	119.7351	4.2600e-003	1.5200e-003	120.2938
Mobile	0.0640	0.3743	0.7554	2.3000e-003	0.1388	2.7700e-003	0.1416	0.0383	2.6100e-003	0.0409	0.0000	211.2523	211.2523	8.8400e-003	0.0000	211.4732
Waste						0.0000	0.0000		0.0000	0.0000	2.6663	0.0000	2.6663	0.1576	0.0000	6.6056
Water						0.0000	0.0000		0.0000	0.0000	1.6531	8.5346	10.1877	0.1702	4.0900e-003	15.6607
Total	**0.1699**	**0.4150**	**0.7897**	**2.5400e-003**	**0.1388**	**5.8600e-003**	**0.1447**	**0.0383**	**5.7000e-003**	**0.0440**	**4.3194**	**339.5223**	**343.8417**	**0.3409**	**5.6100e-003**	**354.0338**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.15	4.16	4.09	5.58	4.89	9.57	5.09	4.90	9.67	5.54	38.17	7.32	7.90	31.74	3.77	8.65

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-16-2018	7-15-2018	0.3515	0.3515
2	7-16-2018	10-15-2018	0.4056	0.4056
3	10-16-2018	1-15-2019	0.4119	0.4119
4	1-16-2019	4-15-2019	0.7986	0.7986
		Highest	0.7986	0.7986

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1014	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.1000e-004	4.1000e-004	0.0000	0.0000	4.4000e-004
Energy	5.1800e-003	0.0471	0.0396	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	136.3296	136.3296	4.8300e-003	1.7400e-003	136.9676
Mobile	0.0652	0.3859	0.7836	2.4100e-003	0.1460	2.9000e-003	0.1489	0.0402	2.7300e-003	0.0430	0.0000	221.2701	221.2701	9.1500e-003	0.0000	221.4988
Waste						0.0000	0.0000		0.0000	0.0000	5.3326	0.0000	5.3326	0.3152	0.0000	13.2112
Water						0.0000	0.0000		0.0000	0.0000	1.6531	8.7560	10.4092	0.1702	4.0900e-003	15.8831
Total	**0.1719**	**0.4330**	**0.8234**	**2.6900e-003**	**0.1460**	**6.4800e-003**	**0.1525**	**0.0402**	**6.3100e-003**	**0.0465**	**6.9857**	**366.3562**	**373.3419**	**0.4993**	**5.8300e-003**	**387.5611**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	22.7540
Vegetation Land Change	-2.9739
Total	**19.7801**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/16/2018	4/17/2018	5	2	
2	Site Preparation	Site Preparation	4/15/2018	7/2/2018	5	56	digging the subterranean floor
3	Grading	Grading	7/3/2018	8/1/2018	5	2	
4	Building Construction	Building Construction	8/2/2018	2/19/2019	5	100	
5	Paving	Paving	2/20/2019	3/7/2019	5	5	
6	Architectural Coating	Architectural Coating	3/8/2019	4/10/2019	5	5	

Acres of Grading (Site Preparation Phase): 1.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 34,361; Non-Residential Outdoor: 11,454; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	9.00	4.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	**1.0600e-003**	**9.4300e-003**	**7.7800e-003**	**1.0000e-005**	**0.0000**	**6.2000e-004**	**6.2000e-004**	**0.0000**	**5.9000e-004**	**5.9000e-004**	**0.0000**	**1.0608**	**1.0608**	**2.0000e-004**	**0.0000**	**1.0659**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0726	0.0726	0.0000	0.0000	0.0727
Total	**5.0000e-005**	**4.0000e-005**	**3.7000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0726**	**0.0726**	**0.0000**	**0.0000**	**0.0727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	9.4300e-003	7.7800e-003	1.0000e-005		6.2000e-004	6.2000e-004		5.9000e-004	5.9000e-004	0.0000	1.0608	1.0608	2.0000e-004	0.0000	1.0659
Total	**1.0600e-003**	**9.4300e-003**	**7.7800e-003**	**1.0000e-005**	**0.0000**	**6.2000e-004**	**6.2000e-004**	**0.0000**	**5.9000e-004**	**5.9000e-004**	**0.0000**	**1.0608**	**1.0608**	**2.0000e-004**	**0.0000**	**1.0659**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0726	0.0726	0.0000	0.0000	0.0727
Total	**5.0000e-005**	**4.0000e-005**	**3.7000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0726**	**0.0726**	**0.0000**	**0.0000**	**0.0727**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2732	0.1190	2.7000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	24.9620	24.9620	7.7700e-003	0.0000	25.1563
Total	**0.0220**	**0.2732**	**0.1190**	**2.7000e-004**	**8.0000e-004**	**0.0117**	**0.0125**	**9.0000e-005**	**0.0108**	**0.0109**	**0.0000**	**24.9620**	**24.9620**	**7.7700e-003**	**0.0000**	**25.1563**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	5.1000e-004	5.1800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0164	1.0164	4.0000e-005	0.0000	1.0173
Total	**6.6000e-004**	**5.1000e-004**	**5.1800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0164**	**1.0164**	**4.0000e-005**	**0.0000**	**1.0173**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2732	0.1190	2.7000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	24.9620	24.9620	7.7700e-003	0.0000	25.1563
Total	**0.0220**	**0.2732**	**0.1190**	**2.7000e-004**	**8.0000e-004**	**0.0117**	**0.0125**	**9.0000e-005**	**0.0108**	**0.0109**	**0.0000**	**24.9620**	**24.9620**	**7.7700e-003**	**0.0000**	**25.1563**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	5.1000e-004	5.1800e-003	1.0000e-005	1.1100e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0164	1.0164	4.0000e-005	0.0000	1.0173
Total	**6.6000e-004**	**5.1000e-004**	**5.1800e-003**	**1.0000e-005**	**1.1100e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0164**	**1.0164**	**4.0000e-005**	**0.0000**	**1.0173**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2800e-003	0.0000	8.2800e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1037	0.0855	1.3000e-004		6.8500e-003	6.8500e-003		6.5400e-003	6.5400e-003	0.0000	11.6690	11.6690	2.2500e-003	0.0000	11.7252
Total	**0.0117**	**0.1037**	**0.0855**	**1.3000e-004**	**8.2800e-003**	**6.8500e-003**	**0.0151**	**4.5500e-003**	**6.5400e-003**	**0.0111**	**0.0000**	**11.6690**	**11.6690**	**2.2500e-003**	**0.0000**	**11.7252**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.0000e-004	4.0700e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7986	0.7986	3.0000e-005	0.0000	0.7993
Total	**5.2000e-004**	**4.0000e-004**	**4.0700e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7986**	**0.7986**	**3.0000e-005**	**0.0000**	**0.7993**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.2800e-003	0.0000	8.2800e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1037	0.0855	1.3000e-004		6.8500e-003	6.8500e-003		6.5400e-003	6.5400e-003	0.0000	11.6690	11.6690	2.2500e-003	0.0000	11.7252
Total	**0.0117**	**0.1037**	**0.0855**	**1.3000e-004**	**8.2800e-003**	**6.8500e-003**	**0.0151**	**4.5500e-003**	**6.5400e-003**	**0.0111**	**0.0000**	**11.6690**	**11.6690**	**2.2500e-003**	**0.0000**	**11.7252**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.0000e-004	4.0700e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7986	0.7986	3.0000e-005	0.0000	0.7993
Total	**5.2000e-004**	**4.0000e-004**	**4.0700e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7986**	**0.7986**	**3.0000e-005**	**0.0000**	**0.7993**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0586	0.5957	0.4186	6.1000e-004		0.0383	0.0383		0.0352	0.0352	0.0000	56.1663	56.1663	0.0175	0.0000	56.6034
Total	**0.0586**	**0.5957**	**0.4186**	**6.1000e-004**		**0.0383**	**0.0383**		**0.0352**	**0.0352**	**0.0000**	**56.1663**	**56.1663**	**0.0175**	**0.0000**	**56.6034**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-003	0.0290	8.5100e-003	5.0000e-005	1.2800e-003	2.4000e-004	1.5200e-003	3.7000e-004	2.3000e-004	6.0000e-004	0.0000	5.2168	5.2168	3.1000e-004	0.0000	5.2245
Worker	2.3100e-003	1.7800e-003	0.0180	4.0000e-005	3.8400e-003	3.0000e-005	3.8700e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.5282	3.5282	1.2000e-004	0.0000	3.5313
Total	**3.5100e-003**	**0.0308**	**0.0265**	**9.0000e-005**	**5.1200e-003**	**2.7000e-004**	**5.3900e-003**	**1.3900e-003**	**2.6000e-004**	**1.6500e-003**	**0.0000**	**8.7450**	**8.7450**	**4.3000e-004**	**0.0000**	**8.7558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0586	0.5957	0.4186	6.1000e-004		0.0383	0.0383		0.0352	0.0352	0.0000	56.1662	56.1662	0.0175	0.0000	56.6034
Total	**0.0586**	**0.5957**	**0.4186**	**6.1000e-004**		**0.0383**	**0.0383**		**0.0352**	**0.0352**	**0.0000**	**56.1662**	**56.1662**	**0.0175**	**0.0000**	**56.6034**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-003	0.0290	8.5100e-003	5.0000e-005	1.2800e-003	2.4000e-004	1.5200e-003	3.7000e-004	2.3000e-004	6.0000e-004	0.0000	5.2168	5.2168	3.1000e-004	0.0000	5.2245
Worker	2.3100e-003	1.7800e-003	0.0180	4.0000e-005	3.8400e-003	3.0000e-005	3.8700e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.5282	3.5282	1.2000e-004	0.0000	3.5313
Total	**3.5100e-003**	**0.0308**	**0.0265**	**9.0000e-005**	**5.1200e-003**	**2.7000e-004**	**5.3900e-003**	**1.3900e-003**	**2.6000e-004**	**1.6500e-003**	**0.0000**	**8.7450**	**8.7450**	**4.3000e-004**	**0.0000**	**8.7558**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0172	0.1768	0.1358	2.0000e-004		0.0109	0.0109		0.0100	0.0100	0.0000	18.4141	18.4141	5.8300e-003	0.0000	18.5597
Total	**0.0172**	**0.1768**	**0.1358**	**2.0000e-004**		**0.0109**	**0.0109**		**0.0100**	**0.0100**	**0.0000**	**18.4141**	**18.4141**	**5.8300e-003**	**0.0000**	**18.5597**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	9.1600e-003	2.5700e-003	2.0000e-005	4.3000e-004	7.0000e-005	4.9000e-004	1.2000e-004	7.0000e-005	1.9000e-004	0.0000	1.7299	1.7299	1.0000e-004	0.0000	1.7324
Worker	6.9000e-004	5.2000e-004	5.2500e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1414	1.1414	4.0000e-005	0.0000	1.1423
Total	**1.0500e-003**	**9.6800e-003**	**7.8200e-003**	**3.0000e-005**	**1.7100e-003**	**8.0000e-005**	**1.7800e-003**	**4.6000e-004**	**8.0000e-005**	**5.4000e-004**	**0.0000**	**2.8713**	**2.8713**	**1.4000e-004**	**0.0000**	**2.8747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0172	0.1768	0.1358	2.0000e-004		0.0109	0.0109		0.0100	0.0100	0.0000	18.4141	18.4141	5.8300e-003	0.0000	18.5597
Total	**0.0172**	**0.1768**	**0.1358**	**2.0000e-004**		**0.0109**	**0.0109**		**0.0100**	**0.0100**	**0.0000**	**18.4141**	**18.4141**	**5.8300e-003**	**0.0000**	**18.5597**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	9.1600e-003	2.5700e-003	2.0000e-005	4.3000e-004	7.0000e-005	4.9000e-004	1.2000e-004	7.0000e-005	1.9000e-004	0.0000	1.7299	1.7299	1.0000e-004	0.0000	1.7324
Worker	6.9000e-004	5.2000e-004	5.2500e-003	1.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1414	1.1414	4.0000e-005	0.0000	1.1423
Total	**1.0500e-003**	**9.6800e-003**	**7.8200e-003**	**3.0000e-005**	**1.7100e-003**	**8.0000e-005**	**1.7800e-003**	**4.6000e-004**	**8.0000e-005**	**5.4000e-004**	**0.0000**	**2.8713**	**2.8713**	**1.4000e-004**	**0.0000**	**2.8747**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9800e-003	0.0471	0.0429	7.0000e-005		2.6600e-003	2.6600e-003		2.4600e-003	2.4600e-003	0.0000	5.7435	5.7435	1.6400e-003	0.0000	5.7845
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9800e-003**	**0.0471**	**0.0429**	**7.0000e-005**		**2.6600e-003**	**2.6600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**5.7435**	**5.7435**	**1.6400e-003**	**0.0000**	**5.7845**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.4000e-004	3.5000e-003	1.0000e-005	8.5000e-004	1.0000e-005	8.6000e-004	2.3000e-004	1.0000e-005	2.3000e-004	0.0000	0.7610	0.7610	2.0000e-005	0.0000	0.7616
Total	**4.6000e-004**	**3.4000e-004**	**3.5000e-003**	**1.0000e-005**	**8.5000e-004**	**1.0000e-005**	**8.6000e-004**	**2.3000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.7610**	**0.7610**	**2.0000e-005**	**0.0000**	**0.7616**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9800e-003	0.0471	0.0429	7.0000e-005		2.6600e-003	2.6600e-003		2.4600e-003	2.4600e-003	0.0000	5.7435	5.7435	1.6400e-003	0.0000	5.7845
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9800e-003**	**0.0471**	**0.0429**	**7.0000e-005**		**2.6600e-003**	**2.6600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**5.7435**	**5.7435**	**1.6400e-003**	**0.0000**	**5.7845**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.4000e-004	3.5000e-003	1.0000e-005	8.5000e-004	1.0000e-005	8.6000e-004	2.3000e-004	1.0000e-005	2.3000e-004	0.0000	0.7610	0.7610	2.0000e-005	0.0000	0.7616
Total	**4.6000e-004**	**3.4000e-004**	**3.5000e-003**	**1.0000e-005**	**8.5000e-004**	**1.0000e-005**	**8.6000e-004**	**2.3000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.7610**	**0.7610**	**2.0000e-005**	**0.0000**	**0.7616**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-003	0.0220	0.0221	4.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	3.0639	3.0639	2.6000e-004	0.0000	3.0704
Total	**0.5766**	**0.0220**	**0.0221**	**4.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**3.0639**	**3.0639**	**2.6000e-004**	**0.0000**	**3.0704**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	7.8000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1691	0.1691	1.0000e-005	0.0000	0.1692
Total	**1.0000e-004**	**8.0000e-005**	**7.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1691**	**0.1691**	**1.0000e-005**	**0.0000**	**0.1692**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-003	0.0220	0.0221	4.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	3.0639	3.0639	2.6000e-004	0.0000	3.0704
Total	**0.5766**	**0.0220**	**0.0221**	**4.0000e-005**		**1.5500e-003**	**1.5500e-003**		**1.5500e-003**	**1.5500e-003**	**0.0000**	**3.0639**	**3.0639**	**2.6000e-004**	**0.0000**	**3.0704**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	7.8000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1691	0.1691	1.0000e-005	0.0000	0.1692
Total	**1.0000e-004**	**8.0000e-005**	**7.8000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1691**	**0.1691**	**1.0000e-005**	**0.0000**	**0.1692**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Encourage Telecommuting and Alternative Work Schedules

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0640	0.3743	0.7554	2.3000e-003	0.1388	2.7700e-003	0.1416	0.0383	2.6100e-003	0.0409	0.0000	211.2523	211.2523	8.8400e-003	0.0000	211.4732
Unmitigated	0.0652	0.3859	0.7836	2.4100e-003	0.1460	2.9000e-003	0.1489	0.0402	2.7300e-003	0.0430	0.0000	221.2701	221.2701	9.1500e-003	0.0000	221.4988

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	12.79	12.79	12.79	35,324	33,644
General Office Building	37.94	37.94	37.94	104,754	99,772
Manufacturing	61.54	24.00	9.99	188,589	178,998
Quality Restaurant	30.58	45.98	45.98	41,535	39,630
Total	142.86	120.72	106.71	370,203	352,045

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Manufacturing	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
Quality Restaurant	14.70	6.60	6.60	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Manufacturing	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123
Quality Restaurant	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123
General Office Building	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123
General Office Building	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	75.5022	75.5022	3.4100e-003	7.1000e-004	75.7980
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	85.0499	85.0499	3.8500e-003	8.0000e-004	85.3831
NaturalGas Mitigated	4.4700e-003	0.0406	0.0341	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003	0.0000	44.2329	44.2329	8.5000e-004	8.1000e-004	44.4957
NaturalGas Unmitigated	5.1800e-003	0.0471	0.0396	2.8000e-004		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	51.2798	51.2798	9.8000e-004	9.4000e-004	51.5845

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	19016.2	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0148	1.0148	2.0000e-005	2.0000e-005	1.0208
General Office Building	56588	3.1000e-004	2.7700e-003	2.3300e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	3.0198	3.0198	6.0000e-005	6.0000e-005	3.0377
Manufacturing	426513	2.3000e-003	0.0209	0.0176	1.3000e-004		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003	0.0000	22.7604	22.7604	4.4000e-004	4.2000e-004	22.8956
Quality Restaurant	458829	2.4700e-003	0.0225	0.0189	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.4849	24.4849	4.7000e-004	4.5000e-004	24.6304
Total		**5.1800e-003**	**0.0471**	**0.0396**	**2.9000e-004**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**	**0.0000**	**51.2798**	**51.2798**	**9.9000e-004**	**9.5000e-004**	**51.5845**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	14279.5	8.0000e-005	7.0000e-004	5.9000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7620	0.7620	1.0000e-005	1.0000e-005	0.7665
General Office Building	42492.6	2.3000e-004	2.0800e-003	1.7500e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.2676	2.2676	4.0000e-005	4.0000e-005	2.2810
Manufacturing	346743	1.8700e-003	0.0170	0.0143	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.5036	18.5036	3.5000e-004	3.4000e-004	18.6135
Quality Restaurant	425378	2.2900e-003	0.0209	0.0175	1.3000e-004		1.5800e-003	1.5800e-003		1.5800e-003	1.5800e-003	0.0000	22.6998	22.6998	4.4000e-004	4.2000e-004	22.8347
Total		**4.4700e-003**	**0.0406**	**0.0341**	**2.4000e-004**		**3.0800e-003**	**3.0800e-003**		**3.0800e-003**	**3.0800e-003**	**0.0000**	**44.2329**	**44.2329**	**8.4000e-004**	**8.1000e-004**	**44.4958**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	21062.3	6.1273	2.8000e-004	6.0000e-005	6.1513
General Office Building	62676.8	18.2334	8.2000e-004	1.7000e-004	18.3048
Manufacturing	135621	39.4537	1.7800e-003	3.7000e-004	39.6083
Quality Restaurant	72996.5	21.2355	9.6000e-004	2.0000e-004	21.3187
Total		**85.0499**	**3.8400e-003**	**8.0000e-004**	**85.3831**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	18292.5	5.3215	2.4000e-004	5.0000e-005	5.3424
General Office Building	54434.6	15.8356	7.2000e-004	1.5000e-004	15.8977
Manufacturing	119168	34.6672	1.5700e-003	3.2000e-004	34.8031
Quality Restaurant	67641.9	19.6778	8.9000e-004	1.8000e-004	19.7549
Total		**75.5022**	**3.4200e-003**	**7.0000e-004**	**75.7980**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1014	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.1000e-004	4.1000e-004	0.0000	0.0000	4.4000e-004
Unmitigated	0.1014	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.1000e-004	4.1000e-004	0.0000	0.0000	4.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0895					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.1000e-004	4.1000e-004	0.0000	0.0000	4.4000e-004
Total	**0.1014**	**0.0000**	**2.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.1000e-004**	**4.1000e-004**	**0.0000**	**0.0000**	**4.4000e-004**

6.2 Area by SubCategory

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Architectural Coating	0.0119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0895					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.1000e-004	4.1000e-004	0.0000	0.0000	4.4000e-004
Total	**0.1014**	**0.0000**	**2.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.1000e-004**	**4.1000e-004**	**0.0000**	**0.0000**	**4.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.1877	0.1702	4.0900e-003	15.6607
Unmitigated	10.4092	0.1702	4.0900e-003	15.8831

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.817575 / 0.501095	2.0566	0.0267	6.5000e-004	2.9171
Manufacturing	3.72544 / 0	7.0462	0.1217	2.9200e-003	10.9582
Quality Restaurant	0.667774 / 0.0426239	1.3064	0.0218	5.2000e-004	2.0078
Total		**10.4092**	**0.1702**	**4.0900e-003**	**15.8831**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.817575 / 0.300657	1.8525	0.0267	6.4000e-004	2.7122
Manufacturing	3.72544 / 0	7.0462	0.1217	2.9200e-003	10.9582
Quality Restaurant	0.667774 / 0.0255743	1.2891	0.0218	5.2000e-004	1.9904
Total		**10.1877**	**0.1702**	**4.0800e-003**	**15.6607**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.6663	0.1576	0.0000	6.6056
Unmitigated	5.3326	0.3152	0.0000	13.2112

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.28	0.8688	0.0513	0.0000	2.1524
Manufacturing	19.98	4.0558	0.2397	0.0000	10.0480
Quality Restaurant	2.01	0.4080	0.0241	0.0000	1.0108
Total		**5.3326**	**0.3151**	**0.0000**	**13.2112**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	2.14	0.4344	0.0257	0.0000	1.0762
Manufacturing	9.99	2.0279	0.1198	0.0000	5.0240
Quality Restaurant	1.005	0.2040	0.0121	0.0000	0.5054
Total		**2.6663**	**0.1576**	**0.0000**	**6.6056**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	19.7801	0.0000	0.0000	19.7801

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	4.58 / 3.89	-2.9739	0.0000	0.0000	-2.9739
Total		**-2.9739**	**0.0000**	**0.0000**	**-2.9739**

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	31	22.7540	0.0000	0.0000	22.7540
Total		**22.7540**	**0.0000**	**0.0000**	**22.7540**

Historical Resources Study of the Property at 4062 Old Sonoma Road Napa, Napa County, California

Eileen Barrow, M.A.

January 19, 2017

Historical Resources Study of the Property at 4062 Old Sonoma Road Napa, Napa County, California

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January 19, 2017

ABSTRACT

Tom Origer & Associates conducted an historical resources survey of the property at 4062 Old Sonoma Road, Napa, Napa County, California. The study was requested by Kirsty Shelton Gerosa of Farella Braun & Martel, LLP, on behalf of the property owner, Anthony Truchard. This study was conducted to meet the requirements of the Napa County Planning, Building, and Environmental Services Department and those of the California Environmental Quality Act. The purpose of this report is to identify historical resources (see definition of historical resources in the Regulatory Context section). This report will not address Tribal Cultural Resources as defined in Public Resources Code [PRC] 21074 (a)(1)(A)-(B).

The proposed project includes construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard on an 11.5-acre parcel.

This study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 16-0884), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No historical resources were found within the study area; however, a stone bridge was found immediately adjacent to the study area on Old Sonoma Highway. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2016-138S).

This report contains information about the locations of archaeological sites. For the protection of these resources, this report, and such location information, should not be publicly circulated.

Synopsis

Project:	Truchard Family Winery
Location:	4062 Old Sonoma Road, Napa, Napa County
APN:	043-040-001
Quadrangles:	Napa 7.5' series
Study Type:	Intensive
Scope:	11.5 acres
Finds:	No resources within the study area

Project Personnel

Eileen Barrow

Mrs. Barrow has been with Tom Origer & Associates since 2005. She holds a Master of Arts in cultural resources management from Sonoma State University. Mrs. Barrow's experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Her professional affiliations include the Society for American Archaeology, the Society for California Archaeology, the California Historical Society, the Sonoma County Historical Society, and the Western Obsidian Focus Group.

CONTENTS

FIGURES

INTRODUCTION

Tom Origer & Associates conducted an historical resources survey of the property at 4062 Old Sonoma Road, Napa, Napa County, California. The study was requested by Kirsty Shelton Gerosa of Farella Braun & Martel, LLP, on behalf of the property owner, Anthony Truchard. This study was conducted to meet the requirements of the Napa County Planning, Building, and Environmental Services Department and those of the California Environmental Quality Act. The proposed project includes construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard on the 11.5-acre parcel. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2016-138S).

REGULATORY CONTEXT

The California Environmental Quality Act (CEQA) requires that historical resources be considered during the environmental review process. This is accomplished by an inventory of resources within a study area and by assessing the potential that historical resources could be affected by development. The term "Historical Resources' encompasses prehistoric and historical archaeological sites and built environment resources (e.g., buildings, bridges, canals). An additional category of resources is defined in CEQA under the term "Tribal Cultural Resources" (Public Resources Code Section 21074). They are not addressed in this report. Tribal cultural resources are resources that are of specific concern to California Native American tribes, and knowledge of such resources is limited to tribal people. Pursuant to revisions to CEQA enacted in July of 2015, such resources are to be identified by tribal people in direct, confidential consultation with the lead agency (PRC §21080.3.1).

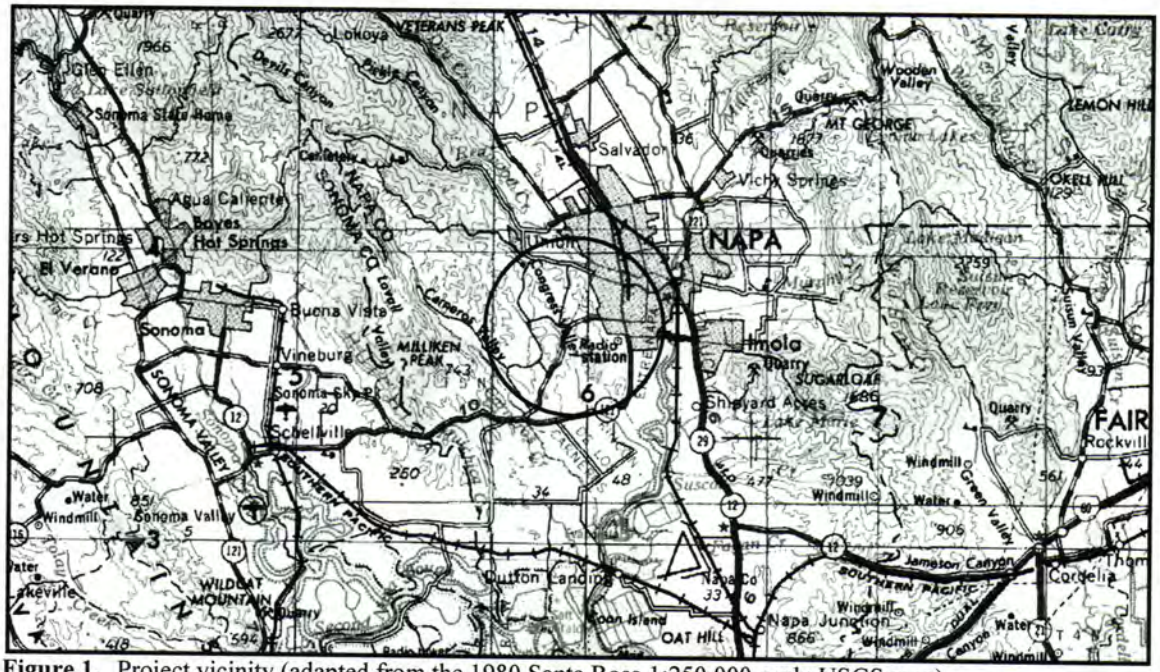

Figure 1. Project vicinity (adapted from the 1980 Santa Rosa 1:250,000-scale USGS map).

This historical resources survey was designed to satisfy environmental issues specified in the CEQA and its guidelines (Title 14 CCR §15064.5) by: (1) identifying all historical resources within the project area; (2) offering a preliminary significance evaluation of the identified cultural resources; (3) assessing resource vulnerability to effects that could arise from project activities; and (4) offering suggestions designed to protect resource integrity, as warranted.

Resource Definitions

Historical resources are classified by the State Office of Historic Preservation (OHP) as sites, buildings, structures, objects and districts, and each is described by OHP (1995) as follows.

> **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
>
> **Building.** A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.
>
> **Structure.** The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
>
> **Object.** The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.
>
> **District.** A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect an historical resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. The importance of a resource is measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852(a)) as listed below. A resource may be important if it meets any one of the criteria below, or if it is already listed on the California Register of Historical Resources or a local register of historical resources.

An important historical resource is one which:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2. Is associated with the lives of persons important to local, California, or national history.

3. Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values.

4. Has yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, eligibility for the California Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

The OHP advocates that all historical resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

Study Area Location and Description

The study area is located at 4062 Old Sonoma Road, Napa, Napa County, as shown on the Napa 7.5' USGS topographic map (Figure 2). It consists of 11.5 acres situated on level to gently sloping land.

The closest water source are two an unnamed seasonal creeks which flow through the property.

Soils within the study area belong to the Bressa-Dibble, Cole, and Haire series (Lambert and Kashiwagi 1978:Sheet 43). Bressa-Dibble soils consist of well-draining soils found on uplands. Cole soils consist of poorly-draining soils found on alluvial fans. Haire soils consist of moderately-draining soils found on old terraces and alluvial fans. In a natural state these three soil types generally support the growth of grasses, forbs, and oaks. Historically, parcels containing these soils were used for vineyards, orchards, and pasture (Lambert and Kashiwagi 197:11-13, 23).

The geology of the study area consists of alluvium, stream terrace deposits, and stream channel deposits which range in age from the beginning of the Pleistocene epoch (2.588 million years ago to 11,700 years ago) through the Holocene epoch (11,700 years ago to present) (Clahan *et al.* 2004). The youngest deposits are the stream channel deposits which are less than 1,000 years old. The second youngest deposits are to the west of the creek and are less than 10,000 years old. All of the land east of the creek that runs through the property is approximately 9,000 years old or older (Clahan *et al.* 2008).

Cultural Setting

Archaeological evidence indicates that human occupation of California began at least 11,000 years ago (Erlandson *et al.* 2007). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling

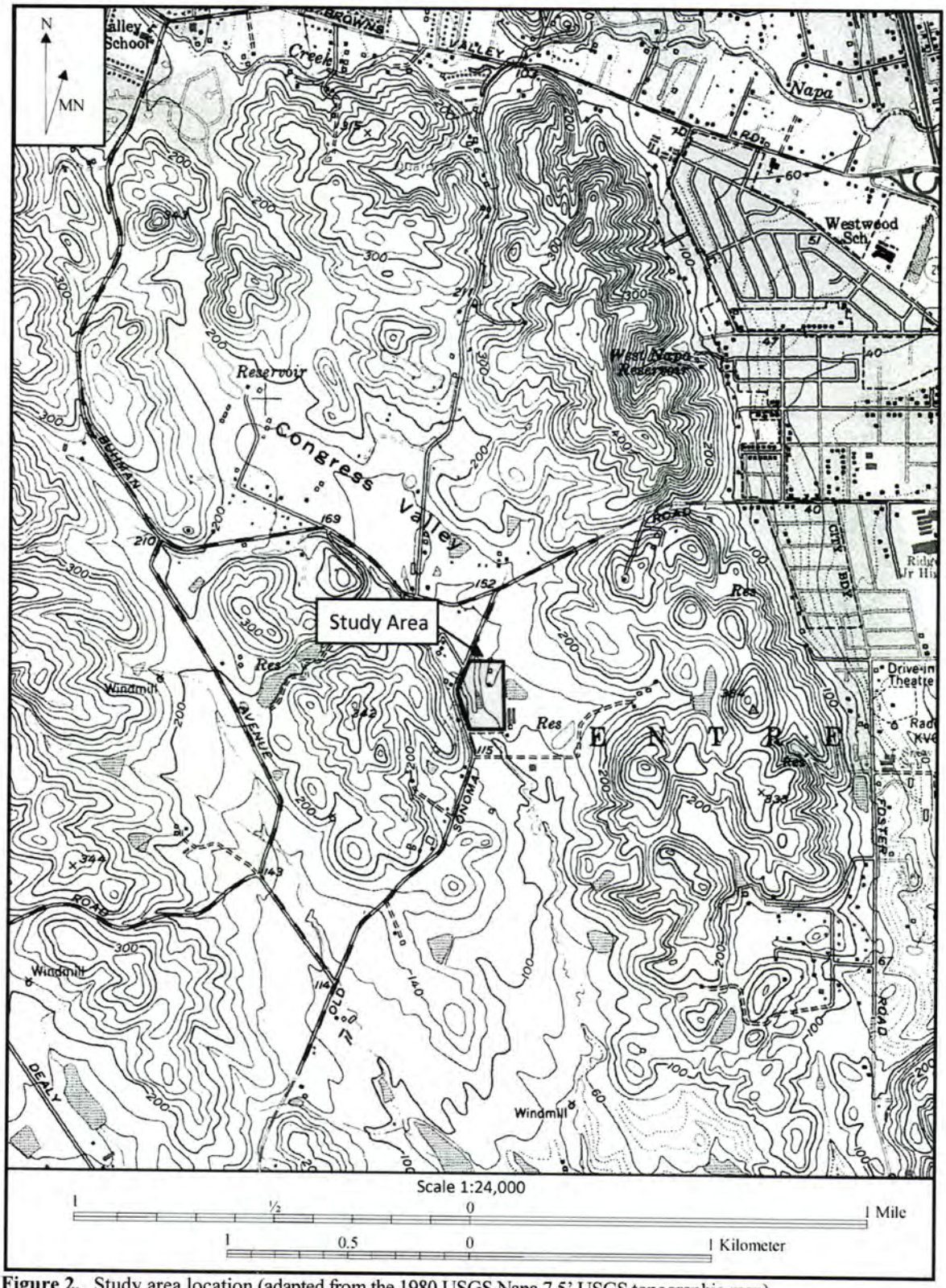

Figure 2. Study area location (adapted from the 1980 USGS Napa 7.5' USGS topographic map).

technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion.

Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the study area was situated within the area controlled by the Wintun, or Patwin (Barrett 1908; Johnson 1978). The Wintun were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant life and animal life were diverse and abundant. For more information about the Wintun see Barrett (1908), Kroeber (1925), and Johnson (1978).

Historically, the study area is within the Rancho Entre Napa, which was granted to Nicolas Higuera in 1836 (Cowan 1977). Higuera was *alcalde auxiliar* at mission San Francisco Solano (Sonoma) (Hoover *et al.* 2002). When granted, the rancho consisted of 7,000 acres of land that lay primarily on the west side of the Napa River. It included a large portion what is now the City of Napa.

STUDY PROCEDURES

Native American Contact

A request was sent to the State of California's Native American Heritage Commission seeking information from the sacred lands files and the names of Native American individuals and groups that would be appropriate to contact regarding this project. Letters were also sent to the following groups:

Cortina Band of Indians
Middletown Rancheria of Pomo Indians
Mishewal-Wappo Tribe of Alexander Valley
Yocha Dehe Wintun Nation

This contact represents notification regarding the project to provide an opportunity for comment. It does not constitute consultation with tribes.

Archival Study Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 16-0884) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the Office of Historic Preservation's *Historic Property Directory* (OHP 2012).

The Office of Historic Preservation has determined that structures in excess of 45 years of age should be considered potentially important historical resources, and former building and structure locations

could be potentially important historic archaeological sites. Archival research included an examination of historical maps to gain insight into the nature and extent of historical development in the general vicinity, and especially within the study area. Maps ranged from hand-drawn maps of the 1800s (e.g., GLO) to topographic maps issued by the United States Geological Survey (USGS) and the United States Army Corps of Engineers (USACE).

In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the "Materials Consulted" section of this report.

Field Survey Procedures

An intensive field survey was completed by Rachel Hennessy and Tom Origer on December 16, 2016. Ground visibility was primarily poor, with vegetation, being the primary hindrance. Hoes were used often to clear vegetation so that the ground surface could be inspected.

Based on the results of the prefield research, it was anticipated that prehistoric and historic-period resources could be found within the study area. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

STUDY FINDINGS

Native American Contact Results

The Native American Heritage Commission responded stating that a search of the Sacred Land Files showed the presence of a tribal cultural resource; however, their search area consists of the entire township and range within which the study area lies. They suggested that Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley be contacted for additional information.

An email was sent to Mr. Gabaldon on December 21, 2016. This letter included a copy of the Native American Heritage Commission's letter and a copy of our original letter. We requested that Mr. Gabaldon let us know if the tribe had knowledge or concerns about resources within the study area so that information could be included in our report. Vincent Salsedo from the Mishewal-Wappo Tribe of Alexander Valley discussed this project with the author on January 18, 2017. He stated that after looking through the tribe's records, they do not have information about any resources within the study area.

A letter was received from James Kinter of the Yocha Dehe Wintun Nation stating that the study area is within the tribe's aboriginal territory. They were not aware of any cultural resources near the study area; however, if new resources are found they would like to be contacted.

No other responses have been received as of the date of this report. A log of contact efforts is appended to this report, along with copies of correspondence (see Appendix A).

Archival Study Findings

Archival research found that a very small portion of the southern end of the study area had been previously surveyed for a wastewater reuse program (Ann S. Peak & Associates 1978). Three studies have been conducted adjacent to the study area (Flynn 1980; Jones & Stokes 2000; Soule 1998). None of the above referenced surveys resulted in the finding of any cultural resources within or adjacent to the study area.

No ethnographic villages are reported within one mile of the study area (Barrett 1908).

A review of 19th and 20th century maps show that Old Sonoma Road is present adjacent to the study area as early as 1876 (Lyman and Throckmorton 1876). A building is shown within the study area as early as 1902 (Buckman 1895; GLO 1880, 1881; Lyman and Throckmorton 1876; USACE 1919, 1942; USGS 1902, 1951a, 1951b). One building is shown on the property until the 1951 USGS map shows one additional outbuilding on the property, and one immediately north of the northern property line (USGS 1951b). Aerial photos show that all of the buildings on the property were removed at some point after 2004.

Field Survey Findings

Archaeology

The location of the 1902 building is just north of the intersection of Old Sonoma Road and the southern-most creek that flows through the study area. Field survey found that this building is no longer present; however, a well was present in this area. Although the well may have dated to the time of the 1902 building, recent modifications including the installation of an electric pump. Non-native ivy, and one fragment of abalone shell were also found in the vicinity of the 1902 house. In the area where the mid-century buildings were shown, a few pieces of ceramic were observed. Mr. Truchard met our crew in the field and stated that when these buildings were demolished, the fire department burned them down as a training session and the remains were then cleaned up.

None of the items observed during our survey constituted an archaeological site.

Built Environment

A single-arch stone bridge is located on Old Sonoma Road crossing the unnamed creek that flows through the property. The bridge is outside of, but immediately adjacent to the study area.

RECOMMENDATIONS

Known Resources

Archaeology

No archaeological remains were observed during the course of our survey.

Built Environment

The stone bridge on Old Sonoma Road is outside the study area; therefore no recommendations are provided.

Accidental Discovery

Determining the potential for buried deposits factors includes landform age, distance to water, slope of the study area, and archaeological data (Meyer *et al.* 2016). The study area was essentially level and an unnamed creek flows through the property. Buried prehistoric archaeological sites tend to be found in or beneath Holocene-age depositional landforms (Meyer and Rosenthal 2007). The land east and northeast of the creek that flows through the property is made of geology that either predates generally accepted dates for human occupation of California, or was formed during the early Holocene (~9,000 years ago) when human population was very low. Based on this portion of study area's geologic age, our analysis of the environmental setting, and incorporating King's (2004) analysis of soil sensitivity for buried sites, the probability of identifying one site per 24 acres is < 2%.

The land between the creek and Old Sonoma Road is made up stream terrace deposits formed during the Holocene epoch. This geologic deposit was formed during the last 10,000 years. Based on this portion of study area's geologic age, our analysis of the environmental setting, and incorporating King's (2004) analysis of soil sensitivity for buried sites, the probability of identifying one site per 24 acres is up to 20%.

In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates completed an historical resources study of the property at 4062 Old Sonoma Road, Napa, Napa County, California. The study was requested by Kirsty Shelton Gerosa of Farella Braun & Martel, LLP, on behalf of the property owner, Anthony Truchard. This study was conducted in compliance with the requirements of the Napa County Planning, Building, and Environmental Services Department and those of the California Environmental Quality Act. No historical resources were found within the study area and therefore no resource-specific recommendations are warranted. A stone bridge was found adjacent to, but outside of the study area. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2016-138S).

MATERIALS CONSULTED

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1902 Napa 15' quadrangle. Geological Survey, Washington, D.C.

1951a Sonoma, California 15' map. Geological Survey, Washington, D.C.

1951b Sonoma, California 7.5' map. Geological Survey, Washington, D.C.

Appendix A

Native American Contact

Copies of Correspondence

Native American Contact Efforts
4062 Old Sonoma Road, Napa, Napa County

Organization	Contact	Action	Results
Native American Heritage Commission		Email 12/14/16	The Native American Heritage Commission responded stating that a search of the Sacred Land Files showed the presence of a tribal cultural resource; however, their search area consists of the entire township and range within which the study area lies. The suggested that Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley be contacted for additional information.
Cortina Band of Indians	Charlie Wright	Letter 12/14/16	No response received as of the date of this report.
Middletown Rancheria of Pomo Indians	Jose Simon, III	Letter 12/14/16	No response received as of the date of this report.
Mishewal-Wappo Tribe of Alexander Valley	Scott Gabaldon Vincent Salsedo	Letter 12/14/16 Email 12/21/16	Mr. Salsedo called on 12/28/16 to request the address of the study area so that the tribe could search their records. Mr. Salsedo called on 1/18/17 to say that the tribe had no record of any resources within the study area.
Yocha Dehe Wintun Nation	Leland Kinter	Letter 12/14/16	A letter was received from James Kinter of the Yocha Dehe Wintun Nation stating that the study area is within the tribe's aboriginal territory. They were not aware of any cultural resources near the study area; however, if new resources are found they would like to be contacted.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Truchard Family Winery
County: Napa

USGS Quadrangles
Name: Napa
Township T5N Range R4W Section(s) N/A MDBM (and within the Entre Napa land grant)

Date: December 14, 2016
Company/Firm/Agency: Tom Origer & Associates
Contact Person: Eileen Barrow

Address: P.O. Box 1531
City: Rohnert Park Zip: 94927
Phone: (707) 584-8200 Fax: (707) 584-8300
Email: eileen@origer.com

Project Description: The project proponent is applying for a use permit from the County of Napa for the proposed construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

December 20, 2016

Eileen Barrow
Tom Origer & Associates

Sent via E-mail: Eileen@origer.com

RE: Truchard Family Winery, Napa, Napa County

Dear Ms. Barrow:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* (SLF) was completed for the area of potential project effect (APE) for the above referenced project. Tribal Cultural Resources were identified in the project area provided. Please contact Chairman Scott Gabaldon of the Mishewal-Wappo Tribe of Alexander Valley, at 2275 Silk Road, Windsor, CA 95492 and the Tribes on the attached "Native American Heritage Commission Tribal Consultation List" directly for more information about the sites and resources within your APE.

The absence or presence site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE. Other sources of cultural resources information should be contacted regarding known and recorded sites. Please contact all of the people on the attached list. The list should provide a starting place to locate areas of potential adverse impact within the APE. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult under applicable laws.** If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst

Native American Heritage Commission
Native American Contact List
Napa County
12/20/2016

Cortina Band of Indians
Charlie Wright, Chairperson
P.O. Box 1630
Williams, CA, 95987
Phone: (530)473-3274
Fax: (530)473-3301

Patwin

Middletown Rancheria of Pomo Indians
Jose Simon, Chairperson
P.O. Box 1035
Middletown, CA, 95461
Phone: (707)987-3670
Fax: (707)987-9091

Lake Miwok
Pomo

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road
Windsor, CA, 95492
Phone: (707) 494 - 9159
scottg@mishewalwappotribe.com

Wappo

Yocha Dehe Wintun Nation
Leland Kinter, Chairperson
P.O. Box 18
Brooks, CA, 95606
Phone: (530)796-3400
Fax: (530)796-2143
lkinter@yochadehe-nsn.gov

Patwin

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Truchard Family Winery, Napa, Napa County, Napa County.

Tom Origer & Associates
Archaeology / Historical Research

December 14, 2016

Charlie Wright
Cortina Band of Indians
P.O. Box 1630
Williams, California 95987

RE: Truchard Family Winery, Napa, Napa County, California

Dear Mr. Wright:

I write to notify you of a proposed project within Napa County, for which our firm is conducting a cultural resources study. The project proponent is applying for a use permit from the County of Napa for the proposed construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard. The County of Napa is reviewing the project (Use Permit P14-00330 and Variance P14-00331) for CEQA compliance.

This letter does not constitute formal consultation.

Enclosed is a portion of the Napa, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200

Tom Origer & Associates
Archaeology / Historical Research

December 14, 2016

Jose Simon, III
Middletown Rancheria of Pomo Indians
P.O. Box 1035
Middletown, California 95461

RE: Truchard Family Winery, Napa, Napa County, California

Dear Mr. Simon:

I write to notify you of a proposed project within Napa County, for which our firm is conducting a cultural resources study. The project proponent is applying for a use permit from the County of Napa for the proposed construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard. The County of Napa is reviewing the project (Use Permit P14-00330 and Variance P14-00331) for CEQA compliance.

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Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200

Tom Origer & Associates
Archaeology / Historical Research

December 14, 2016

Scott Gabaldon
Mishewal-Wappo Tribe of Alexander Valley
2275 Silk Road
Windsor, California 95492

RE: Truchard Family Winery, Napa, Napa County, California

Dear Mr. Gabaldon:

I write to notify you of a proposed project within Napa County, for which our firm is conducting a cultural resources study. The project proponent is applying for a use permit from the County of Napa for the proposed construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard. The County of Napa is reviewing the project (Use Permit P14-00330 and Variance P14-00331) for CEQA compliance.

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Sincerely,

Eileen Barrow

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Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200

Tom Origer & Associates
Archaeology / Historical Research

December 14, 2016

Leland Kinter
Yocha Dehe Wintun Nation
P.O. Box 18
Brooks, California 95606

RE: Truchard Family Winery, Napa, Napa County, California

Dear Mr. Kinter:

I write to notify you of a proposed project within Napa County, for which our firm is conducting a cultural resources study. The project proponent is applying for a use permit from the County of Napa for the proposed construction of a winery building, a crush pad, a small parking lot, replacement of an existing bridge, improvements to an existing driveway, installation of a wastewater system and a water storage tank, and removal and replanting of some vineyard. The County of Napa is reviewing the project (Use Permit P14-00330 and Variance P14-00331) for CEQA compliance.

This letter does not constitute formal consultation.

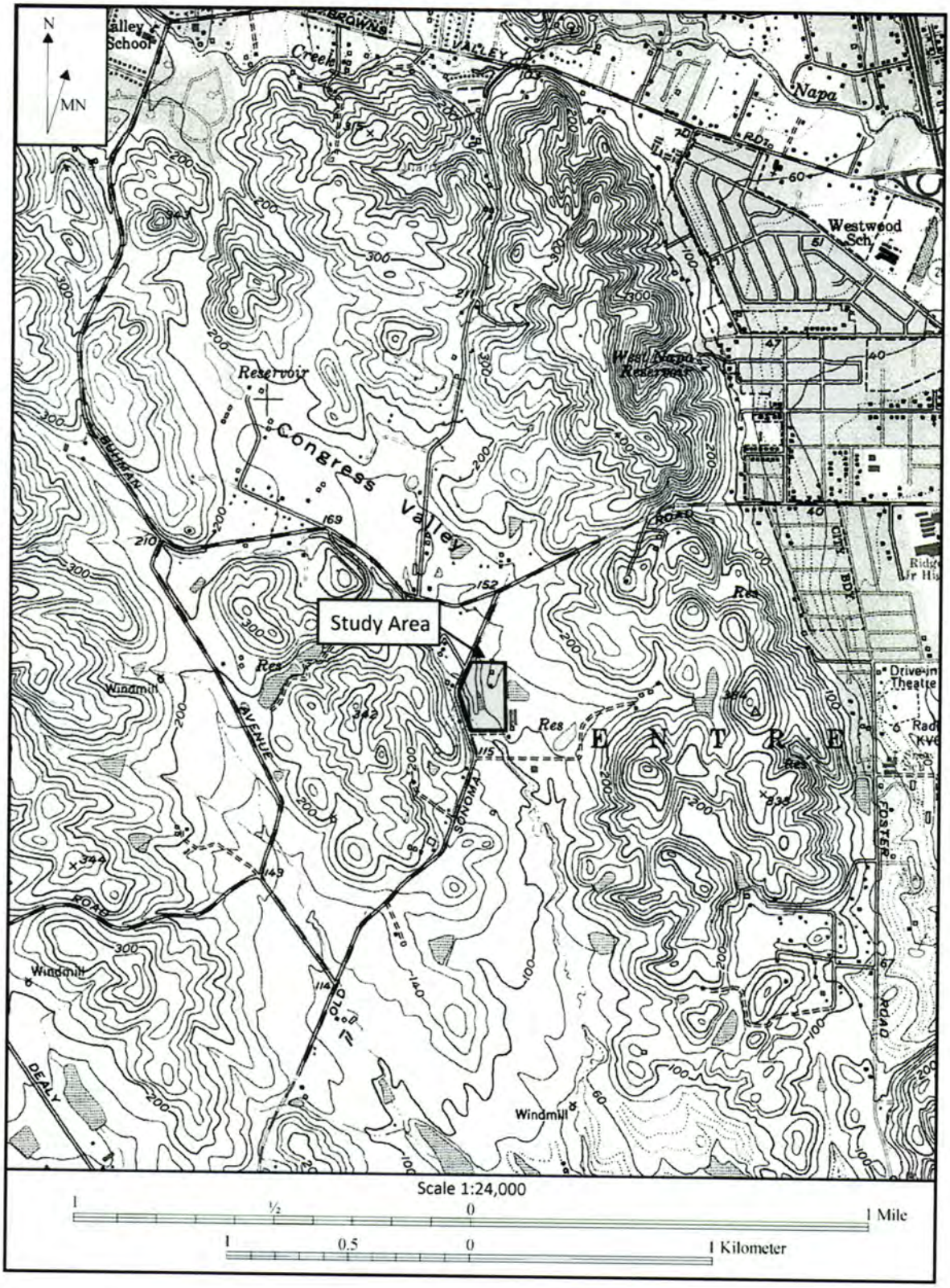
Enclosed is a portion of the Napa, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,

Eileen Barrow

Eileen Barrow
Senior Associate

P.O. Box 1531, Rohnert Park, California 94927 ♦ www.origer.com Phone (707) 584-8200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YOCHA DEHE
CULTURAL RESOURCES

January 6, 2017

Tom Origer & Associates
Attn: Eileen Barrow
P.O. Box 1531
Rohnert Park, CA 94927

RE: Truchard Family Winery 4062 Old Sonoma Road, Napa County

Dear Ms. Barrow:

Thank you for your project notification letter dated, December 14, 2016, regarding cultural information on Truchard Family Winery 4062 Old Sonoma Road, Napa County. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area.

Based on the information provided, Yocha Dehe Wintun Nation is not aware of any known cultural resources near this project site and a Cultural Monitor is not needed. However, if any new information or cultural items are found, please contact the following individual:

James Sarmento, Cultural Resources Manager
Yocha Dehe Wintun Nation
Office: (530) 723-0452, Email: jsarmento@yochadehe-nsn.gov

Please refer to identification number YD – 12202016-02 in correspondence concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,

James Kinter
Tribal Secretary
Tribal Historic Preservation Officer

Architectural
Resources Group

Pier 9, The Embarcadero, Suite 107
San Francisco, California 94111

arg-sf.com

21 July 2107

Katherine Philippakis
Farella Braun + Martel LLP
899 Adams Street, Suite G
St. Helena, CA 94574

RE: Proposed Truchard New Winery (P14-00330)

Dear Kay:

As requested, I have reviewed the existing bridge located on the above mentioned property, relative to its eligibility as an historic resource under the California Register criteria. From my review, it does not appear to me that the bridge on the proposed site is over 50 years old and thus would not be considered a historic resource on the basis of age. In any event, to be considered an historic resource under CEQA, the structure (or element) must meet eligibility requirements of the California Register of Historic Resources. This includes the following four potential context types:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States, or history, or
2. It is associated with the lives of persons important to local, California, or national history, or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or
4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.

If the entire property has not been determined to be eligible as a historic site, it does not appear that the bridge would meet the criteria to be individually eligible as an historic resource. The construction materials are similar to readily available materials, including pressure treated wood with tags still attached. As you may recall, in my previous evaluation of the barn on your property, I concluded that the barn did not have historic significance. As the barn is the only other structure on the property that could potentially be considered historic, I do not believe that the bridge could qualify as a cultural resource under the relevant criteria.

Sincerely,

Naomi Miroglio

Naomi Miroglio, FAIA
Principal

Image 1. September 1973 aerial at 10,000 feet (USGS EarthExplorer).

Image 2. Existing View of Bridge

Image 3. Existing View of Bridge

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ENVIRONMENTAL CONSULTANTS

July 21, 2017

Anthony Truchard
Truchard Family Vineyards
3234 Old Sonoma Road
Napa, California 94559

RE: Request for Supplemental Information for Truchard Winery Project

Dear Mr. Truchard,

This letter is to provide additional information as requested by the County of Napa for the proposed Truchard Winery Project (P14-00330-UP/Variance P14-0033; Project) in a letter dated July 13, 2017. This letter responds to comments related to the wildlife and plant assessments and surveys described in a June 21, 2017 letter.

Study Area Map

The proposed Project Area is located at 4062 Old Sonoma Road, Napa, Napa County, California and includes the proposed project footprint and temporary staging and stockpile areas. The wildlife assessment on May 12, 2017 focused on the proposed Project Area and surrounding areas east of Old Sonoma Road and within approximately 200 feet of the Project Area (Study Area). The Study Area was the focus of the wildlife assessment and is shown in the enclosed Figure 1. Two additional irrigation ponds and connecting drainage to the east were also inspected for the presence of pond turtle, and are identified in the enclosed figure to document all areas investigated by the wildlife biologist. The additional features will not be impacted by the proposed project.

Pallid Bat

Pallid bats (*Antrozous pallidus*) are a cavity-roosting species, and less commonly, can use cracks or crevices in trees as day and night roosts. No snags or large trees with complex cavities, cracks, or crevices are present within the Study Area. There is no potential for trees in the Study Area to support pallid bat maternity or hibernation roost sites, but there is potential for pallid bat to utilize some trees for a day or night roost.

The existing barn is actively utilized by the winery and maintained in good condition. Access into the barn is limited, but gaps may be present sufficient for pallid bat to enter and use as a day or night roost. Typical of other bat species, pallid bat is sensitive to disturbances at roost sites especially maternity and hibernation roosts. The existing barn is unlikely to be utilized as a maternity or hibernation roost site based on regular disturbance from vineyard operations. However, there is potential for pallid bat to utilize the barn for a day or night roost.

One small tree is proposed for removal and based on size and structure of the tree, no suitable bat roost habitat is present. In adjacent trees and the existing barn, day and night roosting bats may be present. Night roosting bats would not be impacted by the proposed project because no activities are to occur during night hours. Pallid bats are not known to have strong site fidelity to

specific day roosts and may adjust day roost locations daily[1,2]. In addition, these areas will be avoided by project activities; therefore, day roosting bats are not likely to be significantly disturbed by project activities. However, as an extra pre-caution during the pallid bat active season (February 28 – October 31), a qualified biologist can inspect the barn and trees with suitable crevices within 50 feet of project activities within 14 days prior to initial activities. The inspection will assess presence of roost sites, roosting bats, or evidence of recent or regular use by pallid bats.

Draft Notification of Lake or Streambed Alteration

The draft Notification of Lake or Streambed Alteration stated potential for presence of western pond turtle, pallid bat, and California giant salamander. This determination was made strictly upon a review of species occurrences documented in the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB)[3] and general habitats present in the Project Area. Per RSA, a biologist did not evaluate the Project Area and vicinity for specific habitat requirements of the species. WRA reviewed the CNDDB, but a biologist also conducted a site inspection and determined the potential for these species based on conditions and habitats present at the site. These species are known in the vicinity; however, upon a review of habitats present in the Study Area, WRA determined the species would not likely be present within the Study Area.

Special-status Plant Study Area

The Project Area and vicinity are predominantly grapevines in active production or developed habitat including access roads, barns, and irrigation ponds. The assessment for special-status plant species was focused on habitats with potential to support native plant species. The ruderal (weedy) areas along the roadsides and irrigation ponds did not support native plant species and are regularly maintained. The project botanist determined that these areas and the vineyards do not have potential to support specials-status plant species.

Please do not hesitate to contact me if you have any further questions regarding the wildlife and plant assessments conducted.

Sincerely,

Patricia Valcarcel
Associate Wildlife Biologist

Enclosure

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[1] Lewis. S.E. 1996. Low roost-site fidelity in pallid bats: associated factors and effect on group stability. Behavioral Ecology and Sociobiology 39:335-344

[2] Western Bat Working Group. 2005. Western Bat Species Accounts, *Antrozous pallidus* | Pallid Bat. Available online: http://wbwg.org/western-bat-species/; Most recently accessed July 19, 2017.

[3] California Department of Fish and Wildlife (CDFW). 2017. Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento.

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Truchard Winery Project

Napa County, California

Figure 1.

Study Area Map

N
W E
S

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Feet

Map Prepared Date: 7/18/2017
Map Prepared By: smortensen
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA

Path: L:\Acad 2000 Files\27000\27169\GIS\ArcMap\Location Map.mxd